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THE ACQUISITION OF MAJOR WEAPONS SYSTEMS BY THE DEPARTMENT OF DEFENSE

HEARING

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

JUNE 3, 2008

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CONTENTS

CHRONOLOGICAL LIST OF WITNESSES

THE ACQUISITION OF MAJOR WEAPONS SYSTEMS BY THE DEPARTMENT OF DEFENSE

JUNE 3, 2008

	Page
Young, Hon. John J., Under Secretary of Defense for Acquisition, Technology, and Logistics	9
Schinasi, Katherine V., Managing Director, Acquisition and Sourcing Management, Government Accountability Office	20
GAO Report to Congressional Committees on Defense Contracting: Post-Government Employment of Former DOD Officials Needs Greater Transparency	109

THE ACQUISITION OF MAJOR WEAPONS SYSTEMS BY THE DEPARTMENT OF DEFENSE

TUESDAY, JUNE 3, 2008

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

The committee met, pursuant to notice, at 9:35 a.m. in room SD–50, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Reed, Akaka, Pryor, McCaskill, Warner, Collins, Dole, Thune, and Martinez.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Madelyn R. Creedon, counsel; Creighton Greene, professional staff member; Michael J. Kuiken, professional staff member; Peter K. Levine, general counsel; Michael J. McCord, professional staff member; William G.P. Monahan, counsel; and William K. Sutey, professional staff member.

Minority staff members present: Michael V. Kostiw, Republican staff director; William M. Caniano, professional staff member; Gregory T. Kiley, professional staff member; David M. Morriss, minority counsel; Christopher J. Paul, professional staff member; and Sean G. Stackley, professional staff member.

Staff assistants present: Jessica L. Kingston, Ali Z. Pasha, Benjamin L. Rubin, and Breon N. Wells.

Committee members' assistants present: Jay Maroney, assistant to Senator Kennedy; Frederick M. Downey, assistant to Senator Lieberman; Elizabeth King, assistant to Senator Reed; Bonni Berge, assistant to Senator Akaka; Christopher Caple, assistant to Senator Bill Nelson; Jon Davey, assistant to Senator Bayh; M. Bradford Foley, assistant to Senator Pryor; Gordon I. Peterson, assistant to Senator Webb; Sandra Luff, assistant to Senator Warner; Anthony J. Lazarski and Nathan Reese, assistants to Senator Inhofe; Lenwood Landrum and Todd Stiefler, assistants to Senator Sessions; Mark J. Winter, assistant to Senator Collins; Clyde A. Taylor IV, assistant to Senator Chambliss; Lindsey Neas, assistant to Senator Dole; Jason Van Beek, assistant to Senator Thune; and Erskine W. Wells III, assistant to Senator Martinez.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. The committee meets today to consider the performance of the Department of De-

fense (DOD) major acquisition programs at a time when cost growth on these programs has reached crisis proportions. We don't have to look very far to find examples. Over the last few years, unit costs on the Air Force's largest acquisition program have grown by almost 40 percent, costing us an extra $37 billion. Over the last 3 years, unit costs on the Army's largest program, the Future Combat System (FCS), have grown by more than 45 percent, costing us an extra $40 billion. Last year, the Navy had to cancel the planned construction of the two Littoral Combat Ships (LCSs) after the program cost doubled in just 2 years.

Since the beginning of 2006, nearly half of DOD's 95 largest acquisition programs have exceeded the so-called Nunn-McCurdy cost growth standards established by Congress. Overall, these 95 Major Defense Acquisition Programs (MDAPs) have exceeded their research and development (R&D) budget by an average of 40 percent, have seen their acquisition costs grow by an average of 26 percent, and experienced an average schedule delay of almost 2 years.

The Government Accountability Office (GAO) tells us that cost overruns on these MDAPs now total $295 billion over the original program estimates, even though we have cut unit quantities and reduced performance expectations on many programs in an effort to hold down costs.

Now, just to put the size of these cost overruns in perspective, what would that $295 billion buy? We could buy at current prices 2 new aircraft carriers for $10 billion each, and 8 *Virginia*-class submarines for $2.5 billion each, and 500 V–22 Ospreys for $120 million each, and 500 Joint Strike Fighters (JSFs) for $100 million each, and 10,000 mine resistant ambush protected vehicles for $1.4 million each, all of that, and still have enough money left over to pay for the entire $130 billion FCS program.

These cost overruns happen because of fundamental flaws that are built into our acquisition system. We know what those flaws are. DOD acquisition programs fail because the Department continues to rely on unreasonable cost and schedule estimates, establish unrealistic performance expectations, insist on the use of immature technologies, and direct costly changes to program requirements, production quantities, and funding levels in the middle of ongoing programs.

As Secretary Gates recently acknowledged, we've been "adding layer upon layer of cost and complexity onto fewer and fewer programs that take longer and longer to build." He said, "This must come to an end." Well, it's been long overdue that that come to an end.

Let me just give you a few examples of how these programs have impacted weapons systems. With regard to unrealistic cost and schedule estimates, the Navy initially established a goal of $220 million and a 2-year construction cycle for the two lead ships on the LCS program. These goals were completely inconsistent with the Navy's historic experience in building new ships and with the complexity of the design required to make the program successful. As a result, program costs doubled and the Navy started to run out of money long before the ships were complete, forcing it to cancel follow-on ships.

With regard to unrealistic performance expectations, the National Polar Orbiting Operational Environmental Satellite System was designed to include 14 different environmental sensors on 6 different satellites, plus a ground system. Now, the system turned out to be so complex and unmanageable that the cost doubled, forcing DOD to eliminate one of the planned satellites and five of the planned sensors and make several of the other sensors less complex. The Department is now trying to figure out how to restore some of the capability that will be lost as a result of the elimination of the planned sensors.

With regard to immature technologies, the Army's Warfare Information Network-Tactical program entered the System Development and Demonstration (SDD) phase with only 3 of its 12 critical technologies at the appropriate level of maturity. As the Army struggled to develop these technologies or to substitute alternative technologies that were more ready for production, program costs grew by 88 percent and the program was delayed by more than 4½ years.

With regard to changing program requirements, the Air Force has repeatedly restructured its Global Hawk program to add new and sometimes unproven technologies. While the new technologies have added to the capability of the Global Hawk, the changes have led to space, weight, and power constraints that have more than doubled production costs and have significantly disrupted the program.

Over the last few years this committee has taken a number of steps to try to address these problems. For example, we have required senior acquisition officials to certify that cost estimates are realistic and technologies are mature before new programs are started, we've required that program managers be held accountable for meeting measurable performance objectives to which they have agreed in writing, and we've tightened the so-called Nunn-McCurdy thresholds to prevent DOD from hiding underperforming programs.

The Under Secretary of Defense for Acquisition, Technology, and Logistics (AT&L), who will be testifying before us today, has carried out our new certification requirements and he has used the Nunn-McCurdy process to require the serious reexamination of troubled programs. He has also required the military departments to establish Configuration Steering Boards (CSBs) to prevent unnecessary and costly changes to program requirements, which is a constructive step that we propose to enact into law in this year's National Defense Authorization Act (NDAA).

However, those efforts have fallen far, far short. No matter how well intentioned Secretary Young and other senior acquisition officials may be, they remain dependent upon the information that is provided to them by contractors and program officers. These contractors and program officers have every reason to produce overly optimistic cost estimates and unrealistic performance expectations because programs that promise revolutionary change and project lower costs are more likely to be approved and funded by senior administration officials and by Congress. In other words, we get the information we need to run our programs from people who have a vested interest in overpromising.

In a draft report that will be issued later this month, GAO concludes that "The Department of Defense's inability to allocate funding effectively to program is largely driven by the acceptance of unrealistic cost estimates and a failure to balance needs based on available resources. Development costs for major acquisition programs are consistently underestimated," they said, "at a program's initiation by 30 to 40 percent, in large part because the estimates are based on limited knowledge and optimistic assumptions about system requirements and critical technologies."

The consequences of using such optimistic estimates were correctly identified by the DOD acquisition performance assessment panel 2 years ago. That panel found that using "optimistic budget estimates force excessive annual reprogramming and budget exercises within the Department, which in turn cause program restructuring that drive long-term costs, cause schedule growth, and open the door to requirements creep."

It's going to take a fundamental change in the structure and culture of the acquisition system to address that problem. For this reason, I believe that we need a Director of Independent Cost Assessment in the DOD, with authority and responsibility comparable to those of the Director of Operational Test and Evaluation (DOT&E) that we established 20 years ago. This new independent office would review cost estimates on all MDAPs and develop its own independent cost estimates to ensure that the information, on which so many of our program and budget decisions are based, are fair, unbiased, and reliable. I plan to offer an amendment to this year's defense bill when it comes to the Senate floor to establish this office.

Today the committee will hear from John Young, the Under Secretary of Defense for AT&L, who is the top acquisition official for DOD, and from Katherine Schinasi, who is GAO's top expert on the acquisition system. We look forward to the testimony of our witnesses on these important issues. We thank both of you for your commitment and your service to improving these systems.

Senator Warner.

STATEMENT OF SENATOR JOHN WARNER

Senator WARNER. Thank you, Mr. Chairman. I join you in welcoming our witnesses today. I thought you laid out a very factual and pragmatic assessment of the situation as this committee views it.

Mr. Chairman, I roughly estimate that DOD, over the next 5 years, has $900 billion with which to inject in the procurement system. We simply must make the adjustments that are required to obviate what you have recited.

You and I have been on this committee a long time. I remember one very clear chapter when Dave Packard put forward the Packard Commission reports and that was to solve all the problems. It didn't seem to work. We awakened here one day and it was this committee that put a stop to the Boeing tanker situation, and it's taken these many years to remedy that and hopefully get back on the rails again.

So I join you, Mr. Chairman. I think the committee, the members on our side, are very much in favor of seeing what we can do to take positive action to correct the situation.

I'd like to put in a statement on behalf of Senator McCain at this point and amplify my own. Thank you.

[The prepared statements of Senator McCain and Senator Warner follow:]

PREPARED STATEMENT BY SENATOR JOHN MCCAIN

Mr. Chairman, thank you for calling this important hearing. The committee meets to examine the management and oversight of Department of Defense (DOD) acquisition programs.

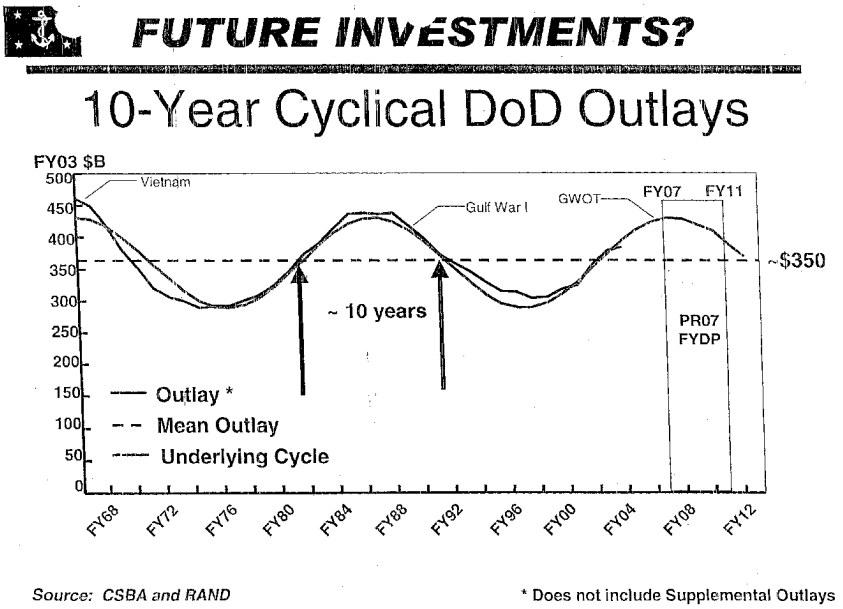
Defending our Nation against its enemies is the first and most fundamental commitment of the Federal Government. Resourcing our military to defend this nation requires an appropriate working relationship among defense industries, the DOD, and Congress with an eye toward faithful and efficient expenditure of every taxpayer dollar that is made available for defense procurement.

However, I believe it is important to recall that President Eisenhower warned in 1961 that, "We must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military industrial complex. The potential for the disastrous rise of misplaced power exists and will persist."

Over the last 6 years—since the Air Force-Boeing tanker procurement scandal where we learned of the most egregious abuse of power from a government acquisition official—this committee has been active in its oversight responsibilities and approved the largest number of acquisition reform measures since the mid-1980s when a series of procurement scandals plagued the Pentagon. If DOD follows these laws, they could exercise more discipline in how the Pentagon develops and buys new weapon systems.

Unfortunately, despite these recent reforms drafted by this committee and enacted into law, cost overruns for major weapon programs are still staggering. We are here today to find out if these policy changes have improved the way the DOD buys new weapon systems, and to determine whether additional reforms are necessary. According to the Government Accountability Office (GAO), none of the weapons programs that they assessed this year had proceeded through system development and met the "best practices" standards for mature technologies, stable design, and mature production processes—all prerequisites for achieving planned cost, schedule, and performance outcomes. Equally as disturbing are the GAO reports that the Department has not used system engineering tools—preliminary design reviews and prototyping—to demonstrate the maturity of the planned weapon system.

The need for acquisition reform is paramount. Most civilian and uniformed leaders, as well as outside defense experts, believe that military spending is going down. A short time ago, the former Chairman of the Joint Chiefs, General Peter Pace, showed me a chart called "Future Investments? 10-Year Cyclical DOD Outlays." It examined defense spending since the beginning of the Vietnam War, and the results described 10-year cyclical spending cycles.



What is clear from the chart is that investment in weapon acquisition programs is now at its highest level in two decades—but is at its apex and heading downward. No other organization understands this better than the GAO which has authored several reports on defense acquisition. GAO has stated that since the mid-1990s, the acquisition costs for major weapons programs has increased almost 120 percent and that current programs are experiencing, on average, nearly a 2-year delay in delivering initial capabilities to the warfighter.

The Department expects to invest about $900 billion over the next 5 years on development and procurement and invest nearly $340 billion specifically in major defense acquisition programs. Every dollar spent inefficiently in acquiring weapon systems is less money we spend on our budget priorities—such as the global war on terror. Nearly half of DOD's major defense acquisition programs are paying at least 25 percent or more per unit than originally expected.

Analysis of DOD Major Defense Acquisition Program Portfolios (FY08 Dollars)

	FY 2000 Portfolio	FY2005 Portfolio	FY 2007 Portfolio
Portfolio size			
Number of programs	75	91	95
Total planned commitments	$790 Billion	$1.5 Trillion	$1.6 Trillion
Commitments outstanding	$380 Billion	$887 Billion	$858 Billion
Portfolio performance			
Change in total acquisition cost from first estimate	6 percent	18 percent	26 percent
Estimated total acquisition cost growth	$42 Billion	$202 Billion	$295 Billion
Share of programs with 25 percent or more increase in program acquisition unit cost	37 percent	44 percent	44 percent
Average schedule delay in delivering initial capabilities	16 months	17 months	21 months

Source: GAO analysis of DOD data.

Given this situation, some will simply call for increasing defense spending or fixing it to a greater percentage of the Gross National Product. I believe, instead, that

what our Nation spends on defense should be dictated by the threat. So how do we ensure our defense budget is adequate and cost-effective? First and foremost, we must stop wasteful spending on congressional earmarks. Second, we must maximize the value of the defense dollar while providing the maximum protection to the taxpayer. A core element of this is to execute a sound acquisition strategy that remedies systemic problems at the senior management and the program level, which causes alarming increases in costs and schedule delays. A sound acquisition strategy will help improve accountability in acquisition management and ensure that program decisions are consistent with the requirements of the unified commands.

Defense acquisition policy has been a major issue ever since President Eisenhower first warned the Nation about the military-industrial complex. Yet, as Operation Ill Wind in the 1980s and the more recent Boeing Tanker scandal show, Eisenhower's admonitions should be paramount in our examination today. Despite the lessons of the past, the acquisition process continues to produce poor cost-, scheduling-, and performance-outcomes—to the detriment of the taxpayer and the warfighter.

In the 109th and 110th Congresses, major acquisition policy issues have come up on several multi-billion dollar programs: the Army's Future Combat Systems contract conversion; the Navy's Littoral Combat Ship (LCS); the Air Force's F–22 Raptor, C–130J contract conversion, replacement tanker program, and Combat Search and Rescue helicopter; the Marine Corps' Expeditionary Fighting Vehicle (EFV); and one of the largest aviation acquisition programs ever, the Marine Corps, Navy, and Air Force F–35, Joint Strike Fighter.

There is much we can do to help ensure taxpayers' dollars are spent wisely as we develop, test, and acquire major defense systems. By increasing transparency and accountability and maximizing competition, broad acquisition reform can deliver the best value to the taxpayer and minimize waste, fraud, and abuse. Most importantly, it can help assure that the United States maintains the strongest fighting force in the world. The Senate Armed Services Committee's efforts, along with the help of the GAO and strong oversight of the Office of the DOD Inspector General (IG), can improve an acquisition system that is fundamentally broken.

At one time or another, all of the military Services have received failing grades in the development and acquisition of weapon systems. Where problems have been identified, some of the military Services have recognized the need for more discipline and accountability and in some cases fired program managers, directors, and service acquisition executives. That was the case with the Marine Corps' EFV and the Navy's LCS programs. But, when the Services have not held people to the level of excellence they espouse in glorified mission statements, there have been more systemic problems. Unfortunately, that is the case with the Air Force, where protests in competitive acquisition awards are seven times more likely to occur than with the other Services.

The Secretary of Defense (SECDEF), the Deputy Secretary of Defense—as the Secretary's Executive Officer—and the Under Secretary of Defense for Acquisition must pay more attention to these acquisitions, especially when poor decisions are made and procedures ignored.

In the Boeing tanker scandal, actions by a top Air Force acquisition official, Darleen Druyun, not only disgraced herself and resulted in her conviction on public corruption charges, but also disgraced the Air Force, the DOD, and the entire defense establishment. I continue to believe that Ms. Druyun was not solely responsible for the Air Force's failure. On the contrary, it is the Air Force's inability to accept any responsibility for wrongdoing that predicates potential failures in the future.

For example, the DOD IG has recently reported that within a year after Darleen Druyun and a Boeing CEO went to jail over the proposed Air Force tanker acquisition, a former Air Combat Commander and 4-star Air Force general improperly influenced senior Air Force officers to steer a high visibility Air Force contract through a non-competitive process for the Thunderbirds to a friend and his new company. Clearly, the recent Air Force scandal was not the rare example of mismanagement and oversight failure we thought it would be.

No one was held accountable when the Air Force misled Congress after being directed by statute to convert a contract for C–130Js from a commercial contract to a traditional military contract. Despite this legal requirement, the Air Force reported to Congress the contract had been converted, even though it had not yet been done. Furthermore, no one was held accountable when the DOD IG found that the Air Force apparently presented Congress false information on the C–130J multi-year contract termination costs and the F–22A Program Manager who was among those responsible for apparently exaggerating the termination costs—is responsible for executing the F–22 multi-year contract today.

We shall see if anyone will be held accountable when the DOD IG completes its ongoing investigation examining how senior Air Force officials may have inappropriately solicited new orders for C–17s, contrary to the orders of the President and the SECDEF. This occurred in spite of clear guidance from the DOD that they did not want additional C–17s, because there is no military "requirement" for them and buying more C–17s is contrary to the Pentagon's current budget plan.

Again, while legislation and policy revisions can help guide change, the DOD must begin making better choices that reflect joint capability needs and match requirements with resources, or the department will continue to experience acquisition failures. This Hobson's choice must ensure that the military Services do not continue to over promise capabilities and underestimate the costs of developing and buying weapon systems.

Acquisition problems will continue to prevail in DOD until the Secretary provides a better foundation for buying the right assets, the right way. This requires making tough decisions as to which programs should be pursued, and more importantly, not pursued; making sure programs are executable; locking in requirements before programs are ever started; and making it clear who is responsible for what and holding people accountable when responsibilities are not fulfilled. Moreover, we must change the culture that leads DOD and the military Services to over-compromise on capability and underestimate costs in order to sell new programs and capture funding will need to change.

We must also reverse the trend of Service leaders not understanding the complexity of developing systems through adequate oversight and holding those accountable for failing to follow acquisition laws and regulations. We simply cannot afford further acquisition failures, not if we are to maximize the value of the defense dollar and buy the right weapon systems for our service men and women.

Finally, let me recommend to the committee, and ask that it be placed into the record, a recent GAO report titled, "Defense Contracting, Post-Government Employment of Former DOD Officials Needs Greater Transparency." This report recommends additional statutory and policy changes in this area and finds significant under-reporting by as much as half of the contractors' employment of former DOD officials. Time and again, some poor acquisition decisions are made because of a lack of transparency at all levels of the acquisition process. The report cites recent high-profile cases involving former senior DOD officials' violations of post-government employment laws that are worth reviewing to understand the breadth of the problem, and demonstrate the need for further reform.

The bottom line is this: DOD must implement acquisition initiatives quickly if we are to ensure that warfighter capabilities are delivered when needed and as promised. In addition, I call on the Defense Secretary, Deputy Secretary, and Under Secretary for Acquisition to enforce the acquisition laws and regulations in the department and hold people accountable when they do not follow them. When we do this we should be able to more effectively and efficiently buy weapon systems and we will regain the confidence of the taxpayer and our soldiers, sailors, marines, and airmen.

I look forward to hearing from today's witnesses and receiving an update on the execution of and implementation of acquisition policies that this committee has carefully drafted and were enacted into law over the past 3 years.

Thank you, Mr. Chairman.

[The GAO Report to Congressional Committees entitled "Defense Contracting: Post-Government Employment of Former DOD Officials Needs Greater Transparency" dated May 2008 is located at the end of this hearing.]

PREPARED STATEMENT BY SENATOR JOHN WARNER

Mr. Chairman, thank you for calling this hearing to examine the management and oversight of Department of Defense (DOD) acquisition programs. The topic of our hearing today is of the utmost importance to me. I believe that the way we resource the military Services to defend our Nation requires an appropriate working relationship among defense industries, the DOD, and Congress. But we must always strive to be mindful that we are making efficient and effective use of every taxpayer dollar that is made available for defense procurement.

Recall that President Eisenhower warned in 1961 that, "We must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military industrial complex. The potential for the disastrous rise of misplaced power exists and will persist."

I believe that this committee has been very active and attentive in its oversight responsibilities over the last several years. In particular, since the Air Force-Boeing

tanker procurement scandal, this committee has approved the largest number of acquisition reform measures since the mid-1980s. I believe that if DOD takes these reforms seriously and implements the changes required by these laws, it could instill more discipline into how the Pentagon develops and buys new weapon systems.

But, I am very concerned that despite our efforts to seek changes at the Pentagon that will make defense acquisitions effective and efficient for our military Services and for taxpayers, cost and schedule outcomes for major weapon programs are not improving. As a result, we are here today to find out if our recent policy reforms have improved the way the DOD buys new weapon systems, and to determine what additional steps and reforms are necessary.

I would like to mention a few other key areas of concern that are relevant to this discussion. Currently, most civilian and uniformed leaders, and outside defense experts, believe that military spending, which is at its highest point now, is heading down. This is a very troubling trend at such a critical time given our national security situation and our military Services' needs, and it reinforces the need for real and timely acquisition reform.

In addition, a recent report by the Government Accountability Office (GAO) found that none of the weapons programs that they assessed this year had proceeded through system development and met the "best practices" standards for mature technologies, stable design, and mature production processes—all prerequisites for achieving planned cost, schedule, and performance outcomes. GAO has also stated that since the mid-1990s, the acquisition costs for major weapons programs have increased almost 120 percent and that current programs are experiencing, on average, a nearly 2-year delay in delivering initial capabilities to the warfighter. This demonstrates that the DOD acquisition process remains inefficient and costly across a wide range of programs, and we need to determine what can be done to significantly improve this situation.

Mr. Chairman, defense acquisition policy has been a major issue ever since President Eisenhower first warned the Nation about the military-industrial complex. Yet, as Operation Ill Wind in the 1980s and the more recent Boeing Tanker scandal demonstrate, Eisenhower's admonitions should be front and center in our examination today. Despite the lessons of the past, the acquisition process continues to result in troubling outcomes, to the detriment of the warfighter and the taxpayer.

I believe the need for acquisition reform is paramount, and as DOD expects to invest nearly $900 billion over the next 5 years on development and procurement, every dollar spent inefficiently and ineffectively will limit the funding available for other budget priorities. A sound acquisition strategy will help improve accountability in acquisition management and will also help ensure that decisions made on programs are consistently cross-checked with the requirements of the unified commands.

I look forward to hearing from our witnesses today. Thank you again Mr. Chairman for holding this important hearing.

Chairman LEVIN. Thank you, Senator Warner.

Secretary Young, I think we will begin with you. Again, our thanks to you.

STATEMENT OF HON. JOHN J. YOUNG, UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS

Mr. YOUNG. Thank you, Chairman Levin, members of the committee.

Members of the defense acquisition team and I are working very hard to improve the cost and schedule performance of defense acquisition programs and I welcome the chance to talk with you about this. I would ask that my written statement be made part of the record and I would like to open with a discussion of the key elements necessary for a successful program.

First, people devise and execute programs. The DOD procurement budget has experienced 34 percent real growth since 2001 and the R&D budget has risen 70 percent. The DOD acquisition workforce has actually decreased slightly in this time period and there has been a cap on management and headquarters staff to

oversee these programs. Programs cannot be successfully executed without adequate, experienced, and capable people.

Indeed, I have recently reviewed several troubled programs and one factor was inadequate staffing in the government program office.

Next, I agree with the many assessments that suggest that systems should only move to the final stages of development when key technologies are appropriately mature. Congress' requirement for certification of technology readiness at Milestone B is a very helpful decision.

Third, a weapons program must have reasonable and stable requirements and understood certification standards. While many factors are involved, there's been a tendency, as you noted, to establish requirements which exceed the budget, schedule, and maturity of technology. Additionally, the application of certification and technical authority standards to programs has driven dramatic cost growth and schedule impacts.

Finally, successful program execution is totally dependent upon a stable and adequately funded budget. In most cases we should fund major programs through an independent cost estimate. Fully funding the initial phases of a program is most critical. I've seen many instances where DOD has underfunded programs and Congress has cut programs, ensuring cost growth and schedule slippage.

While there are other relevant factors, a summary of all of this is: Hope is not a strategy. As my previous comments suggest, many of the factors necessary to successfully execute programs are not currently in the control of the program manager. In the Goldwater-Nichols legislation, Congress was amazingly prescient in assigning acquisition responsibility to the civilian chain of command working for the President.

I believe the Defense and Service Acquisition Executives (SAEs) are critical positions and these individuals are the key to many aspects of improving defense acquisition. SAEs must support program managers in their efforts to moderate or adjust requirements to get best value for the warfighter and the taxpayer, must fight in the military personnel system for promotion of program managers, must prioritize jointness and interoperability above service equities, and must set high standards for program development and execution.

I'd like to talk briefly about some of the many steps I am taking to address these obligations. Program managers must have a forum to discuss program execution decisions and requirement changes with key stakeholders. CSBs, as you noted, sir, were used on programs like F–16 in the past and we are renewing this practice in the Defense Department. In hopes of constructing a joint, interoperable, executable and properly priced development program, we have used Joint Analysis Teams with membership that includes all relevant DOD stakeholders to mature program plans or review portfolios of programs to avoid duplication.

The Department has often used blue ribbon panels or independent reviews to assess problems. I have formalized this process into Defense Support Teams which seek to harness experienced outside experts to help us solve program execution problems and

to assess the adequacy of our development plans and technologies. These Defense Support Teams also help partially offset DOD's inability to hire adequate government personnel to manage our programs.

As the Director of Defense Research and Engineering (DDR&E), I began a practice of quick-look technology readiness assessments. It is of no value to reach Milestone B and determine that we have technology which is immature. Quick-look assessments are necessary to drive investments in the maturation of technologies in advance of Milestone B.

Historically, the Defense Department built prototype systems. DOD has evolved from this strategy to moving to paper competitions for contract awards for final development of systems. I rarely believe this is the best strategy. We need to build prototypes competitively to demonstrate the validity of requirements, to mature technology, to inform our estimates of development and procurement costs, and to insist in the development of concepts of operation.

At a more general level, DOD needs to pursue the development of prototypes to train our personnel in program management and systems engineering, to attract talented scientists and engineers to work on defense programs, and to inspire a new generation of people to pursue technical education.

Shifting the culture and discipline of the enterprise will take time. In a small way, I constantly work towards this goal by sending weekly notes across, broadly across, the acquisition team highlighting the challenges, problems, and best practices which I see. Alternately, I would tell you that I do not think we can assure program performance through rules and certifications. Indeed, these processes diffuse accountability from the fact that responsible and accountable people must manage acquisition programs.

Finally, I'm grateful to the Senate for this chance to serve as the Defense Acquisition Executive. My primary responsibility is to serve as Milestone Decision Authority for major acquisition programs and set these higher standards. Recently I have sought to further address many of these issues through Acquisition Decision Memorandums (ADMs). In recent decision memorandums I have locked program requirements, prohibited changes, directed full funding, encouraged program managers to pursue trades which could reduce costs, and forced jointness. I recognize the need for improvement in the planning and execution of the defense acquisition programs and, I'm seeking to honor your trust by making necessary changes.

I'm most grateful for the chance to talk with you today about these issues and I look forward to your questions.

[The prepared statement of Mr. Young follows:]

PREPARED STATEMENT BY HON. JOHN J. YOUNG

INTRODUCTION

Chairman Levin, Senator McCain, and distinguished members of the committee, thank you for the opportunity to appear before you today to discuss the Department's policies and practices in the acquisition of major weapons systems.

VISION

Since I last appeared before this committee for my confirmation 8 months ago, I have taken a number of actions to implement my vision for Acquisition, Technology, and Logistics, which is to drive the capability to defeat any adversary on any battlefield. I have focused my approach into four strategic thrust areas, each of which has a guiding principle, desired outcomes, and specific initiatives with metrics or steps against which we can measure progress. These four strategic thrust areas are:

- Define Effective and Affordable Tools for the Joint Warfighter
- Responsibly Spend Every Single Tax Dollar
- Take Care of Our People
- Department of Defense (DOD) Transformation Priorities

In identifying both the problems we face, and the solutions we are seeking, I am committed to transparency throughout the acquisition process. It is my belief that we need to be clear, concise, and open with regard to what the DOD is seeking, and the work it is completing. It is our responsibility as stewards of tax dollars to ensure complete openness, fairness, and objectivity in the acquisition process. I intend that we will be accountable to ensure the success of these initiatives.

I have charged the acquisition team to create an inspired, high-performing organization where:

- We expect each person must make a difference;
- We seek out new ideas and new ways of doing business;
- We constantly question requirements and how we meet them; and
- We recognize that we are part of a larger neighborhood of stakeholders interested in successful outcomes at reasonable costs.

We live in an increasingly complex world. Our missions vary widely, so we need strategic resilience and depth; and must ensure our Nation has response options today and for the future with the appropriate capacity and capability to prevail at home and abroad.

I would like to highlight some specific initiatives that capture these philosophies and are fundamental to transforming the acquisition process and workforce. They are:

(1) Program Manager Empowerment and Accountability

Program managers play a critical role in developing and fielding weapon systems. I have put in place a comprehensive strategy to address improving the performance of program managers. Key to this are program manager tenure agreements for Acquisition Category (ACAT) I and II programs, which are our largest programs. My expectation is that tenure agreements should correspond to a major milestone and last approximately 4 years. Another fundamental piece I have established is Program Management Agreements—a contract between the program manager and the acquisition and requirements/resource officials—to ensure a common basis for understanding and accountability; that plans are fully resourced and realistically achievable; and that effective transparent communication takes place throughout the acquisition process.

(2) Configuration Steering Boards (CSBs)

I have directed the military departments to establish CSBs. My intent is to provide the program manager a forum for socializing changes that improve affordability and executability. Boards will be in place for every current and future ACAT I program and will review all proposed requirement changes, and any proposed significant technical configuration changes which potentially could result in cost and schedule changes. Boards are empowered to reject any changes, and are expected to only approve those where the change is deemed critical, funds are identified, and schedule impacts are truly mitigated. For example, the Navy decided to terminate the Extended Range Munition (ERM) contract after the CSB review because the effort on the ERM contract was not meeting the performance needs of the Department. The Department is now looking at other alternatives to satisfy the requirement. I require every acquisition team member to fully engage the Planning, Programming, Budgeting, and Execution (PPBE) process thus creating an avenue for program managers to ensure they are funded to execute their responsibilities or alternatively descope their programs to match reduced budget levels.

(3) Defense Support Teams (DSTs)

To address the challenge of acquisition execution and assist both industry and DOD program managers, I have expanded the use of these teams who are made up of outside world-class technical experts to address our toughest program technical

issues. I expect the teams to resolve emergent problems and help the Department successfully execute tough programs before problems develop. For example, the Net Enabled Command Capability (NECC) program benefitted from a DST that clarified the critical coordination points necessary to bring the Defense Information Support Agency, the Service acquisition authorities, and operational sponsors into a coherent approach balancing military needs, technology solutions, and funding requirements. A refocused NECC team demonstrated significant progress on developing actionable military need definitions and establishing a collaborative environment for design and testing of software application modules enabling elements of a joint command and control tool set.

(4) Prototyping and Competition

I have issued policy requiring competitive, technically mature prototyping. My intent is to rectify problems of inadequate technology maturity and lack of understanding of the critical program development path. Prototyping employed at any level—component, subsystem, system—whatever provides the best value to the taxpayer.

For example, the Joint Light Tactical Vehicle (JLTV) is currently using competitive prototyping. The JLTV program will eventually provide our soldiers and marines with a truck that combines the off-road mobility of a High Mobility Multi-purpose Wheeled Vehicle with protection approaching that of a Mine Resistance Ambush Protected vehicle. To do this, the Joint Program Office is having three separate teams of contractors compete to make multiple prototypes which will be rigorously tested. At the end of this competition, the best of these prototypes will proceed on to Systems Demonstration and Development having already proven that they have the technical maturity to satisfy the requirements in a timely and cost effective manner.

(5) AT&L Notes

I am writing weekly notes to the acquisition workforce. These notes share lessons learned and provide leadership guidance on expected procedures, processes and behaviors within the acquisition workforce. These notes provide a powerful training tool directly from me.

COST AND SCHEDULE DELAYS IN MAJOR DEFENSE ACQUISITION PROGRAMS AND OTHER PROGRAMS

Let me now address cost overruns and schedule delays in the Department's Major Defense Acquisition Programs (MDAPs). First let me say that many programs do well in terms of cost and schedule. But for those programs that do have cost and schedule growth, the biggest drivers are unstable requirements, immature technologies, and funding instability.

I am addressing requirements instability through increased partnering with the Joint Staff on requirements and through CSBs. CSBs review all proposed requirements changes and any proposed significant technical configuration changes which have the potential to result in cost and schedule impacts to an MDAP. Such changes will generally be rejected, deferring them to future blocks or increments. Changes may not be approved unless funds are identified and schedule impacts mitigated. CSBs also create a collaborative forum for program managers to propose and describe reductions in requirements which can significantly lower cost without substantially reducing capability. Program managers desperately need these forums to try to improve the pace of requirements decisions and match that pace to the pace of program execution. The Joint Staff has also asked the programs to come back to them, if requirements are driving costs, and discuss if it makes sense to change the requirements.

I also require technical maturity of programs before program initiation (Milestone B). Statute requires that Milestone Decision Authorities (MDA) certify that the technology in an MDAP is demonstrated in a relevant environment for Milestone B (or Key Decision Point B for space programs). I must also certify that the program demonstrates a high likelihood of accomplishing its intended mission. These are 2 of the 10 criteria I certify. Congress' direction that the DOD ensure appropriate technical maturity at Milestone B was very helpful. I think the additional nine criteria add time and paperwork, and these criteria can conflict with making needed progress on developing tools for our warfighters.

Where I have had questions about a program's readiness for program initiation, I have used Independent Program Assessments (IPAs), DSTs, and other tools to do a thorough assessment of the program and to present their findings to me and other members of the Defense Acquisition Board (DAB). For example, I directed the creation of a DST to assist the Space-Based Infrared System High program in

rearchitecting the Flight Software System. This became the critical path to launch due to architecture problems found late in development. The DST team brought an outside expert perspective, enabling the contractor team to leverage years of embedded systems development and management experience, to assess the viability of the new architecture and highly streamlined development process. Currently, the revised architecture is proving to meet expectations and the development team is meeting critical delivery dates although some minor delays have been experienced.

I give explicit funding and schedule direction to programs at their milestone decisions, and ensure those funding directions are implemented in the budget process. In addition, I am also focusing a great deal of attention on the contractual incentives put in place for programs I review to ensure we incentivize improved outcomes and not reward poor ones.

Finally, I have tried to improve discipline in the process by citing the governing requirements document in acquisition decision memorandums (ADMs), prohibiting any changes to the requirements, and directing the program managers to seek adjustments in requirements which reduce cost and program risk, and insisting the program manager execute within the budget and limit the excessive demands of technical authority and derived requirements.

Taken together I believe these initiatives, along with those I discussed earlier will put us on a path towards achieving markedly improved acquisition outcomes.

GOVERNMENT ACCOUNTABILITY OFFICE REPORT

Let me now address our cost and schedule performance that was detailed in the Government Accountability Office (GAO) Report "Assessments of Selected Weapon Programs." This report made headlines citing cost growth of $295 billion on 95 Defense programs. It was a catchy headline in the newspapers. But having reviewed the report in detail, I can only conclude that we and the GAO have some important work ahead of us to develop appropriate metrics to evaluate DOD's acquisition system. The current report has some significant limitations that I will discuss briefly. Has there been cost growth in some DOD programs? Yes, and I am not here to condone it. Indeed, I am seeking to strictly limit cost growth. Do all programs behave as it is implied in the GAO report? Absolutely not. Our acquisition system is not on a downward spiral—it is on a path to improvement.

As I am sure you know, DOD is working to field some of the most technologically complex and revolutionary systems to ensure our national security, while taking into consideration other aspects, such as immediate national security needs, industrial base considerations, legislative direction, congressional requirements, and changing capability needs. I have yet to see an assessment that takes these kinds of factors into account when developing a report card for DOD. I believe that it is essential that we, and the GAO, account for these issues when assessing the DOD acquisition system to ensure the taxpayer and Congress get an accurate picture of the health of our acquisition system.

I do not plan to dissect the report, but I am going to offer a few specific comments about the GAO's analytical approach to temper any conclusions you might have drawn from their study. I hope to build on this, so that we might all move towards sound future analysis on which to measure the progress of our acquisition system.

First, I believe GAO overstates the magnitude of many of the issues they raise by making generalizations from limited subsets of data. A few poor performers incorrectly drive many of the conclusions that GAO makes. Many of these conclusions are not indicative of most programs in the portfolio nor of DOD acquisition performance trends.

Second, the report does not differentiate between cost growth due to wise and intentional choices and cost growth from programs that are struggling. For example, $18 billion of the cost growth in the GAO's 2007 Selected Acquisition Report portfolio can be attributed to programs with quantity increases. This growth is intentional and intelligent decisionmaking, representing deliberate choices to increase capability. For instance, we recently purchased more Unmanned Aerial Vehicles (UAVs) than originally envisioned because the UAV provides our warfighters with unprecedented capability that enhances their survivability in Iraq and Afghanistan. Under GAO's methodology, these additional UAVs would be counted as cost growth. Similarly, purchasing an additional 76 C–130J aircraft counts as $8 billion of cost growth. Buying almost 500 additional Advanced Threat Infra-Red Countermeasure systems to defend more helicopters from heat seeking missiles counts as cost growth too. These are exactly the kinds of things that are helping the warfighter in both Iraq and Afghanistan, but are used to bolster the perception that the DOD is performing poorly.

We look forward to working with GAO to select better metrics and displays that will portray our incremental performance changes.

GAO High Risk Areas within DOD

All but one of the Department's High Risk Areas fall under my purview. I am committed to aggressively addressing our High Risk Areas including:

(1) Weapons Systems Acquisition;
(2) Contract Management and Interagency Contracting;
(3) Supply Chain Management;
(4) Support Infrastructure Management and Managing Federal Real Property;
(5) Business Systems Modernization;
(6) Financial Management; and
(7) Protection of Technologies Critical to U.S. National Security Interests.

I am tracking the progress of each High Risk Area goal and milestone and receive periodic updates from the respective Department leads. We are working closely with both the Office of Management and Budget (OMB) and GAO staff on developed plans and progress on milestones and metrics to reduce risks in these areas critical to DOD. Last month, we met with OMB leaders and GAO auditors to discuss those plans and review appropriate metrics in details. These exchanges are extremely valuable. Our high level focus and associated initiatives are demonstrating tangible progress in the weapon systems, contract management, supply chain, and infrastructure areas.

INVESTMENT PLANNING—DOD'S IMPLEMENTATION OF SECTION 817 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2008

Let me now address section 817, which requires a report on the DOD strategies for balancing the allocation of funds and other resources among MDAPs. In my response to section 817, I will assess the benefits of several ongoing initiatives, such as capability portfolio management and the incorporation of the benefits of the Concept Decision (CD) Pilot Initiative, which was completed in March 2008. Through CSBs, Joint Analysis Teams (JATs), and the CD Pilot Initiative, we have learned much about bringing the requirements, acquisition, technology and programming processes together to determine potential materiel and non-materiel solutions for Joint Requirements Oversight Council (JROC) approved capability gaps from among a portfolio of choices. As such, I am instituting a more rigorous review prior to entering the acquisition process, called the Material Development Decision which will replace the current Concept Decision point in DODI 5000.2. Additionally, in accordance with the National Defense Authorization Act (NDAA) for Fiscal Year 2007, we are instituting a requirements manager certification course developed in conjunction with the Joint Staff and Defense Acquisition University (DAU) to ensure that requirements are written with a better understanding of and appreciation for the needs of the acquisition process.

The department continues to identify and incorporate additional opportunities for strategic resource balancing and prioritization through initiatives such as the ongoing Capability Portfolio Manager implementations. As the benefits from these initiatives are recognized, we will develop further recommendations for changes in processes and, as appropriate, legislative proposals. However, in order to conduct the necessary in-depth review of all the data and metrics gathered, we will not be ready to submit the report required by section 817 until the second quarter of fiscal year 2009, after we have had an opportunity to view fourth quarter 2008 and first quarter 2009 outcomes and to assess their value added to our ability to make strategic resourcing decisions.

MILESTONE A REQUIREMENTS—DOD IMPLEMENTATION OF SECTION 943 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2008

Let me now address section 943, which enacts a new section 2366b of title 10 that adds requirements for certification of MDAPs before Milestone A, or Key Decision Point A (KDP A) for space programs. This approval must be granted prior to entrance into the technology development phase of the acquisition lifecycle. We have been actively reviewing this legislation in an attempt to establish an implementation plan. Based upon that review, and advice from legal counsel, we have not yet determined how to make the language actionable. Some examples of the issues we are struggling with in section 2366b are:

1. The use of the term "system" to describe a Milestone A technology concept is problematic—there is no "system" or "program" at Milestone A. In-

deed, the DOD needs the flexibility to consider a wide range of prototyping concepts in a post-Milestone A development effort.

2. Section 941 of the NDAA for Fiscal Year 2008 enacted a new section 118b of title 10. We have not completed implementation of section 118b at this time, and in fact it will be some time before that will happen because of the comprehensive reviews it requires. Therefore, the requirement in the new Milestone A certification that the ″system be executed by an entity with a relevant core competency as identified by the Secretary of Defense under section 118b of this title″ is premature.

3. There is ambiguity over the application of the requirement for priority levels assigned by the JROC. Indeed, it is actually essential that post-Milestone A prototyping and development efforts be used to inform the setting of requirements. Excessive requirements are almost always a factor in the high cost and long timelines for DOD development programs. Seeking to grant excessive validity to requirements at Milestone A is exactly the wrong approach to improving DOD development programs.

We are working with our General Counsel in an effort to resolve our concerns and determine how to address Milestone A, or KDP A, approval for programs otherwise ready to enter the Technology Development phase. We will work closely with the committees to resolve our concerns with this new legislative language.

MILESTONE B REQUIREMENTS—DOD IMPLEMENTATION OF SECTION 801 AS AMENDED BY SECTION 812 OF NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2008

Let me now address section 801 as amended by section 812 of the NDAA for Fiscal Year 2008, which requires the milestone decision authority to receive a business case analysis for an MDAP under consideration for Milestone B, or KDP B for space programs, approval and to certify on the basis of the analysis that the program is affordable, reasonable cost and schedule estimates have been developed, and funding is available to execute through the Future Years Defense Plan. In February 2008, I enacted policy implementing section 812. This policy directs the MDA, without further delegation, to certify the program against the components of the business case analysis and the remaining provisions as specified in the law before granting Milestone B (or KDP B) approval. Although not mandated by statute, the policy also requires a similar certification if the program is initiated at Milestone C. Indeed, the most literal interpretation of the Milestone C certification would appropriately require full funding and effectively create a beneficial, stable multi-year procurement. However, the lack of multi-year authority prevents the taxpayer from realizing potential savings.

We have been in compliance with the amended Milestone B/KDP B requirements. Some aspects of these certifications serve to make the acquisition process more robust, but the process adds time and paperwork and limits DOD's flexibility. To date, in accordance with the amended statute, I have certified four MDAPs for Milestone B decisions and one MDAP for a KDP–B decision. The four programs receiving Milestone B certifications were the KC–X Tanker Replacement program, the Joint Tactical Radio—Airborne, & Maritime/Fixed Station program, the Mission Planning System (MPS) Increment IV program, and the Broad Area Maritime Surveillance (BAMS) program. The KDP B certification was for Global Positioning System IIIA.

NUNN MCCURDY—DOD IMPLEMENTATION OF SECTION 802 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2006

Let me now address section 802, which amended section 2433 of title 10, U.S.C., by adding specifications for "significant" and "critical" cost growth thresholds; and established the requirement for unit cost reporting against an original baseline—the baseline description established at program initiation for all MDAPs. Prior to this change, unit cost reporting was done only against the current baseline—which, in practice, once approved, replaced all previous versions.

This change has increased our visibility into unit cost changes over time, however, traditionally the Department has used the Acquisition Program Baseline (APB) both for congressional tracking and for program execution management. The restrictions imposed by section 802 that limit changes of the current APB to Milestones (or Key Decision Points), Low Rate/Full Rate Production, and critical breaches have hampered the usefulness of the APB in the Department as a management tool. To be clear, I have always been an advocate of measuring program results against the original cost baseline.

The Department has a rigorous, intensive, Department-wide review process to assess all programs that have experienced critical Nunn-McCurdy baseline breaches. This process has provided a comprehensive basis of analysis and a review of possible

alternatives for me to consider before making a decision on whether or not to certify each program. I take very seriously the responsibility to keep programs within cost and schedule and to restructure or reset programs with significant or critical cost growth, such as the unit cost growth measured for the Nunn-McCurdy criteria.

Since the changes to the law were enacted, seven programs have had critical Nunn-McCurdy baseline breaches. Of these seven, five had critical breaches to both the current and the original baselines. Only two programs had a critical breach to the original baseline only—Joint Primary Aircraft Training (JPATs) and Joint Air to Surface Missile. All seven programs were certified, although in all cases, except JPATS, those programs were restructured to increase greatly the probability they will remain within cost and schedule.

PROGRAM MANAGER REQUIREMENTS—DOD IMPLEMENTATION OF SECTION 853 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2007

Let me now address section 853 of the NDAA for Fiscal Year 2007, which directs the Department to develop a strategic plan for enhancing the role of program managers in developing and carrying out defense acquisition programs. The Department has taken steps to empower its program managers and to hold them accountable for their performance. As a result of our efforts to develop that plan, we developed a series of initiatives in the areas of program manager development and incentives, knowledge sharing, and stability and support. Those initiatives, described below, are in various stages of implementation.

In the area of "program manager development and incentives," we are actively pursuing program manager financial incentives linked to those positions that develop our program managers and also to their tenure in those positions. These incentives will make the program management field more appealing, especially to the civilian workforce. In addition, we are increasing our use of just-in-time training. DAU is deploying its "Core Plus" concept that involves additional position-specific coursework for program managers in specialty areas. To improve the civilian program manager workforce, we are planning to implement a single occupational specialty for use across the Department. This will allow for more consistent career management of civilian program managers and provide better opportunities for them to compete for positions in other Services.

As part of our "knowledge sharing" initiatives, we are participating in the National Defense Industrial Association's Industrial Committee on Program Management (ICPM). Under the auspices of the ICPM, we are teaming with industry to develop and expand the use of Program Startup Workshops to improve communication and clarify expectations up front. Within the Department, we have held Program Manager Forums that allow me and my senior staff to interact directly with program managers and to get their feedback on issues important to them. We have initiatives led by DAU to ensure our program managers have access to an array of tools and templates.

GANSLER COMMISSION RECOMMENDATIONS

Finally let me briefly address the Gansler Commission, which was established in August 2007 to look at Army Acquisition and Program Management in Expeditionary Operations. This initiative was prompted by the contracting problems identified largely in Kuwait, but the report is not limited to Kuwait or just to the Army. The work of this commission provides us a clear way ahead on contracting reform that offers detailed analysis and recommendations both large and small. This was a totally independent, objective assessment.

The Commission provided four overarching recommendations, as follows:

(1) Increase the stature, quantity, and career development of military and civilian contracting personnel (especially for expeditionary operations);

(2) Restructure organization and restore responsibility to facilitate contracting and contract management in expeditionary and CONUS operations;

(3) Provide training and tools for overall contracting activities in expeditionary operations; and

(4) Provide legislative, regulatory, and policy assistance to enable contracting effectiveness in expeditionary operations.

The DOD is addressing improvement in contracting in several ways. We have increased the staffing within the Defense Procurement, Acquisition Policy, and Strategic Sourcing Directorate that is specifically dedicated to Contracting in Expeditionary Operations. This team is staffed with contracting personnel who have expeditionary deployment experience. In addition, I stood up the Task Force on Contracting and Contract Management in Expeditionary Operations to address the spe-

cific Commission recommendations and to integrate activities responding to the Commission's recommendations with the many other relevant activities already underway within the DOD. The Task Force is guided by senior leaders within the Acquisition, Technology, and Logistics organization, including the Deputy Under Secretary (Acquisition and Technology), as well as the Director, Defense Procurement, Acquisition Policy, and Strategic Sourcing. These senior leaders are working closely with key personnel throughout the Department. They meet weekly to track progress and monthly with Dr. Gansler himself to discuss any points of clarification regarding the Commission's recommendations. Progress of the Task Force is of utmost importance to me.

The Task Force actions implement section 849 of the NDAA for Fiscal Year 2008, which directed the Secretary of Defense, in consultation with the Joint Chiefs of Staff, to evaluate the Commission's recommendations to determine the extent to which such recommendations are applicable to the other Armed Forces. The evaluation required by section 849 is underway, and the report to the congressional committees is on schedule for submission within a month.

With regard to increasing the number of contracting personnel, we are conducting a competency assessment for the entire DOD Contracting Career Field. The Department is actively assessing and developing its position regarding the appropriate numbers of General and Flag Officers, and Senior Executive Service authorizations for contracting positions. To be clear, it will take time to recruit, hire, train, develop, and promote the full range of contracting personnel required by DOD.

The Commission recommended that the Defense Contract Management Agency should be responsible for all base, post, camp and station contracting, and that it should be resourced to accomplish that mission. The Task Force is developing alternative approaches to achieve the Commission's goal of enhanced post-award contract management during routine times as well as during times of contingency and war. Through monthly discussions with Dr. Gansler, we believe he agrees we are on a path to achieving the Commission's intent.

Recently, the Department sent forward legislative proposals to implement some of the recommendations of the Gansler Commission that require legislation. These proposals include:

- Authority to Acquire Products and Services Produced in a Contingency Theater of Operations Outside the United States
- Exceptions for National Security and Emergency Operations
- Requirement for Use of Express Option for Deciding Protests of Contracts and Task Delivery Orders in Support of Emergency Operations
- Optional Life Insurance Election Opportunity for Certain Federal Civilian Employees
- Expedited Hiring Authority for Defense Acquisition Positions

I would be happy to discuss further my work in implementing the Commission's recommendations and about our legislative proposals. I appreciate the committee's support of these legislative changes that will greatly improve expeditionary contracting and beyond.

PERSPECTIVE

I would like to add some broader perspective to this more specific discussion of acquisition matters. In each of my Senate confirmed positions, I have talked with the previous office holders in order to try to benefit from their experiences. I believe there are many relevant insights in these discussions.

First, this Nation had the chance to lead all other Nation's on some technology efforts because there was available funding to pursue innovative, cutting edge ideas—technology push in many cases. Our current budget processes and timelines seriously limit our ability to pace most nation-states and offer no prospect of pacing aggressive terrorist organizations.

Several of my predecessors highlighted the need for extremely capable people. In the past, there was robust exchange of people at all career stages between industry and government. Indeed, Jacques Gansler was hired from industry based on a phone call from Johnny Foster in search of an extremely capable electronics expert. Today, for a host of reasons, we have virtually eliminated the exchange of personnel between industry and government—to the detriment of the defense research, development and procurement program. DARPA is the only organization which has managed to successfully maintain a reasonable level of industry personnel rotation for the benefit of the DOD and the Nation.

Indeed, after several years in government, I can tell you that it is virtually impossible to hire a mid-career industry person into the DOD. There are many, many im-

pediments. However, I believe this detrimental situation hinders the ability of the defense acquisition team to be maximally effective.

Further, Congress has enacted greater restrictions on the acquisition team members who do choose to serve in the Federal Government. I believe the latest set of restrictions governing post government employment will seriously discourage the very best and brightest from entering the defense acquisition field and serving for their full careers. The legislation will certainly make the wall between industry and government even higher. Many people in all walks of life now pursue two careers. The prospect of devoting years to one career of dedicated public service and then confronting severe restrictions on one's ability to use those experiences in a second career is unfair. While the DOD has some useful opportunities to hire retired military and government personnel into acquisition positions, the Department needs tools to balance these options with the ability to hire industry personnel and nonmilitary personnel into entry, mid, and senior career positions to ensure the highest level of creativity, alternative thinking and balanced perspectives.

Current caps on management headquarters and past focused efforts on "shoppers" have seriously harmed the defense acquisition workforce. As government employees lived through these times, some of the most capable personnel left the government for the lucrative opportunities presented by industry. As the DOD's procurement and research and development budgets have grown significantly since 2001, there has been no linkage to the personnel process or corresponding ability to hire government personnel. Indeed, several programs which I have recently reviewed that experienced cost and schedule problems cited a shortage of program office personnel as one of the contributing factors. I have recently asked the AT&L team to consider the use of personnel plans in conjunction with new major acquisition programs. However, these efforts will still face the constraints of management headquarters caps. The situation has driven the DOD to greater use of contractor personnel, a solution which has several deficiencies. However, it is necessary to have trained people to manage major acquisition programs spending significant tax dollars. It is unfair to expect flawless execution without adequate manpower.

One additional impediment to industry personnel joining the DOD is the restrictions DOD personnel face regarding participating in the stock market. The threshold for defining defense contractors is doing $25,000 of business with DOD, and this threshold has not been adjusted for over 35 years. This restriction prevents many defense personnel from participating in the stock market like the rest of America. The DOD has an abundance of rules and processes to prevent an honest individual from assisting a single company. However, the low threshold prevents DOD appointees from participating in the stock market and restricts other members of the acquisition team. All of these issues can be carefully and appropriately managed and do not require the blanket restrictions and rules which are going to discourage people from working for the DOD in defense acquisition.

The DOD needs to work with Congress on appropriate changes which can help DOD retain a highly capable acquisition team, recruit talented individuals from all levels of industry, and give the acquisition team greater flexibility to deliver technology and products to protect our Nation's security.

CONCLUSIONS

In conclusion, I am working extensively with others in the Department and our industry partners to improve Defense Acquisition as outlined by the numerous initiatives I have described today. We have taken a multi-faceted approach to improve both our processes and our products. Our goal is to have the best equipment for the warfighter, while spending the taxpayer's money wisely. The review boards and teams that I have instituted provide an excellent forum for integrating technology, and improving affordability and executability. Prototyping ensures competition and technological maturity. Analysis, through business case development at Milestone Reviews and Nunn-McCurdy reviews, creates a framework for cost/schedule/performance tradeoffs. Most importantly, our people, from the contract specialist to the program manager are becoming more knowledgeable and multi-functional through the training and professional development initiatives I have implemented.

In summary, we work in a very dynamic environment, and as such we must constantly be balancing stability and flexibility in our requirements, resources, and reporting. I believe we have developed a solid set of checks and balances that I am confident will support our current acquisition posture and keep us on a path to improvement.

I thank the committee for their time in allowing me to describe my vision for improving our acquisition system and some specific initiatives we have undertaken to improve program outcomes. I look forward to answering your questions.

Chairman LEVIN. Thank you very much, Secretary Young.

Ms. Schinasi?

STATEMENT OF KATHERINE V. SCHINASI, MANAGING DIRECTOR, ACQUISITION AND SOURCING MANAGEMENT, GOVERNMENT ACCOUNTABILITY OFFICE

Ms. SCHINASI. Thank you, Mr. Chairman, Senator Warner, and members of the committee, for inviting me here today to talk about DOD's management of its acquisition.

In preparing for this hearing, I looked at a statement that we had delivered in front of this committee a decade ago. The title of that statement was "Defense Acquisition: Improved Program Outcomes Are Possible." I'm trying hard to hold on to that optimism as I come before you today. Part of the reason I think I may be able to is some of the things that the Under Secretary has talked about.

But I'm going to start from a different place. I'm going to start from a position that says I believe DOD's acquisition process has failed in two important ways. First, it's failed the warfighter because it's delivering capabilities late and in fewer quantities than planned, or both. Many times when equipment is delivered to the field, it is not what's needed for the current operations. I think you've heard Secretary Gates' frustration lately with the Air Force, who continues to produce fighter aircraft when really it's unmanned aerial vehicles that are needed in current operations. The Army is spending billions of dollars that it did not plan to on legacy radios because its development efforts for a new radio have gotten so bogged down. The Navy is apt to have a net loss in its carrier fleet capacity, because it has been delayed in developing a new carrier beyond the point where it will have to start retiring its current carriers. The Marine Corps will have to wait at least 5 years to get half of the quantities of expeditionary vehicles that it has planned. The space community, after years of trying and failing to develop the Space-Based Infrared System-High program, is going to be left with a constellation of missile warning satellites that are nearing the end of their useful life.

I believe the acquisition process has also failed the taxpayer, as continuing and significant cost overruns mean less value for the dollar spent. There are concerns about what is known about program costs and, Mr. Chairman, you referred to a number of those in your opening statement. But there also needs to be concern for what is not known about program costs. The change that Congress made in 2005 to Nunn-McCurdy is telling in that respect. In the 3 years before the rebaselining was done in 2005, DOD reported 12 cost breaches. In the 3 years since that change was made, DOD has reported 4 times as many, or 48 cost breaches.

In addition to that, the work we have done shows that cost growth is not recognized in the Department until after the critical design review, and there are many programs that the Department currently has in development that have not yet reached that point. So there is cost growth coming that we don't yet know about.

In addition to the individual program cost growth, there is also the matter of cost growth in the modernization account as a whole. The Department estimates its costs over the 6-year Future Years

Defense Program (FYDP). What we have seen in work that we have done for this committee recently, is that that period of time does not really give a full picture of the cost of the programs overall. In fact, it obfuscates that cost. It is always the next year, after the FYDP program, when we see that bow wave that we will not be able to continue to support.

If you look at the period 1992 to 2007, what you see is the costs needed to complete DOD's portfolio increased 120 percent, but over that time period the funding that was provided to do so was only 57 percent. So that bow wave is going to continue.

But an evaluation cannot just look at the acquisition process to see what's gone wrong and what needs to be fixed. DOD actually knows pretty well how to buy things, which is what the acquisition process does. DOD's policies are sound in that regard, some of those put in place because of legislation from this committee. The challenge is to figure out why managers and decisionmakers don't do what they say they should do.

But the evaluation must also include the proper focus on what to buy, because until that condition is fixed we will continue to see dysfunction in the acquisition process. What to buy, of course, starts with the requirements process. The requirements process is broken. Program requirements are established on wants, not needs, and moving from a threat-based evaluation to establish the need for new equipment to a capabilities-based evaluation I believe has only exacerbated this problem. Solutions developed by the military departments and approved by the military vice chiefs reflect parochial service interests, rather than current and future warfighter needs.

What to buy also includes the resource allocation process and the resource allocation process is broken. Resource needs are almost an afterthought in requirements decisions. As a consequence, DOD has too many programs chasing too few dollars. When priorities are not established, the continual battle for funding that results creates damaging instability.

What to buy increasingly relies on a defense industry that has shrunk to just a handful of companies. The government has increasingly turned to industry to help them find and develop almost unbelievably complex technical solutions, without ensuring that sufficient in-house capacity exists to manage contractor activities. The defense industry is too willing a participant in continuing business as usual.

Finally, I need to say a word about oversight. Oversight has not made much of a difference. As much as I would agree with many of the policies that the current under secretary and his team have put forward, the transitory nature of leadership in the Department makes it almost impossible to get lasting change. Just as an example, Mr. Young is the seventh individual in the under secretary's position in the 15 years that I've been working in this area.

In fulfilling their own oversight role, the Members of Congress have their own ideas about authorizing and appropriating individual weapons programs. It's the decisions on those individual programs that determine whether or not policies will work.

Some believe that more money is the answer, but DOD has already tried spending more money. Investment in the weapons ac-

quisition programs is now at its highest level in 2 decades and the outcomes have only gotten worse. I have one chart that I brought with me today that has cost and schedule overruns, and you only need to look at that to see the discouraging detail.

Chairman LEVIN. Do we have copies of that chart in your testimony?

Ms. SCHINASI. Yes, I believe you do, yes.

What we have to do is redefine success. Success should be defined as producing needed equipment that can be delivered to the warfighter as promised, and at a predictable cost that the country can afford. The goal of any changes as we go forward should be to create a system in which this is the natural outcome.

The perverse incentives now contained in the requirements, funding, acquisition, and oversight processes are there because success is currently defined as attracting funding and the way to attract funding is to get a program started. The system that has arisen as a consequence is one in which all participants get just enough so as to maintain the status quo—the military departments, the Office of the Secretary, defense companies, the press, Congressional sponsors, and even the auditors—who have lifetime employment. Negative consequences now accrue only to the warfighter and to the taxpayer, who don't really participate in the process.

We have to find a way to establish consequences. Another way of saying that is that we have to create a system in which we can assign accountability and then make it stick. Advocates in the system must be recognized for what they are. Their individual needs must be explicitly balanced in the context of constrained resources, and as a check independence must exist in key functions.

In some cases, changes to DOD organizations or the authority of DOD officials may need to be made. Congress can help by reinforcing sound Department policies with laws, and by providing or withholding funding as necessary.

As I said when I started, I'm trying to hold on to the optimism contained in our statement from a decade ago. But we have to start thinking in terms of the opportunity costs that we're facing.

Mr. Chairman, you made the point in your opening statement that the $295 billion that was not planned that we are now spending on weapons programs could be used for so many other things. They say that if you do what you've always done you'll get what you've always gotten. I hope the witness appearing before you 10 years from now will have a different and better story to tell.

Thank you for your continued leadership in these matters and I look forward to your questions.

[The prepared statement of Ms. Schinasi follows:]

PREPARED STATEMENT BY KATHERINE V. SCHINASI

Mr. Chairman and members of the committee: I am pleased to be here today to discuss the Department of Defense's (DOD) management of its major weapon system acquisitions—an area that has been on the Government Accountability Office's (GAO) high risk list since 1990. Prior to and since that time, Congress and DOD have continually explored ways to improve acquisition outcomes without much to show for their efforts. DOD's major weapon system programs continue to take longer, cost more, and deliver fewer quantities and capabilities than originally planned. Current operational demands have highlighted the impact of these per-

sistent problems as DOD has been forced to work outside of its traditional acquisition process to acquire equipment that meet warfighter needs.

Investment in weapons acquisition programs is now at its highest level in two decades. The department expects to invest about $900 billion (fiscal year 2008 dollars) over the next 5 years on development and procurement with more than $335 billion invested specifically in major defense acquisition programs. Given the size of this investment, poor outcomes in DOD's weapon system programs reverberate across the entire Federal government. Every dollar wasted during the development and acquisition of weapon systems is money not available for other internal and external budget priorities—such as the war on terror and mandatory payments to growing entitlement programs.

My statement today is drawn from our body of work on DOD's acquisition, requirements, and funding processes, as well as our annual assessment of selected DOD weapon programs. As you requested, I will focus on (1) the performance of DOD's major defense acquisition program portfolio; (2) the underlying systemic problems that contribute to poor cost and schedule outcomes; (3) recent legislative initiatives and DOD actions aimed at addressing these problems; and (4) the extent to which those initiatives and actions can be expected to improve the future performance of DOD's major defense acquisition programs. Our work was conducted in May 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

SUMMARY

Since fiscal year 2000, DOD significantly increased the number of major defense acquisition programs and its overall investment in them. During this same time period, acquisition outcomes have not improved. Based on our analysis, total acquisition costs for the fiscal year 2007 portfolio of major defense acquisition programs increased 26 percent and development costs increased by 40 percent from first estimates—both of which are higher than the corresponding increases in DOD's fiscal year 2000 portfolio. In most cases, the programs we assessed failed to deliver capabilities when promised—often forcing warfighters to spend additional funds on maintaining legacy systems. Our analysis shows that current programs are experiencing, on average, a 21-month delay in delivering initial capabilities to the warfighter, a 5-month increase over fiscal year 2000 programs.

Several underlying systemic problems at the strategic level and at the program level continue to contribute to poor weapon system program outcomes. At the strategic level, DOD does not prioritize weapon system investments and the department's processes for matching warfighter needs with resources are fragmented and broken. Furthermore, the requirements and acquisition processes are not agile enough to support programs that can meet current operational requirements. At the program level, programs are started without knowing what resources will truly be needed and are managed with lower levels of product knowledge at critical junctures than expected under best practices standards. In the absence of such knowledge, managers rely heavily on assumptions about system requirements, technology, and design maturity, which are consistently too optimistic. This exposes programs to significant and unnecessary technology, design, and production risks, and ultimately damaging cost growth and schedule delays. DOD officials are rarely held accountable for these poor outcomes and the acquisition environment does not provide the appropriate incentives for contractors to stay within cost and schedule targets, making them a strong enabler of the status quo.

Recent congressionally mandated changes to the DOD acquisition system, as well as initiatives being pursued by the department, include elements that could improve DOD's overall investment strategy and the soundness of the programs it allows to move forward. However, it is still too early to determine the impact those changes have had on programs. Recognizing the need for more discipline and accountability in the acquisition process, Congress enacted legislation that requires decision-makers to certify that programs meet specific criteria at key decision points early in the acquisition process, and are measured against their original baseline estimates for the purpose of assessing and reporting unit cost growth.

Recent legislation also requires DOD to report on its strategies for balancing the allocation of funds and other resources among major defense acquisition programs and to identify strategies for enhancing the role of program managers in carrying out acquisition programs. DOD has begun several policy initiatives including a new concept decision review initiative, acquisition approaches with shorter and more cer-

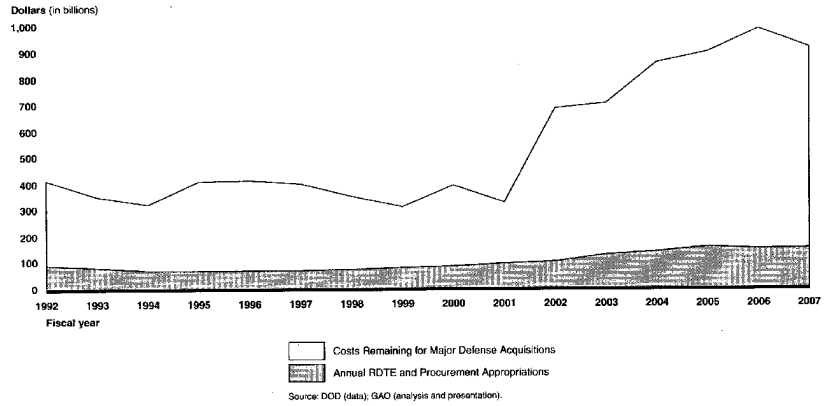
tain delivery timeframes, a requirement for more prototyping early in programs, and the establishment of review boards to monitor weapon system configuration changes, which are designed to enable key department leaders to make informed decisions before a program starts and maintain discipline once it begins.

While legislation and policy revisions can help guide change, DOD must begin making better choices that reflect joint capability needs and match requirements with resources or the department will continue to experience poor acquisition outcomes. DOD and the military Services cannot continue to view success through the prism of securing the funding needed to start and sustain new programs. Sound programs should be the natural outgrowth of a disciplined knowledge-based process. DOD's policy emphasizes the importance of a knowledge-based approach, but practice does not always follow policy. The transitory nature of leadership and the stovepiped process further undermines successful reform. Meaningful and lasting reform will not be achieved until the right incentives are established and accountability is bolstered at all levels of the acquisition process—both within the department and in the defense industry. Finally, unless all of the players involved with acquisitions—Congress, DOD, and perhaps most importantly, the military Services—have unified goals, outcomes are not likely to improve.

DOD HAS TOO MANY ACQUISITION PROGRAMS COMPETING FOR LIMITED RESOURCES, WHILE PROGRAM COSTS AND SCHEDULES CONTINUE TO INCREASE

DOD's portfolio of major acquisition programs has grown at a pace that far exceeds available resources. From 1992 to 2007, the estimated acquisition costs needed to complete the major acquisition programs in DOD's portfolio increased almost 120 percent, while the funding provided for these programs only increased 57 percent, creating a fiscal bow wave that may be unsustainable (see fig. 1).

Figure 1: Costs Remaining Versus Annual Appropriations for Major Defense Acquisitions



Source: DOD (data); GAO (analysis and presentation).

The total acquisition cost of DOD's 2007 portfolio of major programs under development or in production has grown by nearly $300 billion over initial estimates. While DOD is committing substantially more investment dollars to develop and procure new weapon systems, our analysis shows that the 2007 portfolio is experiencing greater cost growth and schedule delays than the fiscal years 2000 and 2005 portfolios (see table 1).[1] For example, total acquisition costs for programs in DOD's fiscal year 2007 portfolio have increased 26 percent from first estimates—compared to a 6-percent increase for programs in its fiscal year 2000 portfolio. We found a similar trend for total RDT&E costs and unit costs.

[1] Our analysis in this area reflects comparisons of performance for programs meeting DOD's criteria for being a major defense acquisition program in fiscal year 2007 and programs meeting the same criteria in fiscal years 2005 and 2000. The analysis does not include all the same systems in all 3 years.

Table 1: Analysis of DOD Major Defense Acquisition Program Portfolios

Fiscal year 2008 dollars

	Fiscal year		
	2000 portfolio	2005 portfolio	2007 portfolio
Portfolio size			
Number of programs	75	91	95
Total planned commitments	$790 Billion	$1.5 Trillion	$1.6 Trillion
Commitments outstanding	$380 Billion	$887 Billion	$858 Billion
Portfolio performance			
Change to total RDT&E costs from first estimate	27 percent	33 percent	40 percent
Change in total acquisition cost from first estimate	6 percent	18 percent	26 percent
Estimated total acquisition cost growth	$42 Billion	$202 Billion	$295 Billion
Share of programs with 25 percent or more increase in program acquisition unit cost	37 percent	44 percent	44 percent
Average schedule delay in delivering initial capabilities	16 months	17 months	21 months

Source: GAO analysis of DOD data.

Note: Data were obtained from DOD's Selected Acquisition Reports (dated December 1999, 2004, and 2006) or, in a few cases, data were obtained directly from program offices. Number of programs reflects the programs with Selected Acquisition Reports. In our analysis we have broken a few Selected Acquisition Report programs (such as Missile Defense Agency systems) into smaller elements or programs. Not all programs had comparative cost and schedule data, and these programs were excluded from the analysis where appropriate. Also, data do not include full costs of developing Missile Defense Agency systems.

Continued cost growth results in less funding being available for other DOD priorities and programs, while continued failure to deliver weapon systems on time delays providing critical capabilities to the warfighter. Put simply, cost growth reduces DOD's buying power. As program costs increase, DOD must request more funding to cover the overruns, make trade-offs with existing programs, delay the start of new programs, or take funds from other accounts. Delays in providing capabilities to the warfighter result in the need to operate costly legacy systems longer than expected, find alternatives to fill capability gaps, or go without the capability. The warfighter's urgent need for the new weapon system is often cited when the case is first made for developing and producing the system. However, DOD has already missed fielding dates for many programs and many others are behind schedule. On average, the current portfolio of programs has experienced a 21-month delay in delivering initial operational capability to the warfighter, and 14 percent are more than 4 years late.

FRAGMENTED PROCESSES, UNEXECUTABLE BUSINESS CASES, AND LIMITED ACCOUNTABILITY UNDERLIE POOR ACQUISITION OUTCOMES

Poor program execution contributes to and flows from shortfalls in DOD's requirements and resource allocation processes. Over the past several years our work has highlighted a number of underlying systemic causes for cost growth and schedule delays both at the strategic and at the program level. At the strategic level, DOD's processes for identifying warfighter needs, allocating resources, and developing and procuring weapon systems—which together define DOD's overall weapon system investment strategy—are fragmented and broken. At the program level, the military Services propose and DOD approves programs without adequate knowledge about requirements and the resources needed to successfully execute the program within cost, schedule, and performance targets. In addition, DOD officials are rarely held accountable for poor decisions or poor program outcomes.

Key Acquisition Support Processes Are Fragmented and Result in Unsound Programs

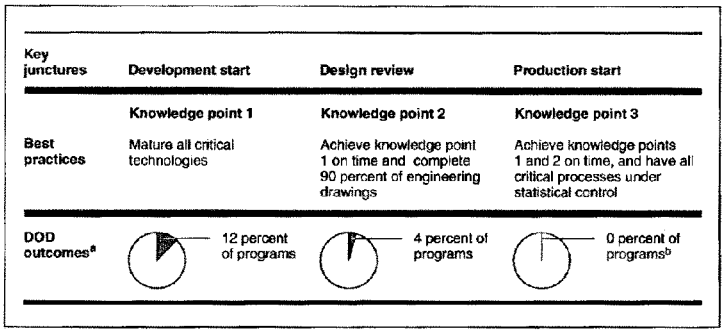
DOD largely continues to define warfighting needs and make investment decisions on a service-by-service basis, and assess these requirements and their funding implications under separate decisionmaking processes. While DOD's requirements process provides a framework for reviewing and validating needs, it does not adequately prioritize those needs and is not agile enough to meet changing warfighter demands. A senior Army acquisition official recently testified before Congress that because the process can take more than a year, it is not suitable for meeting urgent needs related to ongoing operations; and a recent study by the Center for Strategic and International Studies indicates that the process is unwieldy and officials are now trying to find ways to work around it. Ultimately, the process produces more demand for new programs than available resources can support. This imbalance promotes an unhealthy competition for funds that encourages programs to pursue overly ambitious capabilities, develop unrealistically low cost estimates and optimistic

schedules, and to suppress bad news. Similarly, DOD's funding process does not produce an accurate picture of the department's future resource needs for individual programs—in large part because it allows programs to go forward with unreliable cost estimates and lengthy development cycles—not a sound basis for allocating resources and ensuring program stability. Invariably, DOD and Congress end up continually shifting funds to and from programs—undermining well-performing programs to pay for poorly performing ones.

Initiating Programs with Unexecutable Business Cases Sets Them Up to Fail

At the program level, the key cause of poor outcomes is the consistent lack of disciplined analysis that would provide an understanding of what it would take to field a weapon system before system development. Our body of work in best practices has found that an executable business case is one that provides demonstrated evidence that: (1) the identified needs are real and necessary and that they can best be met with the chosen concept and (2) the chosen concept can be developed and produced within existing resources—including technologies, funding, time, and management capacity. Although DOD has taken steps to revise its acquisition policies and guidance to reflect the benefits of a knowledge-based approach, we have found no evidence of widespread adoption of such an approach in the department. Our most recent assessment of major weapon systems found that the vast majority of programs began development with unexecutable business cases, and did not attain, or plan to achieve, adequate levels of knowledge before reaching design review and production start—the two key junctures in the process following development start (see figure 2).

Figure 2: Knowledge Achievement for Weapon System Programs in 2008 Assessment at Key Junctures



Source: GAO analysis of DOD data.

[a]Not all programs provided information for each knowledge point or had passed through all three key junctures.

[b]In our assessment of two programs, the Light Utility Helicopter and the Joint Cargo Aircraft, are depicted as meeting all three knowledge points when they began at production start. We excluded these two programs from our analysis because they were based on commercially available products and we did not assess their knowledge attainment with our best practices metrics.

Knowledge gaps are largely the result of a lack of disciplined systems engineering analysis prior to beginning system development. Systems engineering translates customer needs into specific product requirements for which requisite technological, software, engineering, and production capabilities can be identified through requirements analysis, design, and testing. Early systems engineering provides knowledge that enables a developer to identify and resolve gaps before product development begins. Because the government often does not perform the proper upfront analysis to determine whether its needs can be met, significant contract cost increases can occur as the scope of the requirements change or become better understood by the government and contractor. Not only does DOD not typically conduct disciplined systems engineering prior to beginning system development, it has allowed new requirements to be added well into the acquisition cycle. The acquisition environment encourages launching ambitious product developments that embody more technical unknowns and less knowledge about the performance and production risks they entail. A new weapon system is not likely to be approved unless it promises the best

capability and appears affordable within forecasted available funding levels. We have recently reported on the negative impact that poor systems engineering practices have had on several programs such as the Global Hawk Unmanned Aircraft System, F–22A, Expeditionary Fighting Vehicle, Joint Air-to-Surface Standoff Missile and others.[2]

With high levels of uncertainty about technologies, design, and requirements, program cost estimates and related funding needs are often understated, effectively setting programs up for failure. We recently assessed the service and independent cost estimates for 20 major weapon system programs and found that the independent estimate was higher in nearly every case, but the difference between the estimates was typically not significant. We also found that both estimates were too low in most cases, and the knowledge needed to develop realistic cost estimates was often lacking. For example, program Cost Analysis Requirements Description documents—used to build the program cost estimate—are not typically based on demonstrated knowledge and therefore provide a shaky foundation for estimating costs. Cost estimates have proven to be off by billions of dollars in some of the programs we reviewed. For example, the initial Cost Analysis Improvement Group estimate for the Expeditionary Fighting Vehicle program was about $1.4 billion compared to a service estimate of about $1.1 billion, but development costs for the system are now expected to be close to $3.6 billion. Estimates this far off the mark do not provide the necessary foundation for sufficient funding commitments and realistic long-term planning.

Constraining development cycles would make it easier to more accurately estimate costs, and as a result, predict the future funding needs and effectively allocate resources. We have consistently emphasized the need for DOD's weapon programs to establish shorter development cycles. DOD's conventional acquisition process often requires as many as 10 or 15 years to get from program start to production. Such lengthy cycle times promote program funding instability—especially when considering DOD's tendency to change requirements and funding as well as frequent changes in leadership. Constraining cycle times to 5 or 6 years would force programs to conduct more detailed systems engineering analyses, lend itself to fully funding programs to completion, and thereby increase the likelihood that their requirements can be met within established timeframes and available resources. An assessment of DOD's acquisition system commissioned by the Deputy Secretary of Defense in 2006 similarly found that programs should be time-constrained to reduce pressure on investment accounts and increase funding stability for all programs.

Accountability Suffers When Program Managers Lack the Authority to Shape Programs

When DOD consistently allows unsound, unexecutable programs to pass through the requirements, funding, and acquisition processes, accountability suffers. Program managers cannot be held accountable when the programs they are handed already have a low probability of success. In addition, program managers are not empowered to make go or no-go decisions, have little control over funding, cannot veto new requirements, and have little authority over staffing. At the same time, program managers frequently change during a program's development. Our analysis indicates that the average tenure for managers on 39 major acquisition programs started since March 2001 was about 17 months—less than half the length of the average system development cycle time of 37 months. Such frequent turnover makes it difficult to hold program managers accountable for the business cases that they are entrusted to manage and deliver.

The government's control over and accountability for decisions is complicated by DOD's growing reliance on technical, business, and procurement expertise supplied by contractors. This reliance can reach a point where the foundation on which decisions are based may be largely crafted by individuals who are not employed by the government, who are not bound by the same rules governing their conduct, and who are not required to disclose whether they have financial or other personal interests that conflict with the responsibilities they have performing contract tasks for DOD. Further, in systems development, DOD typically uses cost-reimbursement contracts, in which DOD generally pays the allowable costs incurred for the contractor's best efforts, to the extent provided by the contract. This may contribute to an acquisition environment that is not conducive for incentivizing contractors to follow best practices and keep cost and schedule in check.

[2] GAO, Best Practices: Increased Focus on Requirements and Oversight Needed to Improve DOD's Acquisition Environment and Weapon System Quality, GAO–08–294 (Washington, DC: Feb. 1, 2008).

RECENT CONGRESSIONAL INITIATIVES AND DOD ACTIONS AIM TO PROMOTE A MORE DISCIPLINED, KNOWLEDGE-BASED ACQUISITION APPROACH

Recognizing the need for more discipline and accountability in the acquisition process, Congress recently enacted legislation that, if followed, could result in a better chance to spend resources wisely. Likewise, DOD has recently begun to develop several initiatives, based in part on congressional direction and GAO recommendations that, if implemented properly, could also provide a foundation for establishing a well balanced investment strategy and sound, knowledge-based business cases for individual acquisition programs.

Legislation Could Have a Positive Impact on Acquisition Outcomes

Over the past 3 years, Congress has enacted legislation that requires DOD to take certain actions which, if followed, could instill more discipline into the front-end of the acquisition process when key knowledge is gained and ultimately improve acquisition outcomes. For example, 2006 and 2008 legislation require decisionmakers to certify that specific levels of knowledge have been demonstrated at key decision points early in the acquisition process before programs can enter the technology development phase or the system development phase. The 2006 legislation also requires programs to use their original baseline estimates—and not only their most recent estimates—when reporting unit cost threshold breaches. It also requires an additional assessment of the program if certain thresholds are reached. Other key legislation requires DOD to report on the department's strategies for balancing the allocation of funds and other resources among major defense acquisition programs, and to identify strategies for enhancing the role of program managers in carrying out acquisition programs. (For more detailed description of recent legislation, see appendix I).

Recent DOD Actions Provide Opportunities for Improvement

DOD has initiated actions aimed at improving investment decisions and weapon system acquisition outcomes, based in part on congressional direction and GAO recommendations. Each of the initiatives is designed to enable more informed decisions by key department leaders well ahead of a program's start, decisions that provide a closer match between each program's requirements and the department's resources. For example:

- DOD is experimenting with a new concept decision review, different acquisition approaches according to expected fielding times, and panels to review weapon system configuration changes that could adversely affect program cost and schedule.
- DOD is also testing portfolio management approaches in selected capability areas to facilitate more strategic choices about how to allocate resources across programs and also testing the use of capital budgeting as a potential means to stabilize program funding.
- In September 2007, the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics issued a policy memorandum to ensure weapons acquisition programs were able to demonstrate key knowledge elements that could inform future development and budget decisions. This policy directed pending and future programs to include acquisition strategies and funding that provide for contractors to develop technically mature prototypes prior to initiating system development, with the hope of reducing technical risk, validating designs and cost estimates, evaluating manufacturing processes, and refining requirements.
- DOD also plans to implement new practices that reflect past GAO recommendations intended to provide program managers more incentives, support, and stability. The department acknowledges that any actions taken to improve accountability must be based on a foundation whereby program managers can launch and manage programs toward greater performance, rather than focusing on maintaining support and funding for individual programs. DOD acquisition leaders have told us that any improvements to program managers' performance hinge on the success of these departmental initiatives.
- In addition, DOD has taken actions to strengthen the link between award and incentive fees with desired program outcomes, which has the potential to increase the accountability of DOD programs for fees paid and of contractors for results achieved.

If adopted and implemented properly these actions could provide a foundation for establishing sound, knowledge-based business cases for indi-

vidual acquisition programs, and the means for executing those programs within established cost, schedule, and performance goals.

CONCLUDING OBSERVATIONS ON ACHIEVING SUCCESSFUL AND LASTING REFORM

DOD understands what it needs to do at the strategic and at the program level to improve acquisition outcomes. The strategic vision of the current Under Secretary of Defense for Acquisition, Technology, and Logistics acknowledges the need to create a high-performing, boundary-less organization—one that seeks out new ideas and new ways of doing business and is prepared to question requirements and traditional processes. Past efforts have had similar goals, yet we continue to find all too often that DOD's investment decisions are service- and program-centric and that the military Services overpromise capabilities and underestimate costs to capture the funding needed to start and sustain development programs. This acquisition environment has been characterized in many different ways. For example, some have described it as a "conspiracy of hope," in which industry is encouraged to propose unrealistic cost estimates, optimistic performance, and understated technical risks during the proposal process and DOD is encouraged to accept these proposals as the foundation for new programs. Either way, it is clear that DOD's implied definition of success is to attract funds for new programs and to keep funds for ongoing programs, no matter what the impact. DOD and the military Services cannot continue to view success through this prism. Adding pressure to this environment are changes that have occurred within the defense supplier base. In 2006, a DOD-commissioned study found that the number of fully competent prime contractors competing for programs had been reduced from more than 20 in 1985 to only 6. This limits DOD's ability to maximize competition to reduce costs and encourage innovation.

More legislation can be enacted and policies can be written, but until DOD begins making better choices that reflect joint capability needs and matches requirements with resources, the acquisition environment will continue to produce poor outcomes. It should not be necessary to take extraordinary steps to ensure needed capabilities are delivered to the warfighter on time and within costs. Executable programs should be the natural outgrowth of a disciplined, knowledge-based process. While DOD's current policy supports a knowledge-based, evolutionary approach to acquiring new weapons, in practice decisions made on individual programs often sacrifice knowledge and realism in favor of revolutionary solutions. Meaningful and lasting reform will not be achieved until DOD changes the acquisition environment and the incentives that drive the behavior of DOD decisionmakers, the military Services, program managers, and the defense industry. Finally, no real reform can be achieved without a true partnership among all these players and Congress.

Mr. Chairman, this concludes my prepared statement. I would be happy to answer any questions you may have at this time.

CONTACTS AND STAFF ACKNOWLEDGMENTS

For further information about this statement, please contact Katherine V. Schinasi at (202) 512–4841 or schinasik@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this testimony. Individuals who made key contributions to this statement include Michael J. Sullivan, Director; Ronald E. Schwenn, Assistant Director; Megan Hill; Travis J. Masters; Karen Sloan; and Alyssa B. Weir.

Appendix I: Recent Legislative Initiatives

Legislation	Major Components
Section 801 National Defense Authorization Act for Fiscal Year 2006 Pub. L. No. 109-163	10 U.S.C. § 2366a (as amended) - Milestone B Certification Before a major defense program can receive approval to start system development, the Milestone Decision Authority (MDA) must certify that, for example-- • the program is affordable when considering DOD's ability to accomplish the program's mission using alternative systems and the per unit and total acquisition costs in the context of the Future Year Defense Plan; • reasonable cost and schedule estimates have been developed for system development and production; • appropriate market research has been conducted prior to technology development to reduce duplication of existing technology and products; and • the technology in the program has been demonstrated in a relevant environment. MDA may waive one or more requirements if the MDA determines that without a waiver, DOD would be unable to meet critical national security objectives.
Section 802 National Defense Authorization Act for Fiscal Year 2006 Pub. L. No. 109-163	10 U.S.C. § 2433 (as amended) - Unit Cost Reports Amended reporting and certification requirements for major defense programs that exceed baseline costs, by: • creating two types of growth thresholds--"significant cost growth" and "critical cost growth"; • basing new thresholds on the percentage increases in both the original and current baseline estimate for the program; • incorporating these thresholds into existing unit cost reporting requirements; and • requiring that in the event of a breach of the critical cost growth threshold, the Secretary of Defense, in coordination with the Joint Requirements Oversight Council, to (1) assess the reasons for the cost growth, the projected cost to either complete the program with current or reasonably modified requirements, and the rough order of magnitude costs for a reasonable alternative system or capability and (2) certify that the program is essential to national security; no less costly, equally capable alternatives exist; new cost estimates are reasonable; and an adequate management structure is in place to control costs.
Section 853 John Warner National Defense Authorization Act for Fiscal Year 2007 Pub. L. No. 109-364	Program Manager Empowerment and Accountability Required the Secretary of Defense to develop a strategy for enhancing the role of DOD program managers in developing and carrying out defense acquisition programs that addressed matters such as: • enhanced training; • improved career paths and opportunities; • incentives for recruitment and retention of highly qualified individuals; • improved resources and support; • increased accountability; • enhanced monetary and non-monetary awards for successful accomplishment of program objectives; Required that DOD guidance for major defense programs be revised to address program manager qualifications, resources, responsibilities, tenure and accountability. Guidance for taking programs from development to production was to address matters such as: • the need for performance agreements between program managers and MDAs that set forth expected parameters for cost, schedule and performance and include commitments by both parties to ensure parameters are met and • the extent to which a program manager should continue in the position without interruption until the delivery of the first production units.

Legislation	Major Components
Section 817 National Defense Authorization Act for Fiscal Year 2008 Pub. L. No. 110-181	Investment Strategy for Major Defense Acquisition Programs Required the Secretary of Defense to submit to the congressional defense committees a report on DOD's strategies for balancing the allocation of funds and other resources among major defense acquisition programs. The report was to address topics such as DOD's ability to: • establish priorities among needed capabilities and assess resources needed to achieve such capabilities and • balance costs, schedule and requirements of major defense programs to ensure the most efficient use of resources. The report also was to address the role of a Tri-Chair Committee comprised of the Under Secretary of Defense for Acquisition, Technology, and Logistics; the Vice Chairman of the Joint Chiefs of Staff; and the director of Program Analysis and Evaluation, among others; in the resource allocation process.
Section 943 National Defense Authorization Act for Fiscal Year 2008 Pub. L. No. 110-181	10 U.S.C. § 2366b Milestone A Certification Before a major defense program can receive approval to begin technology development, the MDA must, after consulting with the Joint Requirements Oversight Council (JROC) on matters related to program requirements and military needs, certify that, for example: • the system fulfills an approved initial capabilities document; • the system is necessary and appropriate if it duplicates a capability already provided by an existing system; and • the cost estimate for the system has been submitted and the level of resources required to develop and procure the system is consistent with the priority level assigned by the JROC. If a milestone A certified major defense program exceeds the cost estimate for the system submitted at the time of certification by at least 25 percent prior to milestone B approval, the MDA and JROC shall determine whether the level of resources required to develop and procure the system remains consistent with the priority level assigned. The Secretary of Defense was also asked to review guidance and take steps to ensure that DOD does not initiate a technology development program for a major weapon system without milestone A approval.

Source: GAO.

Related GAO Products

Defense Acquisitions: Assessments of Selected Weapon Programs. GAO-08-467SP. Washington, D.C.: March 31, 2008.

Best Practices: Increased Focus on Requirements and Oversight Needed to Improve DOD's Acquisition Environment and Weapon System Quality. GAO-08-294. Washington, D.C.: Feb. 1, 2008.

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Chairman LEVIN. Thank you so much and thanks for the work of the GAO in this area. We're also hopeful that the story will improve instead of getting worse over the years. Even though our efforts and your efforts and Secretary Young's efforts have not been successful in correcting these problems yet, to the extent at least that we want them to be corrected, and they've gotten worse in many instances, we just have to keep plugging away at it. It's our responsibility and it's, I hope, a responsibility which DOD accepts and feels.

Secretary Young, the GAO reported in March 2006 that DOD was paying hundreds of millions of dollars of award and incentive fees to contractors without regard to acquisition outcomes. The GAO found that most contractors were paid 90 percent or more of available award and incentive fees even when they failed to meet basic cost, schedule, and performance requirements.

We responded by enacting a provision in the NDAA for Fiscal Year 2007 which requires DOD to tighten up requirements for award and incentive fees and tie those fees more closely to acquisition outcomes and contractor performance. Is the provision that we enacted in the NDAA for Fiscal Year 2007 having any effect on the Department's behavior and do you believe that this provision succeeds in tying contractor profits to acquisition outcomes, or is further action needed?

Mr. YOUNG. Mr. Chairman, there are so many things I want to tell you today. I want to try to be efficient. I believe the provision is helpful. As the Navy acquisition executive, I issued three memos on the use of profit and incentive fees. As the Defense Acquisition Executive, I am constantly pushing to tie fees to objective criteria that are on the critical path of a program so that we pay taxpayer dollars for results. I am against the subjective award of fees based on a bunch of viewgraphs and other such things. I have consistently turned down or pushed down on base fees that are basically awarded for people coming to work. It takes your efforts and my efforts to constantly change the culture to more objective awards of fees.

Chairman LEVIN. You mentioned, Mr. Secretary, that some of the problems in our acquisition system can be attributed to a workforce that has been cut over the last 15 years. We addressed that, or attempted to address that problem by establishing an acquisition workforce development fund to provide the resources needed to begin rebuilding DOD's core of acquisition professionals. Section 852 of the NDAA for Fiscal Year 2008 provided $300 million to be transferred to the fund this fiscal year, starting no later than August 1.

Has the Comptroller supported that change?

Mr. YOUNG. We are working with the Comptroller to transfer those funds. We're working on a fairly thorough plan to execute that program. The one thing I would add to that is that I think there are hurdles we have to work our way through. The personnel system is one of the most dysfunctional systems in the government. You could have money, but not billets. You could have billets, but not money. Then the hiring process is excruciatingly long. All of these have not contributed to people with the right talents wanting to come to work for the government.

Chairman LEVIN. The $300 million, though, to put additional people there has not yet been transferred?

Mr. YOUNG. No, sir.

Chairman LEVIN. Will it be transferred no later than August 1?

Mr. YOUNG. It is my expectation. The Comptroller understands that we have a plan to execute to that, and they are working with us.

Chairman LEVIN. If it's not going to be transferred, will you let this committee know?

Mr. YOUNG. Yes.

Chairman LEVIN. Unrealistic cost and schedule estimates have been really at the heart of this problem. DOD's own acquisition performance assessment panel concluded in 2006 that using optimistic budget estimates forces excessive annual reprogramming and budget exercises within the Department, which in turn causes

program restructuring that drives up long-term costs, causes schedule growth, and opens the door to requirements creep.

By the way, before I ask the question on this, let's have an 8-minute round for our first round of questions, so our staff can alert me when I've hit 8 minutes.

I want to talk about these optimistic and unrealistic cost and scheduling estimates that are almost always based on information that comes from contractors, who have a conflict of interest obviously. Now, let me ask you this, Ms. Schinasi; what is your view of my suggestion that we establish a new director of independent cost assessment in the DOD, with authorities and responsibilities comparable to those of the DOT&E, so that we can attempt to ensure that the information on which we base program and budget decisions is objective and reliable?

Ms. SCHINASI. Clearly that is something that is needed. In our work we have found that neither the program office cost estimates nor the independent cost estimates that are currently developed by the Cost Analysis Improvement Group (CAIG) come anywhere close to what the real costs of the program would be. An independent look at that, if the individual also has the ability to set policies that say we need to have cost estimates that actually are informed by knowledge, I think would help to ameliorate the situation that you've described.

Chairman LEVIN. That knowledge has to be objective information.

Ms. SCHINASI. It does, and most of it has to do, frankly, with technologies. What we see is that we promise new programs based on technologies, which oftentimes come from industry, and we don't really understand what it will take to bring those technologies to the field. So cost estimates based on those immature technologies are not going to be very reliable.

Chairman LEVIN. We're going to bring an amendment to establish this new director to the floor and your testimony is very helpful in that regard.

Does DOD have a position yet on this, Secretary Young?

Mr. YOUNG. I wouldn't say we have a position on this, but I would like to comment if I could.

Chairman LEVIN. Sure.

Mr. YOUNG. Contractors don't build the defense budget. It starts with programmers. I labored in the Navy as programmers programmed an 18,000-ton DDX destroyer to cost about 15 percent more than a 9,000-ton DDG destroyer. The program manager should have never accepted that as his challenge, and across the board I need to get my acquisition team not to accept it.

In my ADMs, as I mentioned, I am directing the use of independent cost estimates, and I give the greatest weight to the CAIG's Director, who does do that independent cost estimate for the Department at every milestone, at Milestone B.

Chairman LEVIN. Would you take a look at the language which we're going to submit to you? We've obviously not succeeded, despite efforts, good faith efforts, of people like yourself. It's a history of failure to keep these costs under control, and we have to find ways and keep looking for ways that we can do better. We know what the problems are. We've not solved these problems. We've had

these huge excessive costs, way above what were projected. We have the responsibility of trying to rein them in, and we're going to continue to see if we can't do that through various methods.

If you would take a look at this particular recommendation for a new director of independent cost assessment in the Department, in the next week or 2, we'd appreciate it because we're hopeful our bill will come to the floor in a couple of weeks.

Three years ago, we attempted to address the problem of immature technologies by requiring senior officials to certify that critical technologies have reached the required maturity level before giving the so-called Milestone B approval. I think you've made reference to that already this morning, Secretary Young.

I'd like to ask Ms. Schinasi, though, as to whether or not in her judgment the new technological maturity requirement has been effectively implemented and enforced? Have you gotten into that issue?

Ms. SCHINASI. We haven't looked specifically at the total programs that have gone through that process. I am aware of some in which the DDR&E has turned back technology readiness assessments that were submitted by the programs because they were not ready, but there are others that have gone through even though the technology readiness assessments did not show that the technologies were sufficiently mature. So anecdotally I would say that it's been a mixed experience.

Chairman LEVIN. Did you want to comment on that, Secretary Young?

Mr. YOUNG. I do, sir. I'd like to know which ones haven't gone through. We'll go back and find that out. I had one particular program recently, a major program, $1 billion, Net Enabled Command Capability, where there was a difference of opinion between DDR&E and the program about technology readiness. I refused the Milestone B.

The Department does have needs, though, that have to go forward. I granted a Milestone A to go do prototypical work on that program, improve their process, to mature their technology, let DDR&E review that, the readiness of the technology. They'll come back to me later for a Milestone B. So I am not seeking to grant Milestone approvals. There are certain programs that have unique features, like shipbuilding programs, where a radar may not be today at Milestone B appropriately technology mature, but the radar's not needed for 2 or 3 years down the road for ship construction and delivery and they have a valid path to get to that appropriate technology maturity.

But in general, consistent with law, we are not approving programs without that technology maturity. We need to give this process a chance to prove that it's leading to better management of acquisition programs.

Chairman LEVIN. Ms. Schinasi, would you after this hearing is over get together with the Secretary and give him the items that you made reference to?

Ms. SCHINASI. Yes.

Chairman LEVIN. Thank you.

Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

Perhaps no program in contemporary history here is of greater importance to the United States, not only from the standpoint of its own need for inventory of a weapon system, but some eight or nine other nations that are looking to the U.S. to build it, and that's the JSF. Coincidentally, we're greeted this morning with a press report which reads as follows: "Lockheed Martin Corp. system for tracking costs and schedules has generated useless or suspect data on the F–35 JSF ever since the program started in 2001."

Mr. Young, I think perhaps you should first address that issue. This rattles all across the world.

Mr. YOUNG. Yes, sir.

Senator WARNER. We've spent a great deal of time on it here in this committee. How did this happen?

Mr. YOUNG. Mr. Chairman, I've looked into the details, some level of the details of this. I think the goodness is that the Defense Contract Management Agency (DCMA)——

Senator WARNER. What is?

Mr. YOUNG. The DCMA.

Senator WARNER. No, you said "the goodness"? I didn't get that.

Chairman LEVIN. You said "good news" or "goodness"?

Mr. YOUNG. The goodness is that the DCMA did an audit and discovered this issue. I want to make clear there are two aspects of this. The DCMA did not address the billing system, where valid bills and invoices are turned in and the government pays them. There is not a discrepancy in the billing process.

The discrepancy is taking that billing process and loading it into an earned value management system (EVMS) that lets us see our performance and predict our progress going forward, which is what I think you saw in the report. It says that the EVMS does not provide a confident basis for projecting future performance of the program.

Within that, Jim Finley, the Deputy Under Secretary, has met with Lockheed and DCMA. They've outlined a corrective action plan for the next 12 months. DCMA meets with them every 2 weeks. Lockheed's agreed to the corrective action plan. Furthermore, there are Milestones, 12 Milestones. The first one's been met. At each of those Milestones, if Lockheed does not meet the corrective action plan we will withhold $10 million in payments from the corporation.

So we are working to rectify this situation. It does need to be corrected, you are right.

Senator WARNER. Ms. Schinasi, do you have some views on this?

Ms. SCHINASI. Yes, Senator. We found in the most recent work we've done on the JSF, and we issued that report earlier this spring, that the cost estimate was unreliable and we recommended that another cost estimate be prepared.

Senator WARNER. I hope both of you recognize the two-fold problem here, and that is, the essential need for this aircraft in inventories for purposes of our defense structure; and also, it's the image of the United States, being the principal manager of a major program, and a lot of trust and confidence of other nations was given to the United States to run it right.

Do we know why, at this late date in the program, we're discovering this deficiency?

Mr. YOUNG. I'd like to come back to you on the record as to whether previous audits didn't uncover this. But the audits in general have focused on the billing system, where again we have paid properly for the work that's been performed. The changes—the loading of that information into the EVMS, Lockheed made changes in that. They should not have and it undermined our confidence of projecting our current and future performance. We're going to go fix that for exactly the reasons you said, sir. We have to have confidence in this aircraft.

[The information referred to follows:]

There were no audits of Lockheed Martin Aero's (then General Dynamics) system since the initial validation in 1980. In 1991, General Dynamics' Fort Worth, TX, Cost Schedule Control System was called into question with the findings of the A–12 Program cancellation. Subsequently in 1995, the Department switched to an industry-based Earned Value Management System (EVMS), which placed more reliance on industry for enforcement. However, based on the results of several audits, it was determined in 2004 that industry's stewardship of EVMS has been inadequate. Since that time, the Department's response has been to create a robust, government-monitored earned value management compliance regime, which has been effective in identifying issues across industry.

Senator WARNER. Is our program manager accountable for this?

Mr. YOUNG. Yes, the program manager is accountable for it.

Senator WARNER. Well, that's clear. I hope that you address that properly.

Do you have any views on why it took so long to catch it, Ms. Schinasi?

Ms. SCHINASI. Senator, I believe that the cost growth in the program has been in place from the very beginning. This most recent review of the contractor's systems is new, but the program, the JSF program, has had many of the same problems that we've seen in other programs. The original justification was that this would be a plane that would be very low cost to operate, which was a great idea when it was conceived. But the technologies required to get those low operations and maintenance costs were not mature, and I think the program has gone forward without getting the knowledge that it needed to understand what the true costs would be.

So many of these cost overruns could have been predicted earlier on.

Senator WARNER. Mr. Chairman, I think we should invite Lockheed to review this record and provide for the committee its perspective on this issue.

Mr. YOUNG. Mr. Chairman.

Senator WARNER. Yes?

Mr. YOUNG. Can I comment on this for a moment? There are definitely some accuracies in what Ms. Schinasi said. Every program has unique details that we need to look at. We're applying a bumper sticker of cost growth to everything and we need to look at it. Here's one example where I believe the requirements have been well managed on JSF. We have a CSB. The JSF was prototyped early on.

My frustration is we did not prototype the right things in JSF. So when we went into system design and development, we found the short take-off, vertical landing (STOVL) variant, the variant for the Marine Corps, was heavy. We had to take an extra 18 months

to get the weight out of that program. That 18 months cost us about $7 billion.

So we can explain how we got from there to here. Now, I have reported and have testified that we have some additional cost growth on JSF. I can couple that directly to the fact that over the last 5 years DOD and Congress have taken over $1 billion out of the program. If you have a reasonably well managed and planned program and you take $1 billion out, it probably shouldn't be a surprise that you need that billion dollars with some premium back.

So there were people who bet that the STOVL variant would not fly this year. The good news side of this is that variant probably is going to fly this week or next week. The software is largely done for the first deliverable aircraft. So I would appeal that we look at the details of some of these things and learn the right lessons going forward.

Senator WARNER. Just out of curiosity, Mr. Young, you're well known to this committee and to Congress. You've performed your services here in Congress very ably and we were all extremely pleased you took this position. Ms. Schinasi, I presume you've had an equally distinguished career. Do you ever get together before you come here in Congress and square off on each other and try and avoid some of these hearings?

Mr. YOUNG. Actually, I would say there's a good bit of common ground between us. We haven't personally done it, but members of my team have worked closely with GAO to understand the $295 billion overrun and agreed to work more closely going forward. So we are doing what you suggest.

Senator WARNER. I would hope that you would share views and viewpoints without having to write up all these reports and come in to Congress and sort of set it out. That's the way government should work. You are the GAO and he's government also.

Ms. SCHINASI. Yes, sir, and we try very hard when we make recommendations in our individual reports to make sure that we consult with DOD, because if we put something out that's not doable that doesn't help anyone.

Senator WARNER. Let's touch on just the prototyping, Mr. Secretary. When it comes to ships, you simply can't prototype an entire ship.

Mr. YOUNG. Yes, sir.

Senator WARNER. I think we learned some very tragic lessons with the LCS program. I think you ought to provide for the record what you felt went wrong with that program and what steps you've put in place not to have it reoccur.

Mr. YOUNG. A short comment. You're exactly right. I've pushed for the signing of the contracts for the first two DDG–1000s. I think there is another program that's not talked about as much because the development program for DDG–1000 has gone very well. You're right, we didn't prototype the ship, but we prototyped I think 12 different engineering development models. We installed a fire and battle damage control system in an old Navy ship and proved it. We had a land-based test site for the electric motor. There were a dozen, I believe, development models that built our technological maturity, and our confidence in designing the whole

of the system, which are essentially component prototyping efforts necessary for that program.

So largely that development program has gone well, a very complicated development program. The remaining tests that Congress is rightly asking us to pass is: can you now build that ship for the price that you've advertised? We have signed contracts for that and we have to prove we can go do that.

[The information referred to follows:]

The Navy conducted several reviews of the Littoral Combat Ship (LCS) program, including the establishment of a Program Management Assist Group to conduct a review of cost growth associated with LCS 1, and to review projected costs for LCS 2, LCS 3, and LCS 4. The Navy assessment identified the following root causes of cost growth:

- Aggressive cost and schedule goals.
- Pressure to build to schedule was strongly emphasized and generated cost growth.
- The ambitious schedule relied upon concurrent design and construction that was not achieved.
- For LCS 1, the timing of Lockheed-Martin's bid to the finalization of Naval Vessel Rules resulted in underestimated efforts for design and construction by the contractor.
- The competitive environment created disincentive for the contractor to disclose execution challenges to the Navy.

The Navy has taken the following action for the LCS program to address cost growth and prevent recurrence:

- Increased oversight has been assigned to monitor industry performance.
- More realistic schedule objectives have been assigned.
- To address cost growth, resources were reprogrammed from fiscal year 2007 LCS procurement.
- The plan also includes reduced procurement of LCS seaframes in fiscal year 2008 and fiscal year 2009.

Additionally, overall the Navy has strengthened its acquisition policy to improve rapid acquisition in support of the global war on terror, to control cost growth, and to monitor contractor performance more effectively. The Navy has established a Center of Excellence for Earned Value Management (CEVM) to adopt a more centralized approach to managing EVM and to improve visibility of the status of all Navy acquisition programs. Navy oversight includes acquisition program reviews and portfolio reviews of acquisition programs and the supplier base. The Navy also is working improvement initiatives in accountability, portfolio assessment, and acquisition workforce management. To bolster the Navy's acquisition leadership, the Navy added a three-star admiral to serve as Principal Deputy Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN(RDA)), and recently established the position of Principal Civilian Deputy Assistant Secretary of the Navy for Research, Development, and Acquisition (PCDASN(RDA)). The PCDASN will be responsible to ASN(RDA) for all acquisition workforce programs and functions.

Specifically, on February 26, 2008, the Navy issued guidance implementing Navy acquisition governance improvement through a six-gate reporting, reviewing and oversight process. Its purpose is to ensure early and frequent involvement and collaboration among the leadership of the requirements, resources, and acquisition communities. Configuration Steering Boards will oversee changes to the requirements baselines as well as consider cost and funding availability. In addition, the Department of the Navy will implement a systems design specification which will provide more clarity to the requirements development process and convert and interpret operational specifications into affordable design requirements. It is important to note that the success of all these initiatives is heavily dependent on personnel with the correct training and experience commensurate with responsibilities assigned.

Senator WARNER. As we look back in our oversight, I recall very specifically that DOD made a decision under the last Secretary that he was going to bring in the top industrial leaders and their portfolio was to solve these various problems on procurement. While the committee had some different views as to different types

of individuals that might serve as Service Secretaries, Rumsfeld's view prevailed: I'm going to bring in the top proven executives of industry.

I guess history is going to have to judge how successful they have been in this problem, which they presumably had the expertise coming in to solve. Would you not agree with that?

Mr. YOUNG. I think I'll take the fifth amendment on that one. I think it's an important question, but my response is really too complex and mixed. I just think that there are people, obviously, in industry that can make a difference, but there's also people who have expertise outside of industry that sometimes can be stronger and have a bigger impact. So it's a blend you need, I think, essentially of the industrial experience, but also experience in government and the academic experience that needs to be put in place.

I hate to duck a question from a friend like you, but I think I'd have to give a more complex answer to that. I do agree that Secretary Rumsfeld did put in place this system and the people in it. That part of it I surely agree with, and I don't think that we've seen the kind of success that was promised.

Senator WARNER. Or hoped for.

I thank the chair.

Chairman LEVIN. Thank you, Senator Warner.

Senator Reed.

Senator REED. Thank you very much, Mr. Chairman. I think this is a very important hearing and I commend you and Senator Warner for hosting it.

Secretary Young, one of the major challenges is reducing technical risks in these programs. Sometimes we discover it too late and it costs a great deal of money. What is your view with respect to investment in science and technology (S&T), investment in the defense laboratories to systematically try to reduce technical risk as a way of lowering costs? Is that a useful option?

Mr. YOUNG. Absolutely, sir. I've consistently gone on record, mostly at Secretary Gates's request, explaining that S&T investment has not kept pace with the numbers I mentioned earlier, that the procurement account is up I think 34–35 percent, and the R&D budget is up 70 percent; S&T is not comparably up. We need in several areas more robust S&T investment.

To his great credit, Secretary Gates responded to that and he's increased and provided real growth in basic research, as well as some augmenting incentives in the S&T base for key technologies that we think are enablers of the future.

Then another piece of the process, if we execute prototyping we'll need to pull money back in later stages of development into the S&T program and invest it in these prototypical efforts that again inform us. They develop management skills, they inform us on the engineering and technology maturity, they inform us of the costs if we decide to take it forward into development. I believe that's a critical element of what DOD did well in the past, 20 and 30 years ago, and we need to go back to it.

Senator REED. So this is a deliberate, conscious approach in order to reconnect the S&T, the defense laboratories, with the procurement process?

Mr. YOUNG. Yes, sir.

Senator REED. Very explicit.

Ms. Schinasi, could you comment on that?

Ms. SCHINASI. Yes, Senator Reed. We've made that recommendation in the past. I think what you're seeing is that DOD tends to push those leading edge disruptive technologies inside of programs, and that's a lot of the reason that we're seeing the problems that we're seeing, cost growth and schedule delays.

If in fact they would use the tech base to develop those technologies, you can afford to fail in the tech base and that's what it takes to do that kind of development.

Senator REED. Just a question, Secretary Young. You've made the point, and I think Senator Levin's question was right on target, about the need for additional resources in contracting, oversight, et cetera. First, I think there is a difficult tension between our requirements in Iraq today because everything we read is of the need for additional contracting officers, additional people on the ground, which is basically taking away from your potential pool of procurement and contracting officers. Is that accurate?

Mr. YOUNG. I think it's more complicated than that. The higher demand issue, as Secretary Gates has testified, is that the DCMA in 2000 had 12,550 people, and if you go back to 1990 they had over 20,000 people. Today we project at the end of the year that they'll have 9,899 people. That's for a normal course of business. We don't have a normal course of business. We have Iraq and Afghanistan and a procurement budget that's up 34 percent, an R&D budget that's up 70 percent, and the challenge of finding people with the skills necessary to come in and perform those contracting management and contract oversight functions.

It will take us time to recover from this. It took time to get here. But there is no question we are understaffed in these areas.

Senator REED. I presume there are other areas where the maturity level of your existing workforce would be 45-plus rather than 35-minus.

Mr. YOUNG. Yes, sir, you are very correct. We have an older and experienced workforce. We really need to do some hiring and get some knowledge transfer, and we will have to use other tools, such as these defense support teams I mentioned, that use people who have retired and are willing to come back and help the government to help us go troubleshoot and problem-solve on programs.

Senator REED. Do you have a nominal kind of workforce structure with different levels of expertise that is available to this committee, so that we can see the matchup between what you think is the best and what you have at the moment? Again, these are very capable, dedicated, and extraordinarily talented people.

Mr. YOUNG. If I could for the record, I'd give you a longer answer, but we are working in the enterprise—it involves heavily the Defense Acquisition University (DAU)—to build a competency model that will assess the skills we have, the skills we need, where some of our gaps are, and help us work more deliberate workforce planning going forward.

[The information referred to follows:]

Yes, for each of the approximately 126,000 Department of Defense acquisition positions, the Department has an acquisition workforce structure where the military departments and defense agencies require a minimum certification level, by career

field (e.g., program management, engineering, contracting, et cetera) for each acquisition position: Level One - Entry; Level Two - Journeyman; and Level Three - Expert. The assigned certification level corresponds to minimum experience, education, and training standards. As of March 2008, 54 percent meet or exceed position requirements. Members are required to meet the certification requirements within 24 months of encumbering an acquisition position. The new Acquisition Workforce Development Fund, established pursuant to section 852 of the National Defense Authorization Act in Fiscal Year 2008 that enacted 10 U.S.C. 1705, will be used to increase our training capacity. Additionally, our updated competency models and assessments will provide us the ability to identify more precisely gaps and target training to priority needs.

Mr. YOUNG. That's in progress. It's an important tool to be used in conjunction with the $300 million fund in the section that Chairman Levin referenced.

Senator REED. First, Ms. Schinasi, if you want to comment on any of these issues, please.

Ms. SCHINASI. If I just may comment on that last point, I think the focus lately has been on oversight, which clearly we need more oversight, but I think there's a more basic question about attracting people to the acquisition workforce. A report that was put out by the acquisition advisory panel about a year and a half ago now went out and looked at the private sector. One of the things that they found was that companies invest very large resources in their acquisition workforce because they realize how important that workforce is to their case getting a profit. In the Department's case, I would say to accomplishing a mission.

This is something we're looking at across the government as a whole. You need to pay more attention and raise the prominence of the acquisition function in order to be able to attract and retain good people.

Senator REED. Do you have a comment?

I have one more question, Mr. Chairman.

Mr. YOUNG. At some risk, I'd like to comment about that. The first thing I said is that people manage and execute programs, and that's important and I meant that. At this point in time, I mentioned that we have a dysfunctional personnel system. I have virtually no hope of hiring a midcareer person back into government from industry. 20 years ago, Johnny Foster and some of the great people that had this job—I cite in my written statement I think one example—Johnny Foster called and asked for an expert in electronics technology and he got Jacques Gansler on the DDR&E staff, and Jacques Gansler eventually became the Under Secretary of Defense for AT&L.

That can't happen today. Industry people will not come into the government because of the restrictions that have been placed. At this point in time, I will have increasing trouble getting government people to stay in the acquisition workforce because of post-employment restrictions. We are at serious risk of being able to keep competent people in the government acquisition process.

Senator REED. Thank you, Mr. Secretary.

Ms. Schinasi, you made the distinction between threat-based programs and capabilities-based. Could you elaborate on, first, the difference in your mind, and the consequences to the acquisition process?

Ms. SCHINASI. For a number of years in the post-Cold War environment, we had a system whereby requirements were developed

based on what we thought an enemy was likely to be able to do. Once we lost that peer competitor, we also lost the ability, or we changed our process from going to that peer competitor threat-based to one which said capabilities, we need to look at the capabilities we need.

That, some people would argue, opened up the floodgates for a wants-driven requirements process as opposed to a needs-driven requirements process.

Senator REED. Is it your recommendation or comment that we should return to a threats-based program? Would that help us in this endeavor?

Ms. SCHINASI. I think what we're seeing now is the need for flexibility in the requirements process. So we would argue that what you need to do is bring resources to the requirements determination process at an earlier point in time than it is right now, because there is no limit to the kind of capability that we would want to have.

Senator REED. A quick response, Mr. Secretary. My time has expired.

Mr. YOUNG. I think I would agree strongly with her comments and go beyond it. One of the cancers on the enterprise right now is the competition for resources, and it is fueled by setting a threat level, setting a requirements level, and then saying, I must have budget resources to deal with that, and the competition among the Services for resources.

It really is one of the underlying problems in this space, combined with other factors and that is why I'm constantly in favor of Congress' Goldwater-Nichols legislation, because I believe that the Service Chiefs do have control of that requirements process and it is critical for Congress to hopefully continue to understand that you do not want to move the acquisition process under the Service Chiefs. What you did in Goldwater-Nichols was the right way to handle the business.

Senator REED. Thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Reed.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Secretary Young, your comments on the JSF brought to mind the realization that part of the problem with cost growth is attributable to the failings of the contractors, part of it is attributable to changing requirements and insufficient oversight by DOD, but part of it is the failure at times of Congress to provide predictable, stable funding.

I see you're nodding in agreement. I think we have an example of that with the DDG–1000 program, where we're seeing the House move in the direction of pausing or perhaps terminating the DDG–1000 program after the first two ships. The Senate, far more wisely in my judgment, fully funded the budget request for a third DDG–1000.

What would be the impact if the House position should prevail on the cost of the first two DDG–1000, shipbuilding in general, and the industrial base for shipbuilding if the House position were to prevail?

Mr. YOUNG. I think we should assess that in more detail, but I am extremely concerned about several aspects of the House mark in that deliberation. When we've established a manufacturing—these processes take time to put into place and then they execute very well over a period of time. To stop the DDG–1000 program at two ships would unquestionably add substantial costs to that program.

To restart the DDG–51 program, which is stopped, has been stopped for several years, it is difficult for us to properly estimate the cost of that. Then the question becomes, do you buy more ships after that, because just buying a couple of DDG–51s will be inordinately expensive and I am confident we cannot estimate that. Suppliers will talk to you if you want to buy many of things over several years. If you want to buy a few things for 1 year, I have no idea what that will cost.

So the DDG–1000 will go up. I don't know what those DDG–51s will cost, but I can offer to get you some information for the record. It will destabilize the destroyer industrial base. Then it's a requirements issue, as we've discussed today. We have 62 DDG–51s. The Navy is moving forward because it needs additional capability, it believes. The discussions I've had with the Navy, they do not seek more DDG–51s; they seek a DDG–51 possibly with plugs to carry a bigger radar, and that ship will quickly approach the cost or exceed the cost of a DDG–1000, so we will not be addressing the issues that I think the House has tabled.

We need to look at this combination of requirements, stability of the industrial base, and cost to get a better solution here.

Senator COLLINS. It would be helpful to have your information on the cost estimate.

Are you familiar with the May 7, 2008, letter that the Chief of Naval Operations (CNO) sent to Senator Kennedy attempting to compare the cost of restarting the DDG–51 line versus pursuing continuing with the DDG–1000?

Mr. YOUNG. I've recently learned of the letter and, based on reviewing it, have a number of concerns with the letter that was provided to the CNO for his signature. The letter's numbers are based on key assumptions and are incorrect in some cases. The DDG–51 prices assume continuing DDG–51 procurement, as I said. So those prices in that letter mean you would buy more DDG–51s. If those were the only ones, they would be more expensive, I believe.

Second, the DDG–51 prices assume that the two ships, in the case of the two-ship case, could be awarded to one yard. I have no process right now to give two DDG–51s to one yard, as you well know, and if I build them between yards that will be significantly more expensive.

It's questionable whether the DDG–51 prices are accurate if no DDG–1000 is built in fiscal year 2009, because, to talk more technically, this is about overhead absorption and use of the business base. If there's no DDG–1000 beyond the first two, then those DDG–51s will be more expensive, I believe, than the record suggests.

Then the DDG–1000 prices for the two lead ships, as we already discussed, would certainly increase. Operations and support costs are reported in DOD's Selected Acquisition Reports. The DDG–51

ship costs $10 million more per year to operate and I don't think that's correctly reflected in the letter.

But I can expand on this and reply to you if you would like.

[The information referred to follows:]

There are two cases to consider for acquisition costs. The first case maintains the DDG–1000 program of record and begins procuring additional DD–51 ships beginning in fiscal year 2009 and continuing for a few years. In this case, the costs for one and two additional DD–51 ships in fiscal year 2009 are provided in the table below. The second case stops building DDG–1000 ships after the two lead ships, so there would be no fiscal year 2009 DDG–1000 procurement. Instead, one or two DD–51 ships would be procured. Again, it is essential to recognize that these numbers assume continuing DD–51 procurement. The Navy would likely see significant premiums added to the following prices if only one or two DD–51s were purchased. The following table summarizes the costs for these two acquisition cost cases:

[In billions of dollars]

Fiscal Year 2009	DDG–1000	DDG–51	DDG–51
Case 1			
Quantity	1	+1	+2
Cost	$2.7	+$2.1	+$3.3
Case 2			
Quantity	−1	+1	+2
Cost	−$2.7	+$2.2	+$3.5 to +$3.6

It is important to recognize the following about these cost estimates:

- There would not be sufficient funding to procure two additional DD–51 ships in fiscal year 2009 at a cost less than or equal to one DDG–1000 ship.
- A single DD–51 class ship in fiscal year 2009, with no other DD–51 ships to follow, would not support the current surface combatant industrial base, unless DDG–1000 production is continued.
- Direct production hours for one DDG–1000 ship are about 2.5 times that of one additional DD–51 ship. This validates DOD's experience that two to three DD–51 destroyers need to be purchased annually to maintain the two yard surface combatant industrial base.
- Cost increases for the two lead DDG–1000 ships, with no follow ships, are unknown.
- The RDT&E efforts for the DDG–1000 program must continue in order to deliver two complete ships and to support the Dual Band Radar for the CVN 21 program.

The estimated cost to terminate the DDG–1000 program at the third ship ranges from $2.5 billion to over $4 billion. These costs include increased execution risk on the two lead ships; class services costs and integrated data environment costs that were budgeted in future years; additional Government Furnished Equipment costs for mission systems equipment; class shutdown and closeout costs; cost impacts on other Navy shipbuilding programs as a result of cancelling future DDG–1000 ships; and allowances to recoup lost investments for litigation, and for other liabilities that might be claimed by the DDG–1000 program contractors.

As for annual Operating and Support (O&S) costs for the two ship classes, the Department reports annual O&S costs to the Congress in the Selected Acquisition Record (SAR). The table below shows the annual O&S costs from the most recent SAR, reported as of December 2007, but the values are adjusted to fiscal year 2005 dollars for comparison. As the table shows, there is about a $10 million per year difference between the two classes, but this is based on estimates for the DDG–1000 ships as compared to several years of operating experience with the DDG–51 class ships.

[In millions of dollars]

Fiscal Year 2005	DDG–1000	DDG–51
Mission Pay & Allowance	6.8	20.7
Unit Level Consumption	10.1	11.6
Intermediate Maintenance	0.7	0.7
Depot Maintenance	10.0	7.0

[In millions of dollars]

Fiscal Year 2005	DDG–1000	DDG–51
Contractor Support	0.0	0.9
Sustaining Support	14.2	3.0
Indirect	4.4	12.7
Other		
Total (average annual O&S)	46.2	56.6

The operating cost data provided in the CNO letter to Senator Kennedy compared the programming information used to construct the latest budget, but did not include items not directly budgeted to a specific program, for example, indirect support costs.

Senator COLLINS. That would be very helpful to me and to this committee.

Two more points on that. It's my understanding that the DDG–51 requires a reduction gear that is no longer in production and that you would have to start up that line, which is very expensive. Is that accurate?

Mr. YOUNG. I believe that's correct for that and several other cases, because again I believe the last DDG–51s were bought in fiscal year 2005. I have programs that are in current development that experience obsolescence issues. This is a program that's been out of production, so there's no question we will have multiple obsolete parts issues.

Senator COLLINS. Do you believe that the current contract strategy for the DDG–1000 has sufficient cost control elements to meet the program's objectives?

Mr. YOUNG. The best thing I can do is what I had a chance to state to the chairman, I believe: The DDG–1000 R&D program has gone very well. The drawing designs have been produced. The technology is matured. We did, I believe in that case the right component prototyping to inspire that maturity. We've recently successfully negotiated priced contracts with both yards for the lead ships.

We have to go prove we can execute that, and so, in light of this hearing, I'm anxious about guaranteeing that performance, but I believe every measure has been taken to try to ensure that performance and I'm optimistic about it.

Senator COLLINS. Finally, the Navy's requirements for at least seven DDG–1000 have not changed, have they?

Mr. YOUNG. I'm not aware. That's obviously a question for the Navy. We contemplated some of these issues going forward. The very simple version for me is the Navy needs to study carefully removing the guns from the DDG–1000s and replacing them with missile cells, and then you have the potential for a first generation cruiser with modest changes. That was my goal in setting up the strategy for DDG–1000, to balance the Navy's long-term cruiser requirements with the Marine Corps's fire support requirements.

Senator COLLINS. Thank you.

Chairman LEVIN. Thank you, Senator Collins.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Secretary Young, Ms. Schinasi, thank you. I was thinking as I listened to the testimony, I've been privileged to be on this Armed Services Committee of the Senate for 16 years and in that time I've

developed the highest regard for the Pentagon, for our military, in just so many ways. I must say that this area of acquisition is the one really unsettling exception.

When you think of the consequences, I find the report that you, Ms. Schinasi and GAO, have issued to be exasperating and embarrassing, and ultimately very harmful to our attempts to provide for our national security in exactly the strong, and appropriately strong, and eloquent terms that the chairman, Senator Levin, spoke of in his opening statement. In the work of this committee and the various subcommittees, we hear constantly of the shortfalls in major systems that our military needs down the road.

We are far from the 313-ship Navy that was the goal and we're not closing that gap. We held a hearing in the Airland Subcommittee a while back, the Navy and the Air Force talking about projected shortfalls of aircraft some years down the road which are really troubling.

I could go on and on. I thought Senator Levin's opening statement, in which he basically took that $295 billion, which is what GAO reported earlier this year had been the cost growth on these programs, and talked about what we could buy with that money. It's really a shame.

So in that spirit, Secretary Young, I wanted to ask you this question. I have high regard for you and you've spoken here today about memoranda issued and decisions rendered that caused persons responsible to act in compliance with recommendations and best practice.

I want to say to you today that I think those people who are responsible for acquisition ought to be held accountable, and that accountability should include consequences for failure, because our military, our national security, is now paying the price of the consequences of, in other words, lack of real personal accountability?

Mr. YOUNG. Yes, sir, I'm aware of several. It's not a large number, but I'm certainly aware of a handful of instances where government and industry program managers were held accountable and relieved of their responsibilities for program issues.

Senator LIEBERMAN. So this is not—this is not just the system? I understand the problem with recruiting and retaining personnel in this area. But you agree that some of this is just a failure to do the job that we expect people to do?

Mr. YOUNG. I'd be happy to talk to you in this hearing or outside. I've had—I could cite for you easily ten programs that have come all the way to the Under Secretary level for approval that I felt failed to meet the standards that we're talking about meeting today and I have directed changes in those programs. So I am working with the whole of the acquisition team to shift that culture to greater discipline, and we have to make progress there.

Senator LIEBERMAN. But there are some cases in which adverse career actions have been taken?

Mr. YOUNG. Yes, sir.

Senator LIEBERMAN. What are those kinds of actions? What are the adverse—do you know the number on your watch?

Mr. YOUNG. I could get you some information for the record. Off the top of my memory, I know on one particular program a flag officer and a program manager who were relieved. On the industry

side, I've known of both a flag officer and a major corporate program leader being relieved. I could probably cite for you seven or eight. But I'll get some information to you for the record.

Some of these are a little harder because these are done with some grace here, because there are people that make mistakes, but they can still contribute in other places.

[The information referred to follows:]

The Department is committed to sound program management and holds program managers accountable for their program's cost and schedule performance. In cases where we experience poor program outcomes and we determine the program manager's actions were responsible for those outcomes, we will take steps to correct the situation including appropriate personnel actions. In general, that means the individual is reassigned. Depending on the circumstances, he or she may not be recommended for promotion and may be asked to retire. In general, there is no public release on the rationale for the removal of a servicemember or employee.

During my tenure as the Under Secretary of Defense for Acquisition, Technology, and Logistics, one program executive officer and four program managers have been reassigned due to program performance.

It is incumbent on the acquisition team, and in particular the acquisition executives, to monitor program performance closely and to take early corrective action when problems arise rather than wait for programs to fail. We need to ensure that our program managers have the proper education and training and that they are empowered to act in the best interest of their program, the warfighter, and the taxpayer. It is the acquisition team's responsibility, too, to structure programs so that our program managers can succeed. However, it is equally critical for the programming and budgeting community to fully fund programs to the program manager's estimate. Underfunding which produces bad outcomes is not the program manager's fault. Equally, allowing requirements officers to change requirements during execution creates negative results which again are not totally attributable to the program manager.

Senator LIEBERMAN. I'd like to see that report. Nobody wants to be punitive without justification, but the point is when you think about the consequences of the failures in acquisition then we have to hold people accountable and hope that that's part of the message we send that improves the process.

I think it's gotten, in the time I've been here, notwithstanding all the efforts of a lot of people, I think the problem has gotten worse, not better.

Mr. YOUNG. Could I address this with a couple of brief examples?

Senator LIEBERMAN. Go right ahead.

Mr. YOUNG. The one I use frequently is T–45. The Navy bought the expected number, I think 221, T–45 aircraft. But beyond the control of the program manager, although he should have complained and objected, the programming and budgeting process bought those planes at ranges from 6 per year, at which point they're about $30 million a copy, to 18 a year, at which point they're $20 million a copy. Optimal is about 15.

Had we bought at the optimal rate, we could have bought that program and saved $632 million. It is the program manager's fault that the taxpayer paid $630 million extra dollars for absolutely no more capability. So in my enterprise I have a source document where I ask program managers to behave in certain ways. One way is exactly as Chairman Levin said: Look to save money every day on your program; fight the programming process, fight the comptrolling process, and ask for economic order quantity.

To emphasize that, I sent a note on the T–45 example to Secretary Gates a month ago. He wrote back and said: Bring me some of these examples. I just last week sent him a memo of things we

can do to buy more efficiently and help avoid that, because the source document says what you are saying and what GAO is saying; that is, every time I pay more for no more capability, I'm essentially denying the warfighters a tool that we could have.

Senator LIEBERMAN. That's the ultimate victim here, the warfighter.

Let me ask you a question, the question on the other side. What about a program manager who really does the job, an acquisition official who really does the job and saves money? Are you able to reward that person?

Mr. YOUNG. Especially if they're a military person in uniform, I have nothing to give them other than end-of-service commendations.

Senator LIEBERMAN. Well, that's something we ought to think about.

Let me go on to one more question briefly, because we've seen a lot of progress in the private sector in the reduction of waste. The Pentagon I know has tried to embrace some of those systems. But the report suggests that it's not just the business model and efficiency systems that are being used, but how closely the programs are being followed.

Here I want to get really to the question of organization. While a private sector business has a CEO with wide-ranging control of programs, as you've touched on briefly a while ago, each military department is organized differently. So I want to ask you to deal for a moment with these two questions: Is each Service organized ideally to manage these programs; and then, more broadly, does the senior acquisition official have authority equivalent to a CEO in a private business on not only the process, but on requirements, costs, and what's required to manage the system?

Mr. YOUNG. I believe—as I stated earlier, I think the SAEs are critical functions in the enterprise. I do not believe that that responsibility has been adequately exercised to achieve jointness and interoperability. They have the authority to refuse to sign contracts, and I'll give you an example.

The Navy and Marine Corps wanted to pursue an LHAR, a new amphibious ship, that was basically going to be taking an LHS and put two plugs in it and make it ten feet wider and change 80 percent of the drawings and spend a billion dollars in nonrecurring. I stood up and said: Why do we have to do this? Is the requirement adequately compelling to spend that money? That ended up in discussions with even the Commandant of the Marine Corps, but in the end the Commandant agreed that requirement should be relooked and we didn't go down that path and we saved that money.

So I give you an example that the SAE does have the authority to refuse to sign contracts and call into question the requirements. That's the power of them reporting and working for the President under Goldwater-Nichols. Have we adequately exercised that authority? I think the answer is no.

Senator LIEBERMAN. Okay. Needless to say, and you know it and we all know it, this is real important. So let's work together to try to make it better.

Thank you.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Thune.

Senator THUNE. Thank you, Mr. Chairman.

Secretary Young, I have a question that regards a current program that's at least in the formative stages that I'd like to get your reaction to, how that's progressing, and what can be done to keep it on schedule. The Air Force is currently undertaking a new major weapons system acquisition program in the Next Generation Bomber. As this is a brand new acquisition program with an aggressive time line of being fielded by the year 2018, what acquisition strategies is the Department exercising to successfully field this platform on time without significant cost growth?

Mr. YOUNG. I would think, consistent with what I believe the committee would expect of me, I would take this as one of my fundamental responsibilities. I cannot afford for the Department to embark on a new bomber and not do it accurately. So a couple of things would happen. One, I would give the Air Force credit; they have laid out a program that includes some level of prototyping and the things that I've insisted upon.

I have independently asked the Defense Science Board team to review this program and help advise me on the technology maturity, the achievability of the requirements, and those factors. Then I've personally gone out last week and looked at the potential for this program.

Through the work of that process, already the Air Force has concluded that more money and possibly a little more time is required than they initially laid out, and I am determined to try to bring and present to Congress an achievable program that's properly resourced, properly scheduled, and has appropriate technology maturity in it.

That's the goal. I strongly support the need for the new bomber, but I do not intend to put my name on a piece of paper that will start a program that is going to be in the next hearing a few years from now about how the costs grew on it.

Senator THUNE. One of the issues that's related to that, and the GAO report noted that the long development cycles make it difficult to estimate cost and funding needs. Some development cycles take 10 to 15 years from start to finish. The GAO recommended constraining cycles to 5 to 6 years.

I guess my question is, is that recommendation realistic? How can we continue to shorten the development time of these very complex programs?

Mr. YOUNG. I think I believe the chairman has mentioned a few times the Defense Acquisition Performance Assessment Report, which advocated a tool called time-defined acquisition. I think it's a very potentially useful tool, but it's only useful if you can define requirements that can be achieved in that time period. If you set out and say, I'm going to do something in 5 years, but the something you have set out to do in terms of requirements can't be done, then it'll just be another program that misses its schedule and its budget.

So I do think we need to look at that. In many of those things where you define short windows of time, you will be looking for incremental improvements in capability, and that may be a reasonable and very affordable strategy for the Department. In other

places the Department does have requirements that go beyond an incremental change and so I don't know that I can always demand that a time-defined approach be the strategy.

Senator THUNE. The GAO also noted that DOD typically uses cost reimbursed contracts, in which the DOD generally pays the allowable costs incurred for the contractor's best efforts to the extent provided by the contract. It further notes that this may contribute to an acquisition environment that's not conducive for incentivizing contractors to follow best practices and keep costs and schedule in check.

Would you agree with that statement and, if so, what's being done to correct these misdirected incentives?

Mr. YOUNG. I think we have to—I believe there's work to be done in this space. We have to balance risks and costs. Where we are seeking to push the state of the art in technology, industry will not do this on a fixed-price basis and I'm not sure it's reasonable to ask that it be done.

Other places we possibly could look at a more aggressive contract structure that will help keep in check the requirements and help us deliver for affordable costs.

Then there are other places where we've used cost-type contracts, that I think have been unfair to the government and we need to seek reform in that area. The best example I can give you is on the LPD–17 ship, where some significant fraction of the welds in that ship were flawed and had to be redone. At some point in time, I should expect some reasonable level of performance by industry on a cost basis. I shouldn't be able, forced, if you will, to pay on behalf of the taxpayer any price for any level of deficient performance. That's an area where we need to do some work on our contracts.

Senator THUNE. The GAO testimony concluded with the statement that in practice DOD's decisions made on individual programs often sacrifice knowledge and realism in favor of revolutionary solutions. Would you agree with that assessment, and if so what are the two or three biggest initiatives that you think could correct that problem?

Mr. YOUNG. I think—if I misunderstood your question, please correct me—but I believe the key to that is technology readiness. So there are a couple of steps to that. One, I am a strong advocate of the acquisition team working with the requirements team to try to make sure the initial requirements are set in a reasonable place and informed by what technology can do.

Then, to a finer level of detail, you have to do what Congress has rightly asked us to do, and that is at the milestone points ensure that the technology is appropriately mature to move to the next phase of development. So in both those cases I think we need to address those issues.

Senator THUNE. Thank you, Mr. Chairman.

Thank you.

Chairman LEVIN. Thank you so much, Senator Thune.

Senator McCaskill.

Senator MCCASKILL. Thank you, Mr. Chairman.

There are depressing failures in this area of DOD. The saddest thing about these failures is that we pass laws and we talk about them, and we pass laws and we talk about them, we have audits

and we have audits, and it just keeps getting worse. What do they say, that insanity is to continue doing the same thing over and over again and expecting a different outcome.

It seems to me we ought to implode something here. The system needs to be really looked at in terms of a crisis of leadership. There is—if you look at two broad principles in terms of any government program, it's, first, what's the definition of success; and second, is there accountability? Because people aren't going to change what they're doing if they're not held accountable for it.

We've discussed that briefly in this hearing. But it seems to me that the definition of success, and that's part of the problem, in acquisitions is to get the money and keep getting the money. Well, if the definition of success is to get the money and keep getting the money, then we're going to continue to have these problems.

That's what the whole community's about, is getting the money and keeping the money. It doesn't—well, I think that's what the contracting community's about. I think that that's what sometimes the leadership of the various branches is about, and certainly it's about what Members of Congress are about sometimes, getting the money for their own individual systems that they care about, their pet systems based on what contractors they have in their States or whatever.

I want to focus in on turnover. I asked my staff why the military branches were not going to be represented today and they said, well, two out of the three positions are vacant. Ms. Schinasi, how long have you had your job?

Ms. SCHINASI. 30 years.

Senator MCCASKILL. How long have you been focusing on this area?

Ms. SCHINASI. About 18.

Senator MCCASKILL. So for 18 years you have watched these problems.

Secretary Young, how long have you had your job?

Mr. YOUNG. Which one?

Senator MCCASKILL. The one you have now.

Mr. YOUNG. I was made acting at the end of July. I was confirmed by the Senate in November 2007.

Senator MCCASKILL. How long did the person serving before you have that job?

Mr. YOUNG. Approximately 2 years.

Senator MCCASKILL. Do you know off the top of your head how long the average program manager stays in place in your system?

Mr. YOUNG. I do.

Senator MCCASKILL. It's 17 months, correct?

Mr. YOUNG. That's not correct.

Senator MCCASKILL. Well, the GAO audit says it's 17 months.

Mr. YOUNG. I asked my team yesterday to go through the data and identify, and at least for the places where you had data, the Army and the Navy, we surveyed program managers who have left since 2000 and the average tenure of those program managers was 37 months.

Senator MCCASKILL. Well, you all need to get together, because the audit says that of the 39 systems since 2001 the average length

of a program manager was 17 months, and that is half the life of the development of those systems.

How do we expect any accountability if you know you're going to be gone before the you-know-what hits the fan?

Mr. YOUNG. I think I will certainly let Ms. Schinasi speak, but we have a snapshot in time that says today the current average is about 24 months, but that's a snapshot in time. It doesn't say how much longer they'll serve, and we are seeking to address this very issue with program manager tenure agreements that says that—where program managers agree to serve for a period of time or to the next nearest milestone.

So I agree with you about this. If I could, I'd use this opportunity to say there's another dimension to this. When I was the Navy acquisition executive for 4½ years, I had I think four rotations in the senior requirements officer. The requirements officers are a party to this situation. They rotate on much more regular intervals. They come in and they potentially want to change the requirements, and then I have my acquisition program manager trying not to change and to keep stability and a requirements officer who just came in from the fleet and has the potential to make flag saying you have to change, and it creates a lot of tension in the system.

That's why I believe again the acquisition executives have to take care of their program managers who try to manage with discipline, because it's not an easy discussion with the flag officer requirements person who says: You must change this part of the contract.

Senator MCCASKILL. Where are these people going when they leave?

Mr. YOUNG. The program managers?

Senator MCCASKILL. Yes, or where are the senior acquisition people at the Navy and the Air Force, where are they going? Where do they go? When they leave these jobs, where are they going?

Mr. YOUNG. Well, I was the Navy acquisition executive and I got moved to be the DDR&E, and I got moved to be the Under Secretary for AT&L. Others, SAEs, my colleagues that I knew, one's at the DAU now, one's in industry. Most people I do believe return and work in industry in general, is the vast majority.

Senator MCCASKILL. So what would it take for us to—and I mean the sky's the limit here. What would it take for us to get someone like Ms. Schinasi to stay in some of these jobs for a decade maybe, something remarkable like 10 years, where they could actually manage and be accountable for these programs? Is it a matter of money?

You talked about that you're having trouble getting people to come back because we are limiting what they can do when they leave. If you could write your wish list, why is it that somebody at GAO—I guarantee you she's not getting rich. I guarantee you she's not in this job for the money or the fame. I'm not implying that people that leave DOD are going for money or fame.

But something is terribly wrong when the Government Accountability auditor stays 18 years and the average program manager—and we want to quibble about how long—are turning over like hotcakes. There is something terribly wrong with this system, and

there's no way we're ever going to fix it if we don't have longevity in these leadership positions.

Mr. YOUNG. The questions I had were largely about politically, presidentially appointed senior leadership positions in the acquisition community. If you move levels down from that, we have lots of government civilians who just like Ms. Schinasi, have been in place for 20 and 30 years. I believe Senator Reed asked about this. In fact, my issue is refreshing that leadership with people that are about to retire.

So at the deputy under secretary levels and the next level and even in other places, we have a lot of that leadership. In general, we have a bias to run programs and oversee portfolios of programs with program executive officers (PEOs) who are military. In that regard, the acquisition system parallels to some extent the military assignment system, where people don't serve indefinitely in those jobs. Again, acquisition rotates far less frequently. I have PEOs and program managers for at least 3 years. Many of the line officer organizations—commands of ship rotate on an 18-month to 24-month basis.

Senator MCCASKILL. Well, shouldn't we fix that? Shouldn't we change it? Obviously it's not working. We have cost overruns, we have scheduling. This is a disaster. We're talking about hundreds of billions of dollars. Isn't it time for someone to stand up and say, this is a crisis and we can no longer use this model in terms of the kind of longevity it's producing in these critical oversee and accountability positions?

Mr. YOUNG. The issue has multiple dimensions. I believe this is one that's reasonably addressed when people are serving 36 to 40 months. I have program managers serving more than 4 years. I think we should look at it, but I would urge you that more significant factors are rotating the requirements officers and letting the requirements officers lean very hard on those program managers to change things. Then as I cited in the T–45 example, it's also programmers and comptrollers giving acquisition team members a budget they can't execute, and they need the backing to stand up and say: I can't execute that budget.

Senator MCCASKILL. We'll follow up with you and with you, Ms. Schinasi, because I think it's time that we try—and I know that the chairman talked about a new position that might be outside of the process at this point in terms of the oversight. I think that might be a key example.

I'm new here, but this is sickening. This is unacceptable. This would never be tolerated in the private sector. The reason it's tolerated here is because we care about our military, we want them to have the best, and because, frankly, it's not our money. It's taxpayer money.

I think we need to do something dramatic and different in terms of how these processes are working.

Let me finally address a question about the number of contractors. We're down to six. I think all of us that are being honest about this know that this is a cross-pollinated incestuous deal here, that the contractors and the military—I'm aware of an incredibly inappropriate incident that occurred with the highest ranking of

our military in an acquisition contract dealing with a PR screen for the Thunderbirds that we will go into another day.

But when we get down to one or two contractors, what should we do, Ms. Schinasi? I mean, when we've gone from what, something down to six, what do you recommend? How do we create more competition if we're down to six, and how do we keep it from going to one or two? If we're going to do that, why don't we just bite the bullet and say that we have in fact become like other countries, where the government controls the business of supplying equipment to the government, because right now we kind of do; we just don't admit it.

Ms. SCHINASI. I'm going to give you an answer that touches on a couple of the issues you've raised, and that is, it would be good if we could get more production going because production is where contractors look for efficiencies for themselves. That's where you can go into a fixed-price environment and you can rely on them to do what's in their best interests, that's also in the government's best interest.

One way to do that is to shorten these development cycles, and shorter programs will also address the problem that you talked about for accountability of program managers. If we only need somebody to stay 5 years, we're more apt to get that kind of match between what the system wants out of its program managers and what the system needs out of the program managers. So that would be one part of the answer.

I think you are right in that we cannot rely on competition the way the procurement system has been set up, because the bedrock of our procurement system is competition. So we have to put more rules in place and we have to legislate more and we have to have more oversight. I'm not sure that's the most efficient way to do things, but that's where we are left right now.

There are ways to encourage competition if we look at the supplier base as a whole. The six companies I talked about are the major defense contractors, but there is an industry out there that can be created. Congress has looked at different ways to do that, the use of other transaction authority, for example, or other ways to bring in nontraditional contractors. I think some of those initiatives have merit, that we can get companies involved in government business that will provide some of that incentive and initiative to the ones who are already there to do their job better.

Senator MCCASKILL. Secretary Young, do you have any comments about that?

Mr. YOUNG. I think I would agree completely with that. I've issued—I mentioned that I issue weekly notes to the broad acquisition team to try to keep moving the culture forward. At least two or three of those notes are aligned with the chairman's comments, and your comments. I have asked people to stop viewing success as getting more money, growing your program office, getting more people. In fact, I view that as a failure if you're doing it at the expense of contributing more capability. I'd be happy to give you that note for the record.

[The information referred to follows:]

See the attached DUSD(AT&L) notes.

USD AT&L Note for 08 February 2008

Dear AT&L Team Members,

It takes many organizations in the DoD enterprise to successfully deliver a program. Teamwork will always be critical. I hope we will always be pushing to the same objective, especially in difficult circumstances.

BALANCING OBJECTIVES AND RESOURCES

I recently encountered a program which was significantly over budget on the first item. (Unfortunately, this does not help you much in trying to guess the actual program.) In the face of firm budget constraints and cost growth, technical authority individuals were demanding cost consuming changes in the initial production article. This course of action could imperil the entire program – leading to no capability delivery. Further, it exhibits a lack of sensitivity to reality and a mindset that money is an unconstrained resource. Some organizations seem to take the view that the program manager will just have to get more money.

First, I adamantly reject the last concept – we must stop taking money from other programs and increasing their costs to pay new bills on a broken program. Indeed, it is my view that WE MUST ALL – every person participating in the acquisition process – accept responsibility for helping to deliver a product within budget. Once a program is in trouble, we all need to work to make reasonable and appropriate compromises – requirements and technical authority – to deliver a product. I am extremely disappointed in a mindset on the part of any acquisition team member which seeks to enforce "standards" at any cost and without the express approval of the program manager. There are waiver processes that are appropriately used for prototypes, first production articles, and lead hardware which are over budget.

SUMMARY

If you are working as part of a team on a program which is over budget, please accept responsibility to support extreme cost control efforts. Even better, please help programs that are on budget deliver under budget. Creatively contribute to acquisition program management by looking for ways to reduce cost and avoid the application of standards, processes and procedures which add virtually no value to the warfighter or the taxpayer.

JJY

USD AT&L Update for 21 March 2008

Dear AT&L Team Members,

One of my previous notes talked about a shift in culture. Some view an appropriate metric in a government culture as constantly growing the budget and size of the organization. This is a totally inappropriate metric and is almost certainly not connected to the priority needs of the warfighter. I want to reiterate that the priority is to execute your missions and programs at the lowest possible cost and accept that savings may be applied to other defense enterprise needs.

EMBRACE SAVING MONEY FOR THE DEFENSE ENTERPRISE

Sometime after a merger, I asked whether we had attained the promised savings on a particular large program. The answer was yes, and the program manager allocated the savings to program opportunities and initiatives. Frankly, this should not have been done without an enterprise level discussion. As I noted in the previous note, these dollars did not belong to the program manager – they belong to the taxpayer and the Defense Department.

In industry, every member of the team is generally motivated to improve efficiency and reduce cost. These efforts produce salary and bonus rewards, greater profit, stock price appreciation, and competitiveness on future programs. These factors have a unifying effect on the business enterprise.

In DoD, our unifying objective should be to buy appropriate quantities of a diverse set of capabilities, conscious of both the warfighter and the taxpayer. Every member of the acquisition enterprise should pursue constantly cutting every element of cost. The metrics should include increasing quantities within the budget and returning dollars to the enterprise to address other capability needs or quantity shortfalls – helping to "grow the business." Neither the taxpayer nor the warfighter cares about the size of the program office budget, the rate of growth in the budget, or the number of people in the program office. As in business, we should all view it as detrimental to generate a loss – for us, a loss is increasing cost, taking money from other enterprise needs, growing an organization out of proportion to the enterprise needs, and thus denying the enterprise greater capability.

SUMMARY

Again, I would ask everyone to seek efficiencies each day in order to lower the cost of our programs and purchases. The range of needs for the Defense Department are constantly changing and growing. We all must execute within or below our budgets to help the Defense Department develop the most robust toolbox possible for the warfigher and the Nation.

JJY

USD AT&L Note for 28 March 2008

Dear AT&L Team Members,

The money we spend belongs first to the taxpayer. Through the approval of the Congress, we are granted the authority to spend these tax dollars – money each of us paid to the government along with other Americans. In exercising this privilege, our constant goal should be to perform the work at the lowest possible cost and proudly let the savings address other priority DoD needs.

EMBRACE SAVING MONEY FOR THE DEFENSE ENTERPRISE

The question often arises - what is the incentive for a government program manager to save money if the money is moved to another program or activity? I have heard versions of this question several times in the past. My answers are straightforward.

First, the question presumes that the money this government manager has the privilege of spending belongs to him or her. It is not his or her money! Second, it suggests that a government manager will forego the chance to save money if the money will not remain in his or her program.

I do not believe that all government program managers take these views. To the extent a program manager has this view, this person does not belong on the government team. We all work for a large defense enterprise with many needs. I am not always personally happy with the budget allocation of every single dollar. Nonetheless, the beauty of our democracy is that it seeks to grant many people a voice and achieve an outcome that balances many differing views.

I believe the enterprise can do the most for our primary customer, the warfigher, if we seek to constantly cut cost and save money. I accept that there may be multiple claims for any dollar saved. I welcome the organization which saved the money offering ideas for alternate uses of the savings. However, they are not entitled to the money saved. I adamantly feel that alternate uses must compete against other DoD needs. Frankly, the other DoD needs may often garner the resources. However, this is a net positive for the defense enterprise and the warfighter.

SUMMARY

Seek each day to lower the cost of our programs and purchases. The tax dollar appropriated to a program element which you have the privilege of spending is not your money. It contributes to the greater good of the defense enterprise if savings are applied to priorities outside of your program.

JJY

Mr. YOUNG. I have issued notes that said we have to have more open competition and do it as fairly as possible. I created acquisition strategies where a smaller business and a larger business were going to go head to head and the large business went and bought the smaller business. So I've watched an acquisition strategy through competition fall apart. We need some serious attention in this space.

We have another problem where I've seen some of the venture capital models work well, like In-Q-Tel for the Central Intelligence Agency. I've talked to those companies and those companies in general won't come and do business with the Pentagon because of the complexities of trying to do business with us. So we need to go attack some of those issues.

All these small companies may not have adequate cost accounting systems, but they have technology that our warfighter needs. We need to find a way to deal with that.

Senator MCCASKILL. Well, the irony is that because we are pretending like we have a competitive system, we are putting myriad rules and regulations in place to actually compensate for the fact that it's not true competition, and it's those myriad rules and regulations that are keeping venture capitalists out. So it is a circle of failure. This is like—it's almost surreal, how ridiculous it is.

I don't have any more time——

Chairman LEVIN. Senator, I'm afraid your time is up.

Senator MCCASKILL. I'm out of time. Thank you very much.

Chairman LEVIN. Thank you, Senator McCaskill.

Senator Martinez.

Senator MARTINEZ. Thank you, Mr. Chairman.

Secretary Young, I want to focus on the issue of shipbuilding. I know the CNO has had a goal of a 313-ship Navy. We've talked about that a little bit this morning. We also know that from time to time in recent years this plan has not been meeting the goals that we need in order to see that to fruition.

We've also heard from shipbuilders that they argue that the formula for bringing down construction costs has to include volume and stability. My question to you is essentially, do you believe that the Navy at this point has adequately addressed the concerns in the shipbuilding plan which will then enable the Navy to get on the road to a 313-ship Navy?

Mr. YOUNG. Well, I believe the Navy—I have not seen the latest iteration—the Navy is building, possibly with modest changes, the shipbuilding plan for the program objective fiscal year 2010 to fiscal year 2015 budget. Your current plan, as it exists in the current President's budget, I believe, provides moderate stability. Certainly you wouldn't call it robust, but a moderate stability and a path to the 313-ship Navy.

DDG–1000 is an important piece of that plan. I believe trying to regain cost control on the LCS is an important piece of that plan for capability reasons as well as some degree of industrial base concern.

Senator MARTINEZ. In your prior job you worked on the LCS procurement program. Specifically on that, where are we today in your estimation in terms of—I know we have the two prototypes and they're about to come out I guess in the next 2 or 3 months. Once those are sea-tried and a model is selected on which to go forward, do you think that the system, the procurement system, is ready to go so that we can then proceed to the construction of a LCS and get a production line going that's going to be successful?

Mr. YOUNG. A couple of things. One, the LCS was formed ahead of Operation Iraqi Freedom, where the Department did several thousand—I went to Fifth Fleet and they did several thousand boardings in the Gulf. We were boarding small ships that could have been a danger with billion dollar DDG–51 destroyers. We need a smaller, faster ship in our Navy.

I couldn't be more frustrated than all of you that that ship, which we set out based on some commercial designs that we were going to make modest changes to, has now grown, more than dou-

bled in cost. I would like the Navy to revisit, trying to get some cost control of that program. But I believe the capability is still needed and I think you will see in the POM10 budget the Navy tries—because you can't deny the capability—the Navy will try to buy those ships and restore that program.

The cost cap right now is causing a problem. I was asked, and I will provide extended comments for the record, but one of the fundamental issues is we took a more commercial-like ship that we were going to add some systems to and applied a lot of Navy technical authority and turned it into a militarized ship. We drove that cost growth. I don't even know—it's some mix of cost growth and the fact that we made new demands on this ship that drove the price of it to a higher level. "Cost growth" is such a general word applied here.

[The information referred to follows:]

Yes. The procurement system is prepared to proceed with further production of the Littoral Combat Ship (LCS).

The Navy has worked diligently with the industry teams to identify and evaluate program cost, schedule and technical risk. The Navy has taken the following action for the LCS program to address cost growth and prevent recurrence of the problems found during production of LCS 1 and LCS 2, including increased oversight assigned to monitor industry performance, and allowing for more realistic schedule objectives.

An updated acquisition strategy for the fiscal year 2008 and fiscal year 2009 procurements was approved by the Under Secretary of Defense for Acquisition, Technology, and Logistics. The Navy is seeking to award one ship in fiscal year 2008 using the funding appropriated by Congress, along with material from one of the ships terminated in calendar year 2007. The fiscal year 2009 President's budget requests two additional LCS ships.

The following relates to the incorporation of military specifications into the LCS designs.

In February 2003, the Naval Sea Systems Command and Program Executive Officer ships made two joint decisions. The first was to work with the American Bureau of Shipping (ABS) to develop a set of design standards, or rules that could be applied to non-nuclear naval combatant ships. The second was to utilize ABS to class both LCS and DDG–1000 using the new rules. "To class" means to certify adherence to the rules through design approval and construction surveillance.

In the Preliminary Design Phase Request for Proposal (RFP) issued February 28, 2003, the LCS Industry Teams were required to team with ABS to aid in producing an acceptable design, and to conduct an early assessment of each design to gauge its ability to comply with the design rules that were under development at that time.

The Preliminary Design RFP stated:

> "It is the Government's intention that the Preliminary Design be evaluated by ABS and judged acceptable at that stage of design. This evaluation will be repeated at the end of Final System Design. It is also Government's intention to have the LCS classed by ABS at delivery. The Government understands that there is currently no complete set of U.S. approved rules applicable to LCS. The Government expects that the U.S. naval ship rules currently under development will be available prior to the award of Final System Design."

At that point, the Navy established ship structure design requirements under the High Speed Naval Craft (HSNC) Guide and communicated this to the teams. The HSNC was freely available, having been released the previous year. The Navy also established that other Mechanical and Electrical systems would be designed to the Naval Vessel Rules (NVR) and communicated that fact. At that early stage of the design process, the above dialogue provided sufficient guidance to conduct the Preliminary Design phase.

To provide advance insight into the required rules set, ABS issued a Draft Final Rules Matrix for LCS to the Industry Preliminary Design teams in October 2003. From January 2004 to May 2004, the Navy worked to finalize the first issue of the NVR. This first edition NVR was released May 21, 2004, and was immediately provided to the Industry Teams by ABS.

The December 19, 2003 Final System Design (FSD) Phase RFP reiterated the requirement for the ships to be delivered in class as a naval combatant ship in accordance with the NVR. By the time of FSD contract award on May 28, 2004, the Industry Teams were aware of the February 3, 2004 draft NVR. It is during the FSD phase that the Industry Teams were tasked to fully describe detailed design requirements for all aspects of the ship in the course of preparing the Shipbuilding Specification. It was expected that the ship designs would be further developed during the FSD phase to conform to the design rule requirements (i.e., HSNC for Structure and NVR for the remainder of the mechanical and electrical systems), which is a normal part of the ship design progression.

Both teams inserted reference to the May 21, 2004 NVR in their approved Specified Performance Documents (SPDs), thereby noting the NVR among the applicable requirements documents. After accepting the Teams' SPDs in final form, they were made contractually effective for the succeeding portions of the program.

These comments clearly represent the Navy's statement and view of the circumstances. However, it should be clear that these are ambiguous statements which predict the application of undeveloped standards. It is inappropriate on the part of the Navy to claim that industry clearly and concisely understood the rules and certification requirements which would be applied to LCS. The Navy bears a share of responsibility for the poor management and execution of the LCS program.

Mr. YOUNG. Is it a more capable ship at the price of $400 million plus? Yes, it's a more capable ship. Is it as affordable to the Navy as it should have been? Absolutely not.

Senator MARTINEZ. Well, given that, do you think that the vision for the LCS can be actually accomplished, given where we are today?

Mr. YOUNG. I think I'd stay with the first—I think the vision has to be accomplished. I need a ship that can go 40 or 50 knots and chase down the small vessels. Our adversaries buy ships now that are faster than DDG–51s. DDG–51s really weren't intended for the maritime interdiction operation missions. We need a ship in this class for the missions our Navy faces in today's environment.

I think this is very consistent with Secretary Gates' comments about what are the threats and the missions we will have to execute in the next few years. There's a gap in the Navy to do this job. Can we now go in and undo some of the changes that were done to the LCS to make it more affordable for the Nation so we can buy them in quantity for our Navy's warfighter?

Senator MARTINEZ. So give me some confidence that we're on the right track to be able to get that done. Because I agree with you, we need the ship.

Is the Navy on track to be able to pull this off? Is the acquisition system in place? Once we select the prototype, are we ready to go?

Mr. YOUNG. Are we able to buy the ship that the LCS has become? Probably, but it's not as affordable as it should be. Has the Navy made enough effort to get costs back out of that ship? I think that's not answered yet and I intend to have discussions and meetings with the Navy to seek to accomplish that goal.

Senator MARTINEZ. In terms of the overall ship acquisition challenges, do you believe that we have reversed or have taken the steps necessary to reverse this long-term trend which we've seen that has not allowed us to get the ships that the Navy needs, just in the overall fleet, not just the LCS?

Mr. YOUNG. I think, unfortunately, the requirements process has driven us to ships that are more expensive because they have more capability. You have to look at those factors. I face this constantly in the Navy, and that's my job, is to try to find that middle ground. There are places where I could buy a less capable ship and it would

be more affordable and run some risk of the threat being able to match that ship.

So I think the Navy's trying to find that reasonable balance. I believe we've restored some degree of stability to the Navy shipbuilding program. The program is expensive, more expensive than we would like it to be. But it is linked to the capabilities that reasonable people have assessed the threat to have, particularly when you look at nations that are building capable ships out there.

So I think the Navy's finding that some degree of reasonable ground—unfortunately, ships are more expensive. They're more expensive—I think, as Ms. Schinasi pointed out, we're not buying anything in the quantities we bought them in the past. That alone is driving a significant cost into our systems across the board, not just ships.

Senator MARTINEZ. This last question for both you, Secretary Young and Ms. Schinasi as well. In the 109th Congress this committee passed legislation that was enacted into law which requires that the Defense Department give a preference to fixed-price contracts for major developmental defense programs. Fixed-price contracts shift the risk to the contractor and incentivize the contractor to increase the reliability of the system components.

GAO has determined that cost-type contracts cost the taxpayer $80 billion in cost overruns in the past decade. So what has been the practical effect of this legislation in helping the military Services to end the practice of overpromising capabilities and underestimate cost of development in buying weapons systems?

Ms. SCHINASI. I would say that the contract type should reflect the risk associated. So when we have a preference for fixed-price contract, what we're saying is let's get some of the risk out of the programs that we're trying to develop and produce here. There have been experiments in the past with fixed-price development contracts that have not worked because we have not taken on the more difficult piece of the risk of the technology maturity and the other things that are associated with all the cost growth that we've been talking about this morning.

A program I would look at now is the JSF, where we are going into production and still looking at costs with some cost-type contracts, which says that perhaps the cost of the program is a little bit greater than we would expect to see going into production.

But again, the contract type has to be put in place associated with the risks that the government is undertaking.

Senator MARTINEZ. Mr. Secretary?

Mr. YOUNG. I would agree with Ms. Schinasi's comments and add to that. One thing I have to ask—I don't have any way around—I have to ask your patience with is, you pass legislation and it takes time to implement steps in that regard and move forward. Then it takes some years to see. I've been frustrated with the discussion about that transition. To me this isn't a transition business. I have something like 16 programs seeking Milestone Bs this year and all of those programs will execute over the 3 to 8 years beyond the end of this administration.

We need to make those decisions well. We will make those decisions well. We have done exactly what she said. I have asked the program office and Lockheed to look at fixed-price incentive con-

tracts at the right point for these JSF aircraft. So we will, with your legislation—and partly because it's just the right thing to do—I will continue to push in this space to get better terms and conditions for the government, and it will take us a couple of years to see the benefits of all those activities.

Senator MARTINEZ. Thank you both very much.

Chairman LEVIN. Thank you, Senator Martinez.

Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman.

Ms. Schinasi and Secretary Young, in that order, I want to welcome you here today to talk to me about the problems that have been going on for years. I want to deal with production process control and also with best practices. I think there is an agreement that achievement of quality and production is nearly impossible without process control, and it also makes for casting of cost and timelines extremely difficult to do accurately.

One of the many problems we've heard today deals with poor business and engineering practices. Specifically, I am most concerned that in all cases there was not a single instance where all critical production processes were in statistical control prior to the beginning of the production phase.

My question to both of you is, could you please describe why this previously identified best practice has failed to be enforced? Second, what steps the Department is taking with its current programs that are still in the pre-production stage to break this trend? We're talking about attacking and breaking these trends?

So these two parts of the question, about describing the best practice and also what steps are you taking.

Ms. SCHINASI. Senator, I will defer to the Under Secretary on the enforcement piece, but I would like to say, on the manufacturing the process control, that is an indicator that we use to look at whether or not a system is ready to go into production. What we find in many cases is the reason that you don't have process controls is because you don't have a stable design, and in some cases you don't have stable design because you're working with immature technologies.

So it's a cascading problem that we see in a lot of programs. Process controls is one way that you can measure the readiness of your manufacturing to go forward. It's not the only one. But the thing that I think is most troubling to us is that in many cases, even if program offices do not capture that metric, they do not capture any metric because they don't—they have not seen the importance of getting the manufacturing processes ready.

Senator AKAKA. Secretary Young?

Mr. YOUNG. I would add a comment. This is one of the more difficult decision spaces that I face in the business. I'll use a couple of examples. JSF will be one. Right now we have 15 system design and development, the end of the development of JSF, aircraft in construction. So we have teams of people that are learning, improving the processes to build that aircraft. We have signed for two low-rate production contracts for that aircraft.

My choices are to build the SDD aircraft, come to a halt and test and design that production process and then start it back up. That guarantees me a loss of time and a loss of learning and an in-

creased cost to the taxpayer. Or the risk issue that's come up many times today, do you take some appropriate level of risk and begin the process of fabrication and production at low rates and continue to gain maturity in the processes?

I certainly can't disagree with the GAO comment that you'd love to have everything. But I believe the everything path will cost me more and so I have to take some measured and prudent risks, I believe, on the heels of developmental aircraft construction to begin to do low rate production, and then seek to go to rate production. I believe that in our rate production decisions we seek to have much more maturity, if not good maturity, in that production process control you've talked about.

Senator AKAKA. To both of you, to what degree has the current security environment and the wars in Iraq and Afghanistan contributed to what you call a sense of operational necessity that allows waiving of requirements established in recent legislation regarding these practices?

Mr. YOUNG. Can I comment on that?

Ms. SCHINASI. Yes, please.

Mr. YOUNG. I had a meeting yesterday that I think potentially answers your question, sir. The H–1 upgrade program to get new helicopters to the Marine Corps, known as the Y and the Z, the H–1Y and the H–1Z. The program manager came to me and there are pieces of the AH–1Y that are not ready for test. They are in operational test right now, and successful operational test would have paved the way for a decision this September to buy low-rate production Zs, and then again in 2009 the issue before you is to buy low-rate production Zs.

The Marine Corps has a gap and they need these aircraft. So they come to me and all the risk comes to me and they say—we didn't go—we cancelled operational tests, we're now not going to do operational tests until 2010, and still we seek to buy and deliver aircraft in 2011, hoping for success. I'm faced with the challenge of how do I come talk to you, when you're asking me to execute more discipline in the system and demonstrate that greater discipline. Yet the best way to do this would be stop. If I stop on the Y-Z—on the Z program right now, the Marine Corps will not get helicopters in 2011, they will be short of helicopters, the costs will unquestionably go up, but I could possibly deliver the program more confidently, for a known increase in cost. Or I'm faced with the alternative, to stay the course and take some reasonable measures to demand testing and operational assessments and developmental tests that will help build my and your confidence, with the idea that I possibly need to go ahead and buy the Z aircraft for the Marine Corps's operational need.

I haven't made that decision yet, but that's a perfect example of the kind of decisions, where I'm trying to balance the risks and your request to me to execute the program with more stability and the warfighter's need today in the theater.

Ms. SCHINASI. I think the Under Secretary was correct earlier when he said every program has its own story and it's important to recognize the story in every program. But I also think it's important to step back and look at what is happening across the board. So the question I think that's important from the question that you

just raised and the example that was just given is why are we in this position? Why are we in a place where we have to rush, where we have to push through, where all of a sudden it's urgent, urgent, urgent, because in many cases once we say it's urgent and we move forward, it takes us longer to get where we're going anyway.

Mr. YOUNG. Maybe could I offer another example, because here we have great alignment. Another example I dealt with this year is the Multi-User Objective System (MUOS). It's a replacement for the ultra-high frequency (UHF) satellite. I feel like the requirements and budgeting enterprise should have recognized the need for that satellite earlier and budgeted for it. Instead, we were late to need, and they came to the acquisition team and said: We need a replacement for the UHF satellites in 60 months. The Department historically had taken 78 months to build every communications satellite.

The program office accepted the challenge, said, we'll try to do everything we can to meet the 60-month schedule. They are going to deliver MUOS in 77 months. So they beat the average by 1 month. Is this viewed as program office failure? In one sense it is, because they never should have agreed to do it in 60 months.

Are they the sole responsible party? Absolutely not. The programming and requirements community could have recognized this need, I think, as Ms. Schinasi said, if I could borrow her words, and budgeted for a program that has a reasonable probability of succeeding to meet that schedule and budget.

Senator AKAKA. Thank you very much, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Akaka.

Senator McCaskill.

Senator MCCASKILL. I have looked at the audits that were done by the Defense Contract Audit Agency concerning Lockheed cost estimating systems and also the report that was issued in November of last year by the DCMA that called Lockheed's systems "deficient to the point where the government is not obtaining useful program performance data to manage risks."

There is a GAO audit also that was highly critical. This is not a new issue. Back in 1998, the president of Lockheed Martin said: "Our current program and functional reviews are not capable of providing what we need."

I understand there was a meeting in February between the Lockheed officials about the cost estimating system problem, and obviously this is a big, big problem, because we're talking about the JSF. We're talking about almost $1 trillion, and we're basing payments on a system that all of our auditing agencies and management agencies are saying doesn't work.

Back in 2005 you withheld 2 percent of your payments to Bell Helicopters under a circumstance, frankly, that sounds as egregious as this. Are we going to expect and are you planning on withholding payment from Lockheed because of the deficiencies in their EVMS?

Mr. YOUNG. Senator, you're obviously well-informed on this. One thing I want to distinguish here is to make clear, the report addresses the EVMS and not the billing system. So the government has valid invoices for the moneys that we have paid Lockheed Martin, and I've had this discussion with the CEO. We believe the

money paid and the billings match. The translation by Lockheed Martin of invoicing and billing into an EVMS to assess their progress and their projection of future success on the program, there were flaws in that practice found in that report.

We met with Lockheed, as you noted. Secretary Finley, the Deputy Under Secretary of Defense for AT&L, met with them, highlighted the report, and then he and the DCMA outlined a plan to address and remedy all these issues. There are 12 milestones in that plan. The first milestone's been met. The other 11 are ahead of us.

DCMA meets with Lockheed's staff every 2 weeks to address progress on this, and we will withhold $10 million for every milestone that is not met as we continue to progress, with the goal of remedying the Lockheed EVMS within a year.

Senator MCCASKILL. So you're going to withhold $10 million every time they don't meet one of these. I do want to—that's good, and I would love to be kept apprised of that as to how much is withheld and what the milestones are and what is being reached, because clearly this has been a continuing problem.

I think the thing as an auditor that concerned me most is in the audit they also noted their control environment and accounting at Lockheed was inadequate. Well, when an auditor cites a control environment the sirens and bells and whistles should go off. That means that there is an environment where bad, bad things could happen if the controls are not in place and if it's a matter of their accounting system.

So I would specifically like that issue to be addressed if possible in a follow-up, as to how they are taking steps specifically based on the audit findings about their control and accounting.

Mr. YOUNG. We'll provide you more detail for the record or personally, or both, whichever you like.

[The information referred to follows:]

Lockheed Martin is making adequate progress against their Corrective Action Plan. Twelve withhold milestones have been identified. $10 million penalty represents 3 percent of monthly JSF billings which is in line with Bell withholds. All four withhold milestones have been met on time with none missed.

Senator MCCASKILL. Both would be great. Thank you so much. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you so much, Senator McCaskill, and thanks for your energy and commitment in this area. It's absolutely invaluable to us.

I want to pursue a matter that you made reference to earlier today, and that's this so-called Thunder Vision contract, which has come up many times now. But there's an Inspector General (IG) report that was issued in May which identified an additional seven contracts on which senior Air Force military officers were perceived to have used the powers of their position to award contracts to specific companies.

I'm wondering, Secretary Young, whether or not you're aware of that IG report and, if so, what steps you've taken to provide accountability where you thought accountability was needed.

Mr. YOUNG. I'm aware of the IG report. It is working in the normal disciplinary process, first to the Air Force, and I need to see what actions they take. Many aspects of that report highlight an

issue I've talked about around today, where I believe the report cites that the acquisition team members sought to have a competition and felt like they needed standards against which to compete. The report talks more about people outside the acquisition process seeking to exert undue influence on that process.

Those are disciplinary matters that are not within my purview, but they exist. They exist in lots of different ways and manifest themselves with people who have authority becoming frustrated with an acquisition team who is explaining, we need to do this in a competitive manner, in an open manner, and consistent with the laws and regulations. We run into that challenge on a regular basis, Mr. Chairman.

Chairman LEVIN. I think that it's clear to us the issue of accountability is critically important. This morning Senator McCaskill has highlighted it. It's been raised also in your testimony, I think, Ms. Schinasi. It's critically important. So even though this may not be precisely in your area of jurisdiction, would you let this committee know on this particular report that the IG has issued in May as to what the outcome was relative to accountability?

Mr. YOUNG. Yes, sir, I'd be happy to.

[The information referred to follows:]

The Air Force and Air Combat Command believes they responded aggressively to the second report issued on contracts awarded at Nellis Air Force Base. The Department of Defense (DOD) Inspector General (IG) Report on Air Force Air Combat Command Contracts recommended that the Assistant Secretary of the Air Force for Acquisition issue guidance to Air Force General Officers, military commanders, and senior executive servicemembers within the Air Force that reemphasizes the need to eliminate the appearance of conflicts of interest situations in Air Force contracting. On March 26, 2008, the Secretary of the Air Force and the Air Force Chief of Staff co-issued a memorandum reemphasizing to senior Air Force military and civilian personnel the need to eliminate the appearance of conflicts of interest situations and emphasizing ethical responsibilities while conducting procurements. Additional guidance was issued by the Assistant Secretary of the Air Force for Acquisition on April 2, 2008, and the Deputy Assistant Secretary (Contracting) on April 5, 2008, by memorandum. The Commander of Air Combat Command (ACC) distributed the March 26, 2008, memorandum to all commanders within ACC.

As requested by the Commander of ACC, and at the direction of the Deputy Assistant Secretary for Contracting, an independent review team visited the Nellis Contracting Squadron to review contracts from fiscal year 2006–2008 to see if the practices occurring in the period of the DOD IG reports, 2003–2005, were ongoing. The independent review team concluded that internal controls were still weak.

As a result of the audits and independent review, the Commander of ACC completed many actions and has actions planned for the near future to improve internal controls for contracting activities at Nellis Air Force Base and throughout ACC. The commander of the Nellis Contracting Squadron was relieved from command and has been replaced by an experienced and engaged commander who is committed to turning the organization around. Additional personnel improvements have been started for DOD civilians at the Nellis Contracting Squadron. The Nellis Contracting Squadron and all squadrons in ACC have completed mandatory training directed by ACC headquarters. Inspection checklists throughout ACC Contracting and the Air Force Contracting comprehensive checklist have been updated to include checks for the weaknesses identified in these reports. During the week of July 8, the Director of Installation and Mission Support for ACC, a brigadier general, along with a member of the Judge Advocate General's Corps and senior contracting officials, will visit Nellis to brief senior leaders of host units and tenants units, such as the Air Warfare Center and the Thunderbirds, on lessons learned from past contracting failures and their responsibilities in the future success of the contracting mission. As part of the visit, employees of the contracting squadron will receive additional training on ethics and competition requirements and reaffirmation of their responsibility to seek assistance when they feel pressured to take shortcuts around competition and ethics rules. Finally, the Air Force General Counsel is reviewing additional measures in broader ethics training.

However, I think these statements by the Air Force indicate some of the fundamental cultural and disciplinary problems in the system. While disciplinary actions were implemented for contracting personnel, it is not clear to me that appropriate disciplinary measures have been applied to the individuals who were outside the acquisition process and took actions to improperly influence and pressurize the individuals responsible for acquisition and contracting.

Chairman LEVIN. If there's no other questions, we will, with thanks to our panel, stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JACK REED

REDUCING TECHNICAL RISK IN ACQUISITION PROGRAMS

1. Senator REED. Secretary Young, it is well understood that one of the problems facing many of our major acquisition programs is the high level of technical risk that is not rationalized with limited budgets and optimistic delivery schedules. I think that the Department of Defense's (DOD) science and technology (S&T) programs can play a bigger role in researching fundamental phenomenon and technology design, performance, and integration issues to reduce the costs and risk of major programs. What do you think is the role of relatively small investments in S&T in helping to reduce the large and growing costs of the DOD major acquisition programs?

Mr. YOUNG. Reducing costs of major acquisition programs has been one of my specific goals as the Under Secretary. In my previous position, as the Director of Defense Research and Engineering (DDR&E), I saw the specific role the S&T investment can have in helping to meet this goal and I have continued the integration of both the DDR&E and Systems Engineers in acquisition programs. In addition, we have directed the use of competitive prototyping both before and where appropriate after Milestone B. For those systems before Milestone B, the S&T community is responsible for the competitive prototyping efforts. We believe that by developing prototypes before locking down system design and development, we will be able to make tradeoffs between requirements, cost, and technological feasibility.

Finally, we have expanded the application of technology maturity assessments for major acquisition programs. All of these things—prototypes, demonstrations, and technology assessments—come from the S&T investments of the DOD should help to control costs by providing better information from which decisions can be made.

DEFENSE LABORATORIES

2. Senator REED. Secretary Young, our network of defense laboratories house equipment and expertise which can be better utilized by many accounts to help address the problems that are resulting in cost and schedule overruns in many acquisition programs. How specifically are you tapping into your defense laboratories to address acquisition problems?

Mr. YOUNG. For the most part, the laboratories provide technical expertise to evaluate feasibility. In the past few years, the DOD has substantially expanded its use of technical experts from DOD labs to support the acquisition process. The use of immature technologies is a major risk factor for cost and schedule over-runs in Defense acquisitions. To minimize the possibility of going forward into System Development and Demonstration (SDD) with immature technologies, DOD conducts technology readiness assessments for all acquisition programs as they approach the Milestone B decision point. Technical experts from the DOD laboratories are active participants on the review teams that analyze technology maturity to ensure only mature technologies enter the SDD phase. In addition, the Department employs defense support teams, which often comprise expert technical staff from DOD laboratories to assist specific acquisition programs with technical problems.

3. Senator REED. Secretary Young, what new authorities can this committee provide the laboratories to enhance their ability to support your efforts at reducing acquisition program problems?

Mr. YOUNG. The laboratories have sufficient authority within their expertise and resources to assist acquisition programs.

MANUFACTURING PROGRAMS

4. Senator REED. Secretary Young, the Department's Manufacturing Technology (MANTECH) programs play a key role in reducing the costs of weapons systems and creating innovation in the defense industrial base. However, these programs are often underfunded and do not have the impact that they possibly could. What role do you think the MANTECH program should play in helping to address acquisition issues?

Mr. YOUNG. The MANTECH program develops and matures key manufacturing processes to accelerate technology improvements in the acquisition and sustainment of DOD systems and components. In fiscal year 2008, the Department established a Defense-wide Manufacturing S&T program to focus on cross-cutting manufacturing processes. We are in our first year of execution of this program but I believe it will pay dividends soon. In addition, the military department's MANTECH program investments are critical to affordably equipping the warfighter. As such, the MANTECH programs are closely coordinated with military department's requirements for achieving affordability goals. The Navy MANTECH program is actively participating with the *Virginia* class submarine, CVN, and DDG–1000 programs to achieve shipbuilding affordability goals. The Army MANTECH program is developing manufacturing processes of critical technologies, such as Focal Plane Arrays, where MANTECH investments reduced item costs from $1.6 million to $60,000 per large format arrays to enable proliferation of new sensor capability on ground platforms. The Air Force MANTECH program worked with the F–22 program office to identify new materials and manufacturing processes for the F–22 canopy, resulting in an increase of canopy life of more than 500 percent with an estimated $450 million life cost avoidance for F–22.

Finally, the MANTECH program, under the guidance of the Joint Defense Manufacturing Technology Panel (JDMTP), has worked to develop Manufacturing Readiness Levels (MRL), providing a communication framework for identifying and managing manufacturing risks through the development process.

RESOURCES FOR TECHNOLOGICAL MATURATION

5. Senator REED. Secretary Young, you have implemented a set of procedures to ensure that programs are to use mature technology if they are to pass Milestone B decisions. Technologies do not mature without resources. Has the Department developed any methodologies that would enable estimates of resource requirements and timing of investments in research and early stage technology development to ensure adequate technological maturation to support the reduction of cost and delivery time of major programs?

Mr. YOUNG. Currently, we do not have an estimate of the resource requirements needed in early technology development to ensure adequate technology maturation. We do believe, however, that prudent use of both Advanced Technology Development and Advanced Component Development and Prototype funds (Budget Activities 3 and 4 of major Force Programs 6) should give the Department better cost predictability for late-stage development activities that contribute to reduction of cost and delivery time of major programs. The current DOD-wide S&T budget request of $11.4 billion is the second highest request in history, in constant year dollars; embedded within this request are funds for a number of demonstrations and prototypes.

Also, my policy for competitive prototyping is intended specifically to mature technology, inform requirements and better define costs prior to Milestone B. Competitive prototyping should effectively identify potential issues associated with immature technology and lack of understanding of the critical program development path. It is too soon to provide definitive data on how earlier prototyping will impact the cost and delivery time of major programs, but in general, for those systems before Milestone B, the S&T community is responsible for the technology-based competitive prototyping. This increased investment should reduce risk. We believe that by developing prototypes before locking down system design and development, we will be able to make tradeoffs between requirements, cost, and technological feasibility.

6. Senator REED. Secretary Young, do you have quantitative estimates of the S&T investments necessary to mature technologies to the point that we can reduce cost and time to deliver systems for any existing programs of record?

Mr. YOUNG. Currently, we don't have refined quantitative estimates of the S&T investment necessary to mature technologies to the point that can reduce cost and time to deliver systems. We do believe, however, that prudent use of both Advanced Technology Development and Advanced Component Prototype Development Proto-

type funds (Budget Activities 3 and 4 programs) should give the DOD better cost predictability. The current DOD-wide S&T budget request of $11.4 billion is the second highest request in history, in constant year dollars. This investment highlights our belief in S&T as an enabler of cost control. In this area of maturing and prototyping technologies for weapon systems, it will not be easily possible to provide an annual dollar amount or percentage of the budget. What is required is that the Services and the DOD accept the requirement and demonstrate the will to invest larger amounts of research and development (R&D) funds in the early phases of a program. The rush to move immediately to the final stage of development with one bidder based on a paper proposal has proven to be a formula for risk, cost growth and schedule delays. The Joint Lightweight Tactical Vehicle (JLTV) program provides a great example. It is not likely that the JLTV program would have successfully executed based on selecting one paper proposal for aggressive development against unrealistic requirements. However, it was a struggle to get the Department to fund three prototype JLTVs.

RESOURCES FOR COMPETITIVE PROTOTYPING

7. Senator REED. Secretary Young, your initiative to expand efforts at competitive prototyping prior to major program initiation will naturally lead to increased resource requirements to support these activities. Do you expect these increased investments to be made by the Department in defense industry only, or will additional resources be provided to DOD labs and technical centers as well?

Mr. YOUNG. As noted in my testimony, my intent in establishing policy for competitive prototyping is to rectify problems associated with immature technology and lack of understanding of the critical program development path. Prototyping at any level—component, subsystem, or system—earlier in the milestone development process will improve the knowledge associated with estimating development and procurement cost. It is too soon to provide definitive data on how earlier prototyping will impact the resource level in the DOD labs and technical centers. But, in general, we expect increased attention to prototyping and competition in our late-stage technology demonstration programs to help reduce technical risk, validate designs and manufacturing processes, and refine requirements. The DOD needs to demonstrate the will to properly fund the initial technology maturation and prototyping efforts necessary to succeed in the final phases of weapon system development programs. Concurrently, these strategic DOD decisions will necessarily require lab and center Directors to address the need for more robust and diverse technical, system engineering and program management skills within the R&D community to support earlier development programs. Ultimately, a shift in a program's total funding to enable competitive prototyping through milestone B is expected to improve cost efficiencies across the acquisition life.

8. Senator REED. Secretary Young, has any estimate been made about the increased funding required to support this initiative?

Mr. YOUNG. No comprehensive estimate has been done. My view is that prototyping can and should be accomplished within available resources. The purpose is to achieve higher confidence in the technology and manufacturing readiness before we initiate major investment in the system development. In general, there are many cases where we can mature our knowledge, and sensibly avoid the kinds of cost growth we have seen that resulted from not prototyping.

Frankly, the alternative of taking immature, unproven, and untested technology into the final phase of system design and development without prototyping has proven in several cases to be extremely costly for the DOD. I believe it is fair to suggest that only a fraction of the funds DOD has paid for SDD phase cost growth could have paid for multiple, robust, competitive prototypes.

INDUSTRIAL BASE STRATEGIES

9. Senator REED. Secretary Young, please describe the processes by which the Department assesses the adequacy of the government acquisition and industrial base to support current and planned future defense acquisitions.

Mr. YOUNG. The Department periodically conducts analyses/assessments to identify and evaluate those industrial and technological capabilities needed to meet current and future defense requirements. It then uses the results of these analyses/assessments to make informed budget, technology investment, acquisition, and logistics decisions.

DOD-wide industrial assessments evaluate and address changes in key system, subsystem, component, and/or material providers that supply many programs, and affect competition, innovation, and product availability.

DOD components conduct their own assessments when: (1) there is an indication that industrial or technological capabilities associated with an industrial sector, subsector or commodity important to a single DOD component could be lost; or (2) it is necessary to provide industrial capabilities information to help make specific programmatic decisions. These "programmatic" assessments generally are conducted, reviewed, and acted upon internally within the DOD components. For example, as part of the program acquisition strategy, individual program offices conduct industrial assessments in accordance with the requirements of title 10, U.S.C., section 2440, as implemented in the Defense Acquisition Guidebook (Chapter 2.3. Systems Acquisition: Acquisition Strategy). These assessments address DOD investments needed to create or enhance required industrial capabilities; the risk of industry being unable to provide program design or manufacturing capabilities at planned cost and schedule; and issues associated with product technology obsolescence, replacement of limited-life items, regeneration options for unique manufacturing processes, and conversion to performance specifications at the subsystems, component, and spares levels.

These periodic assessments are summarized in the Department's Annual Industrial Capabilities Report to Congress, most recently completed in March 2008.

10. Senator REED. Secretary Young, does this assessment lead to a single or a set of industrial base planning documents that the Department implements?

Mr. YOUNG. There is no single set of industrial base planning documents that the Department implements. However, the Department's Annual Industrial Capabilities Report to Congress (most recently completed in March 2008) summarizes for Congress, Department acquisition officials, industry, and other stakeholders: (1) new departmental industrial capabilities-associated guidance; (2) methods and analyses undertaken to identify and address concerns regarding technological and industrial capabilities of the national technology and industrial base; (3) industrial capabilities-related assessments conducted within the Department; and (4) programs designed to sustain specific essential technological and industrial capabilities and processes.

Nevertheless, the Department's goal is to integrate and address industrial base issues within its existing budget, acquisition, and logistics processes to the maximum extent practicable. Written reports play a constructive role in identifying and evaluating integrated polices and actions, but at best are vehicles that reflect and document the analyses necessary to develop stronger policies, make informed decisions, and take effective actions. In many cases, these assessments cannot be successfully performed and recommendations implemented on a centralized basis. Industrial concerns affecting individual programs can best be properly and effectively integrated into budgets and acquisition decisions only if the responsible acquisition officers themselves are conscious of issues that affect their programs, and address them within program confines.

11. Senator REED. Secretary Young, what authorities, programs, and other tools does the Department have at its disposal to shape the industrial base to meet its needs?

Mr. YOUNG. The industrial strategy of the DOD is to rely on market forces to the maximum extent practicable to create, shape, and sustain those industrial and technological capabilities needed to provide for the Nation's defense. The Department will intervene in the marketplace only when absolutely necessary to create and/or sustain competition, innovation, and/or essential industrial capabilities.

Having said that, the Department creates market forces—most frequently within defense-dominant market segments—through its budget, acquisition, and logistics processes. DOD research, development, acquisition, and logistics policies, analyses, and decisions guide and influence industry in four fundamental ways. First, DOD evaluations and assessments of industry segments or specific industry-related issues help identify future budgetary and programmatic issues and inform policy-making and requirements generation. Second, DOD defense system acquisition strategies and decisions shape the technological and programmatic focus of industry. Third, the Department incorporates industrial base-related policies into its acquisition regulations to protect national security, promote competition and innovation, and, in certain specific cases, preserve critical defense industrial and technological capabilities. Fourth, DOD decisions made on mergers and acquisitions involving defense firms directly shape the structure of the industry.

When market forces are insufficient, the Department can use other tools to focus industry attention on critical technology development, accelerate technology inser-

tion into manufacturing processes, create or expand critical production facilities, and direct production capacity towards meeting the most urgent warfighter needs. For example, the Defense Production Act (DPA) Title III Program strengthens the economic and technological competitiveness of the U.S. defense industrial base, accelerates the transition of technologies from R&D to affordable production and insertion into defense systems, and can reduce U.S. dependency on foreign sources of supply for critical materials and technologies. The MANTECH program develops and matures key manufacturing processes to accelerate technology improvements in the acquisition and sustainment of DOD systems and components. In fiscal year 2008, Congress added $24 million to the Fiscal Year 2008 Research, Development, Testing, and Evaluation (RDT&E) Defense-wide appropriations to establish an Industrial Base Innovation Fund (IBIF) to develop advanced manufacturing processes and technologies to support long-term and short-term needs of the Department. The IBIF is executed through the Defense Logistics Agency's MANTECH program.

Another tool unavailable to the DOD is the Military Critical Technologies List (MCTL). As DDR&E, I successfully added funds to this program to enhance and update the MCTL process. I believe the MCTL determinations should be used for multiple purposes, including to guide decisions about critical elements of the U.S. industrial base.

DOD has the ability to use the DPA, Title 3, to make investments in the preservation and creation of unique industrial capability required for manufacturing military systems. I believe DOD should significantly expand our utilization of, and funding for, the DPA program.

Finally, the Department has the ability to establish, and has established, administratively-imposed (imposed by DOD policy, not statute) restrictions within the Defense Federal Acquisition Regulation Supplement (DFARS) precluding the use of foreign products for specific defense applications when necessary to ensure military readiness.

12. Senator REED. Secretary Young, how much do you invest in these industrial base planning and shaping activities?

Mr. YOUNG. Generally, the Department leverages its significant market clout through its budget, acquisition (research, development, production), and logistics processes to facilitate an industrial base that is reliable, cost-effective, and sufficient to meet strategic objectives. With respect to the "interventionist" programs noted earlier, in fiscal year 2008, the DPA Title III program appropriation was about $94.8 million and the MANTECH program appropriation was about $273.3 million.

13. Senator REED. Secretary Young, what new authorities do you feel are required by the Department to support efforts in this area?

Mr. YOUNG. The Department has sufficient authorities to identify, evaluate, create, and/or sustain industrial and technological capabilities important to defense.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

OPERATIONAL CAPABILITY DELIVERY DELAY

14. Senator AKAKA. Secretary Young and Ms. Schinasi, according to the Government Accountability Office (GAO) findings, the current portfolio of programs has experienced a 21-month delay in delivering initial operational capability to the warfighter, and a full 14 percent of these are more than 4 years late. These delays are unprecedented, and represent approximately a 33 percent increase over 2,000 portfolio levels. Two of the reasons you have identified as contributing significantly to these delays include both request for changes in system capability by the DOD and the failure of contractors to meet agreed upon timelines. Which of these two factors do you feel pose the biggest challenge to on-time program completion, and why?

Mr. YOUNG. I agree that we can and must do better delivering capability on-time and within budget. It is difficult to identify one dominant factor in schedule delays. I would list several factors which are generally present to varying degrees in every program delay—moving immature technology into final development stages, excessively optimistic industry proposals, lack of full funding or funding cuts in the DOD or congressional budget process, and changes in requirements during program execution.

Thus, to improve program outcomes we must start programs right and align expectations among the key stakeholders. We have several such initiatives in place. I am instituting a Materiel Development Decision (MDD) as the formal entry point

into the acquisition process. The MDD will assess potential materiel solutions and is mandatory for all programs. I am insisting that, with rare exceptions, we conduct a robust Technology Development phase that provides for two or more competing teams producing prototypes of the system and/or key system elements prior to, or through, Milestone B. Prototypes reduce technical risk, validate designs and cost estimates, evaluate manufacturing processes, and refine requirements. These steps will ensure that when a program is initiated at Milestone B it is positioned to develop a system or an increment of capability; complete full system integration (technology risk reduction having occurred during Technology Development); and transition to an affordable and executable manufacturing phase. Along with these initiatives, we need to stay disciplined in keeping to the requirements we agreed to at the start of the program and in holding everyone in the acquisition community accountable for doing so.

We can improve program execution by early dialogue with our contractors. We have begun using the Program Startup Workshop soon after contract award to align the government and contractor teams' understanding of the contract and to ensure they have a shared understanding of contract requirements.

While our industry partners need to improve their schedule performance, we in the Department can do our part by starting programs right and by working with our industry partners to ensure a shared understanding of their responsibilities.

Ms. SCHINASI. Requirements instability and failure to meet agreed upon timelines can contribute significantly to delays in delivering needed capabilities to the warfighter. Our work has consistently emphasized that DOD should require each proposed program to demonstrate that the established requirements are achievable within resource limitations—that is that the program's business case is executable. However, as our most recent Assessment of Selected Weapon Programs indicates, DOD continues to allow programs to progress through the acquisition process before key knowledge has been attained.[1] These knowledge gaps are largely the result of a lack of disciplined systems engineering analysis. Early systems engineering provides knowledge that enables a developer to identify and resolve gaps before product development begins. Because the government often does not perform the proper upfront analysis to determine whether its needs can be met, significant contract cost increases can occur as the scope of the requirements change or become better understood by the government and the contractor. This lack of upfront knowledge can also affect the contractor's ability to meet agreed upon timeframes.

15. Senator AKAKA. Ms. Schinasi, unrealistic development and production timelines have been highlighted as one of the problems that plague defense programs right from the start, and lead to inevitable delays and cost overruns as the reality of the requirement being sought becomes fully clear. In some cases, however, contractors agree to timelines they subsequently are unable to meet. In cases involving the failure of contractors to meet what you have asserted are often overly optimistic timelines, to what extent do you believe that there is adequate documentation being kept regarding instances of contractor poor performance?

Ms. SCHINASI. Past performance information is critical to enhancing contractor accountability and it is essential the government has past performance systems in place to help ensure that contractor performance is reflected in the award of new contracts. With that said, it is questionable whether contracting officials are documenting and maintaining contractor performance information in a timely, complete, and consistent manner. The House Oversight and Government Reform Committee's Subcommittee on Government Management, Organization, and Procurement held a hearing in July 2007 in which we testified on issues related to the use of contractor past performance information.[2] The hearing raised concerns regarding an apparent disconnect between actual contract performance, how performance reviews are calculated, and the weight given to past performance in the source selection process. In addition, a February 2008 DOD Inspector General report highlighted the lack of emphasis across the military Services in accurately and timely reporting of past performance and training for past performance assessment report preparation.[3] The report stated that 82 percent of past performance assessment reports reviewed did not contain detailed, sufficient narratives to establish that ratings were credible and justifiable. At the request of the House Oversight and Government Reform Com-

[1] GAO, Defense Acquisitions: Assessments of Selected Weapon Programs, GAO–08–467SP (Washington, DC: Mar. 31, 2008).

[2] GAO, Federal Contracting: Use of Contractor Performance Information, GAO–07–1111T (Washington, DC: Jul. 18, 2007).

[3] DOD Inspector General, Contractor Past Performance Information, D–2008–057 (Arlington, VA: Feb. 29, 2008).

mittee and the Subcommittee on Government Management, Organization, and Procurement, we are currently assessing how agencies—including DOD—collect contractor past performance information for use in source selection.

16. Senator AKAKA. Ms. Schinasi, are contracting officers making the best use of available information when issuing contract awards?

Ms. SCHINASI. Although a seemingly simple concept, using past performance information in source selection can be complicated in practice. GAO bid protest decisions illustrate some of the complexities of using past performance information as a predictor of future contractor success. A key consideration is whether the performance evaluated can reasonably be considered predictive of the offeror's performance under the contract being considered for award. For example, a June 2008 congressional hearing regarding a $300 million contract the U.S. Army awarded to supply ammunition to Afghan security forces raised concerns about the nature and extent of past performance information that is currently available for contracting officers to use in source selection decisions. In this specific case, questions were raised regarding the contractor's qualifications and whether DOD exercised due diligence in considering all past performance information. A senior Army contracting official testified that certain information regarding the past performance of this particular contractor, such as several previous contracts terminated for cause, was not available to the contracting officer since the contracts fell below DOD's dollar threshold for collecting past performance information.

PROGRAM MANAGER TURNOVER

17. Senator AKAKA. Secretary Young, one of the main problems highlighted in the defense acquisition process is frequent turnover of program managers, as well as senior acquisition officials. I find it interesting that this finding should come to light now, despite the decades old practice of DOD rotating its personnel every few years. It would seem that for some reason, the impact of program manager turnover has been identified as more problematic with the current portfolio of weapons programs than in the past. Traditionally, an officer's career development was contingent upon seeing multiple assignments covering a variety of missions and leadership positions. However, continuous fresh faces in a defense acquisition program over the course of its life is a liability. Why do you think this finding is especially important today, and are there any initiatives within the Services to work with their respective personnel offices to come up with a potential solution of limiting assignment rotations for their project managers and acquisition officers?

Mr. YOUNG. I am aware of several reports that depict higher turnover in program manager assignments than is expected or acceptable. These reports are not accurate. The average program manager tenure for those who have served and left positions since 2000 is 37 months. Again, since 2000, program managers have served in their positions, on average, for 37 months. The average tenure for program managers departing in the last year was 40 months. Indeed, 23 percent of the program managers who completed their tours last year had served more than 48 months. However, our review of the current data shows that the average expected tenure of program managers today, across all Services, is 42 months, based on Program Manager Agreements, assignment plans, and program milestone points.

I would highlight equally relevant concern is the frequent rotation of requirements officers. I have personally seen senior requirements officers rotate in cycles of 18 months or less. Now requirements officers or resource sponsors frequently seek to fundamentally change acquisition programs at substantial cost. Indeed, the new substantial changes in the DDX program are directly related to unexpected requirements changes after years of development and billions of expended tax dollars.

I expect that major system program managers' tours will comply with statutory guidelines and current Department policy. Section 1734 of Title 10, U.S.C., generally requires the Program Manager and Deputy Program Manager of a major defense acquisition program to be assigned to their position until completion of the major milestone (e.g., system design and development) that occurs closest to four years in their position. DOD Instruction 5000.66 provides additional guidance and establishes the requirement for a written tenure agreement.

In May 2007, an Under Secretary of Defese for Acquisition, Technology, and Logistics (USD(AT&L)) policy memorandum, "Program Management Tenure and Accountability," emphasized the need for program managers to have sufficient tenure to achieve expected outcomes and to improve both systemic and personal accountability. Signed tenure agreements capture that expectation. There are waiver provisions in place, but the military departments are aggressive in limiting approvals of

waiver requests. The Navy reports, for example, that nearly two-thirds of their program managers serve until the agreed upon tenure is completed.

In response to section 853 of the National Defense Authorization Act (NDAA) for Fiscal Year 2007, we developed a comprehensive strategy for enhancing the role of DOD program managers in developing and carrying out defense acquisition programs. The strategy addressed a number of initiatives to improve program manager empowerment and accountability. One of these that we are working to implement is a financial incentive for key members of program offices. While the details of that incentive program are still being worked out, tenure will be one of the key requirements. Our intent is to structure the financial incentives in such a way as to encourage highly qualified people to compete for positions of increased responsibility and to serve long enough to apply their experience for the good of the program.

We have long recognized the need to balance the need for individual career development with sufficient tenure to provide for stability and accountability. Department policy already calls for longer tour lengths for assignments to acquisition positions and our planned financial incentive program will further encourage people to stay in their positions longer. However, the Department also believes there is value in rotating experienced members of the acquisition corps to other programs so they transfer lessons learned across the acquisition community.

This, too, is recognized in statute (10 U.S.C. 1734) which generally calls for the rotation of those serving in critical acquisition positions (both military and civilians) after 5 years.

The military departments all recognize the need to balance program manager tenure with the career development needed to grow future acquisition leaders. They are using available flexibilities to tailor tenure appropriately based on the program and its point in the life cycle. For example, the Army staggers rotations to ensure continuity of program goals and responsibilities. At their Project and Product Managers level, they attempt to ensure all Program Managers in one office do not rotate out of their positions in the same year. In addition, civilians who serve as Deputy Program Executive Officers and Deputy Program Managers are often in their positions for five or more years, providing dedicated continuity of effort.

We will continue to use assignment policies that look at individuals' career development and overall program manning to improve the acquisition workforce as a whole and still meet individual program objectives.

CONFIGURATION STEERING BOARDS

18. Senator AKAKA. Secretary Young, one of the initiatives you have described as fundamental to transformation of the acquisition process and its workforce is the establishment of Configuration Steering Boards (CSB). These boards have the responsibility to critically review any proposed changes to system requirements and ensure what few changes are allowed, are deemed critical. Was your decision to establish these CSBs a direct response to the GAO findings?

Mr. YOUNG. No. I formed the first CSB in 2002, for the Joint Strike Fighter (JSF), during my tenure as the Navy Acquisition Executive. That CSB was formed specifically to allow us to manage requirements for a joint program with international participation. There were many stakeholders and the CSB process proved to be a most effective and efficient way to address requirement changes. My experience with the successful JSF CSB led me to broaden its application to all ACAT I programs.

19. Senator AKAKA. Secretary Young, was the Navy CSB example you cited in your prepared testimony an already-established entity under a different name, or was it the first in this new initiative?

Mr. YOUNG. For the Extended Range Munition example I cited the CSB was newly established as a result of my July 2007 memorandum.

20. Senator AKAKA. Secretary Young, what is the current status of these CSBs within each of the military Services, and how are you going to ensure standardization among the Services, given the competition for resources that exists within the building?

Mr. YOUNG. The military departments, along with the Defense Information Systems Agency and the Missile Defense Agency, have implemented my July 2007 memorandum directing establishment of CSBs for all current and future ACAT I programs. Most are adapting the concept to or in conjunction with existing forums. To date, the Navy has conducted 14 CSBs, the Air Force has conducted 4, and the Army, 1. The Services have an active schedule of CSB reviews in the upcoming months.

Implementation is the responsibility of each component; however, my memorandum provided specific guidance on the focus of CSB reviews. We are finding that Service implementation is evolving as they gain experience with the CSB construct. CSBs review proposed changes to requirements that have a cost and schedule impact with a predilection to reject them, or defer them to future blocks/increments. Proposed changes are to include an assessment of the impacts to performance and schedule, a plan to mitigate them, and a funding source. Changes are to be coordinated with Joint Staff and military department requirements owners before they are considered by the CSB.

CSBs include senior AT&L and Joint Staff members. I have assigned a senior member of my staff as the primary point of contact for CSBs. He is tasked to ensure that CSBs meet my expectations and to ensure standardization in Component implementation.

CONTRACTING OFFICER REPRESENTATIVES

21. Senator AKAKA. Secretary Young, according to an October 2007 report on Army Acquisition and Program Management in Expeditionary Operations, it was found that Contracting Officer Representatives (COR) were assigned as an additional duty, requiring no experience. It also found that these individuals received little to no training in the performance of their contracting-related duties. To what extent is COR duty assigned as an additional duty for military personnel, and has there been any effort to establish standardized training for this mission, given the multi-billion dollar value of some contracts overseen?

Mr. YOUNG. The duties of a COR are generally additional duties for military personnel. The Department is working to ensure that trained CORs are available for performing surveillance of the Department's service contracts. COR management, training, and funding for training are being addressed at a strategic level through the development of COR certification requirements dictating training and experience levels prior to assuming their responsibilities. The Department is working to ensure that properly trained and ready CORs are assigned prior to contract award. Further, to validate the training and experience leads to improved oversight, CORs will be rated based on their duty performance on their assigned contracts. The Department has developed a preliminary list of common COR functions and responsibilities and an initial framework for a DOD standard for COR certification. The proposed standard consists of three categories, each based on the nature of the work to be performed, size and complexity of the requirement, and contract type. Each COR category will map to minimum training requirements to ensure personnel performing designated COR functions can perform effectively. The proposed standard will allow sufficient flexibility for additional training beyond the minimum, if deemed appropriate. On December 6, 2006, the Department issued a policy memorandum titled "Designation of Contracting Officer's Representatives on Contracts for Services in Support of Department of Defense Requirements." It states the role of CORs and emphasizes the need to have a properly trained COR designated for contracts for services in support of the Department's requirements before contract performance begins. On July 14, 2008, the Department issued another policy memorandum titled "Management of Contractor Performance under Time & Material and Labor Hour Contracts for Services." It discusses the COR's role in assisting with the technical monitoring or administration of these types of contracts, and it requires the contracting officer (CO) to designate a properly trained COR in writing before contract award. Presently, the Department is staffing another policy memorandum that would require the COR to be identified early in the acquisition cycle and included in pre-award activities when appropriate. Further, it would require the CO to provide the requiring activity a list of responsibilities for the COR, and it would oblige the requiring activity to provide to the contracting activity with nominations for CORs as part of the purchase request package. The package must contain: qualifications of the individual; affirmation that the COR will be afforded necessary resources (time, supplies, and equipment) to perform the designated functions; and affirmation that the performance of the designated functions will be addressed as part of the COR's duty performance evaluation and that the COR must be trained prior to contract award. Finally, the Defense Acquisition University has completed development of, and has conducted a pilot test of, a new COR training course. This training is in addition to the component level training made available to CORs.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

REVOLVING DOOR

22. Senator MCCAIN. Secretary Young, the GAO recently issued a report called, "Defense Contracting, Post-Government Employment of Former DOD Officials Needs Greater Transparency." The DOD fully agreed with the findings in the report and concurred with its recommendations. Based on recent statutory changes directed by this committee, do you think that DOD policies need to be changed or new policies need to be put in place (additional reporting requirements, for example) to guard against violations of the government's post-employment rules?

Mr. YOUNG. Section 813 of the John Warner NDAA for Fiscal Year 2007 directed the establishment of a "Panel on Contracting Integrity." Subcommittee #9, Contractor Employee Conflicts of Interest, was formed to review, evaluate and provide recommendations in response to recent reports by the GAO concerned with defense contracting and conflicts of interest. The scope of this subcommittee was expanded to include the recently issued report that you referenced, GAO Report 08–485, "Defense Contracting, Post Government Employment of Former DOD Officials Need Greater Transparency." The subcommittee reported to the Panel in May that they have begun to review the recommendations, will do further research, and will discuss relative value and feasibility of the recommendations. The subcommittee is expected to report its findings and recommendations at the next Panel meeting in August.

Personally, I think new policies are not necessary. Indeed, the recent legislation in this area is likely to discourage military and civilian personnel from entering the defense acquisition field at senior levels. Already, the excessive restrictions on stock ownership have led many capable private sector experts to reject opportunities to work for the DOD. At this point, we have totally destroyed the exchange of personnel between industry and the DOD—an exchange which some previous USD(AT&L)'s feel was critical to successful program management and execution.

23. Senator MCCAIN. Secretary Young, one recommendation made by the GAO was that within a set number of days after contract award, defense contractors who are awarded a contract should disclose to the contracting officer the names of employees who are certain former DOD officials, such as civilian senior executives, high-level military officers, or acquisition officials, who worked on the response to the solicitation and certify that these employees are in compliance with the applicable post-government employment restrictions. Do you agree with that recommendation?

Mr. YOUNG. The DOD generally agrees with the recommendations of the GAO. Further evaluation will be conducted by Subcommittee #9, Contractor Employee Conflicts of Interest, of the Section 813 Panel on Contracting Integrity. In addition, DFARS Case 2008-D007 has been initiated to implement section 847 of the NDAA for Fiscal Year 2008 that requires certain DOD employees and former DOD employees to obtain a written legal opinion from a DOD ethics official as to the applicability of post employment restrictions prior to accepting compensation from a DOD contractor.

These people have served and returned to the private sector. As long as these individuals honor the existing post employment restrictions, they should be able to work freely in the private sector. The standards and restrictions in the DOD far exceed the restrictions and standards applied to other Federal Agencies or Congress.

ACQUISITION OVERSIGHT

24. Senator MCCAIN. Secretary Young and Ms. Schinasi, in 1986, the Commission on Defense Management (commonly referred to as the Packard Commission) identified structural problems within the DOD, especially the absence of a responsible senior official, to oversee the acquisition process. The Packard Commission recommended a commercial model adopted by successful industrial companies that centralized the decisionmaking process and decentralized the execution of defense procurement. Since then, do structural problems continue to persist within the Department that limit oversight of the acquisition process? If so, in what area(s) are they most apparent?

Mr. YOUNG. The Packard Commission recommended creation of the position I currently occupy and comparable positions within the military departments to oversee the acquisition process. The changes that have been made create clear lines of authority and accountability for the operation of our acquisition system. In addition, service acquisition executives (SAEs) can and do appoint subordinate officials at the

appropriate grade to review programs at the lowest level of investment. Consequently, I believe we have the necessary management infrastructure to ensure comprehensive acquisition process oversight.

The largest structural problem in the DOD is the lack of control and authority provided to program managers in the face of being held accountable. Individuals who are not accountable for acquisition program execution are allowed to annually change the program budget and requirements. The DOD has an adequate oversight structure and process. Responsible acquisition officials do not have adequate control and authority within the broader Pentagon budgeting and requirements structures.

Ms. SCHINASI. Yes. One of the primary structural problems within the department that continues to limit oversight of the acquisition process is that the three major processes that support acquisitions are fragmented and service-centric. To plan, execute, and fund its weapon system acquisition programs, DOD relies on three principal decisionmaking systems: the Joint Capabilities Integration and Development System (JCIDS), which is used to assess gaps in warfighting capabilities and recommend solutions to resolve those gaps; the Defense Acquisition System, which is used to manage the development and procurement of weapon systems and other equipment; and the Planning, Programming, Budgeting, and Execution process, which is used to allocate resources. In March 2007, we reported that although the military Services fight together on the battlefield as a joint force, they do not identify warfighting needs and make weapon system investment decisions together in an integrated manner.[4] Although, DOD has taken steps to identify warfighting needs through a joint requirements process, its service-centric structure and fragmented decisionmaking processes do not allow for the same portfolio management approach used by successful commercial companies to make investment decisions that benefit the organization as a whole. DOD largely continues to define warfighting needs and make investment decisions on a service-by-service basis, an approach that has contributed to duplication in programs and equipment that does not operate effectively together. Further, while DOD's JCIDS process provides a framework for reviewing and validating the initial requirements, it does not focus on the cost and feasibility of acquiring the capabilities to be developed and fielded. Instead, these considerations are addressed through separate budgeting and acquisition processes. Moreover, although DOD policy provides for a series of early reviews—focused on the concept refinement and technology development phases of proposed weapon system programs—in prior work we found that the reviews are often skipped or are not fully implemented.[5]

25. Senator MCCAIN. Secretary Young and Ms. Schinasi, what issues have evolved in the acquisition process not addressed by the Packard Commission?

Mr. YOUNG. As required by section 804 of the John Warner NDAA for Fiscal Year 2007, Public Law 109–364, the Department is submitting the semi-annual Defense Acquisition Transformation Report which takes into account the recommendations made by the following:

1. The "Defense Acquisition Performance Assessment (DAPA) Report" of January 2006
2. The Defense Science Board 2005 Summer Study: "Transformation: A Progress Assessment Volume I" of February 2006
3. The Center for Strategic and International Studies' Phase 2 Report, "Beyond Goldwater-Nichols: U.S. Government and Defense Reform for a New Strategic Era," of July 2005
4. The 2006 Quadrennial Defense Review, issued February 6, 2006

These four studies were commissioned by different authorities and intended to serve different purposes within the DOD. However, the recommendations from these studies are focused on transforming the entire spectrum of the Defense Acquisition System. Our semi-annual reporting focuses on three of these studies: the DAPA Report, the Defense Science Board Study and the CSIS "Beyond Goldwater-Nichols" Report. The studies contain a total of 55 major recommendations to improve the Defense Acquisition System. Recommendations from the studies and DOD Transformation Priorities, along with the AT&L "Source Document," provide a strategic blueprint for the future. The source document is intended to provide a framework that gives the Defense Acquisition System a shared purpose, while shaping our way

[4] GAO, Best Practices: An Integrated Portfolio Management Approach to Weapon System? Investments Could Improve DOD's Acquisition Outcomes, GAO–07–388 (Washington, DC: Mar. 30, 2007).

[5] GAO, Defense Acquisitions: Major Weapon Systems Continue to Experience Cost and Schedule Problems under DOD's Revised Policy, GAO–06–368 (Washington, DC: Apr. 13, 2006).

of being, thinking, and working. It is intended to be the basis by which individual goals are set, planning is done, decisions are made, and actions are taken.

The report, frequently referred to as the 804 report, highlights the progress we are making towards these recommendations as well as towards other initiatives supporting AT&L goals and priorities.

Ms. SCHINASI. We believe that the lack of accountability remains one of the major impediments in the acquisition process. DOD has found it difficult to apply the controls or assign the accountability necessary for successful outcomes. There are no consequences for actions that run counter to the intent of DOD acquisition policies, in part, because officials responsible for approving programs are no longer in their positions by the time the consequences of their actions become evident. In addition, it is difficult to assign accountability to individual program managers because they are often handed programs that are unrealistic from the start. Accountability must extend not just to those involved in the product development process, but also to those involved in the underlying budgeting and requirements processes that define problems and find solutions. First, the budgeting process requires that funding for a program is put on the table 2 to 3 years in advance—this creates pressure to proceed with the program regardless of its technological maturity. Next, the requirements process tends to settle on ultimate performance, which puts pressure on programs to reach for exotic technology. Finally, it is easier to say "yes" than "no" to Service and warfighter demands for new requirements and new programs. Removing these incentives from the system and instilling discipline and accountability will be necessary to get lasting change and improved outcomes.

MULTI-YEAR PROCUREMENT

26. Senator MCCAIN. Secretary Young and Ms. Schinasi, the statutory criteria for determining whether a major system can be procured under a multi-year contract require that a candidate program have associate with it realistic cost estimates, substantial savings, and stability in terms of funding, requirements, and design. However, the stability and saving associated with some programs for which the DOD has sought multi-year contracting authority have been questionable. This has raised concerns about DOD's management and controls for justifying multi-year candidates. When it examined this, the GAO specifically cited the Under Secretary of Defense for Acquisition as providing sufficient guidance and direction in this regard. In order to improve the ability of the Services to enter into multi-year contracts in a responsible manner when buying weapons, this committee passed important legislation last year that provided guidance to the Services on which programs are suitable candidates for multi-year contracting authority. Do you believe that the multi-year statute is well understood by the SAEs?

Mr. YOUNG. I believe the SAEs understand the requirements of the multi-year statute. To save the taxpayer money and deliver more capability to the warfighter, the DOD should be allowed to significantly expand the use of multi-year contracts. Additional restrictions and criteria on the use of this authority are detrimental to efficient program management and are generally resulting in less use of multi-year contracts and higher costs to the taxpayer.

Ms. SCHINASI. While we found no evidence that the multi-year statute was not understood by the SAEs, our recent review identified significant deficiencies in the Department's guidance and implementation of multi-year contracting.[6] Our February 2008 report discussed the need to improve DOD's review process to adequately capture important information and events, document decisions, and help ensure that consistent and reliable determinations are made regarding multi-year criteria. We also observed turnover at every level of the multi-year justification process—from program offices, through higher headquarters, and on to primary action offices in the Office of the Secretary of Defense (OSD) which we believe has contributed to "knowledge gaps," historical recordkeeping deficiencies, and differences in interpretation and application of multi-year decision criteria. In addition, DOD's supplemental guidance does not adequately operationalize the criteria laid out by the multi-year statute by amplifying terms such as "reasonable," "substantial," and "stable" and quantifying where possible to provide more objectivity and rigor to the multi-year review process. Guidance for the most part restates the statutory criteria and establishes formats for submitting multi-year procurement budget justification materials, but does not provide much elucidation for interpreting and applying the criteria and establishing internal evidence standards for demonstrating criteria are

[6] GAO, Defense Acquisitions: DOD's Practices and Processes for Multi-year Procurement Should Be Improved, GAO–08–298 (Washington, DC: Feb. 7, 2008).

met. From our review of justification packages and our discussions with DOD officials responsible for generating and reviewing multi-year justification packages, we determined that reviewers interpret and apply criteria differently and that the methods and data used to compute contract costs and savings and provide evidence to document program stability vary in quality and sophistication. The new guidance provided by this committee in the NDAA for Fiscal Year 2008 should improve consistency in the multi-year review process and result in the Services submitting only those candidates for approval with adequate savings potential.

27. Senator MCCAIN. Secretary Young and Ms. Schinasi, have you done anything to help ensure the Services' compliance with it?

Mr. YOUNG. The plan to pursue a multi-year procurement strategy for a Major Defense Acquisition Program is addressed in its acquisition strategy, which is approved by the Under Secretary of Defense for Acquisition, Technology, and Logistics on ACAT ID programs. My staff participates in budget hearings hosted by the Under Secretary of Defense (Comptroller/Chief Financial Officer) to advise on budget requests with multi-year justifications.

Ms. SCHINASI. In our February 2008 report, we made four recommendations designed to improve the outcomes of DOD's multi-year justification reviews and military Service compliance with the statutory guidance and to provide lessons learned for future multi-year procurements. We recommended that DOD: (1) improve and expand guidance provided to military Services to better define multi-year decision criteria for major weapon systems and to facilitate more consistent, objective, and knowledge-based evaluations of these multi-year candidates; (2) establish a process for third party validation of the costs and savings data submitted for candidate programs to Congress for approval; (3) implement a central database for maintaining historical records and for effectively monitoring and tracking major weapon system multi-year procurements, to include documenting the specific decisions made by stakeholders and their rationales for decisions; and (4) conduct after-action assessments of multi-year contracts to provide lessons learned for informing and improving future multi-year candidates and to ensure DOD is earning a sufficient return on its investments in multi-year contracts. DOD generally concurred with these recommendations and—in keeping with our quality standards—we will follow up periodically with DOD to evaluate its plans for implementing our recommendations and any improvements that result from these efforts.

28. Senator MCCAIN. Secretary Young and Ms. Schinasi, what more, if anything, have you done to help ensure that the process by which multi-year candidates are prepared and reviewed is made more disciplined and supported by adequate empirical data?

Mr. YOUNG. As a result of the GAO audit on this subject, the Director of Defense Procurement, Acquisition Policy, and Strategic Sourcing tasked the military departments to perform a review of their multi-year contracts to determine whether the projected savings were realized; what impact adjustments related to economic price adjustment clauses had on the actual savings; and what changes, if any, are required in their use of multi-year contracts. We expect the results of this review will help inform more realistic support for budget requests that propose multi-year procurements.

To be clear, when the DOD has firm requirements, the Services should be allowed and encouraged to use multi-year contracts at even modest levels of savings in order to provide funding and production stability.

Ms. SCHINASI. During our review of multi-year procurement, we noted the general paucity of records for tracking multi-year candidates, documenting decisions, and assessing contract performance. In performing our work, we helped officials identify data sources for compiling information required to maintain more complete and disciplined records. We also made three recommendations designed to improve the empirical data available to make decisions and the validity of DOD's cost and savings estimates. First, we recommended that DOD maintain a central database for collecting historical data and tracking multi-year performance. The department is beginning to implement this recommendation. A June 20, 2008, memo from the Director of Defense Procurement, Acquisition Policy, and Strategic Sourcing tasked each of the Services to review multi-year contracts and start gathering data in a prescribed format, to include such data as contract price, projected savings, profit rates, and adjustments. We also recommended that independent third party validations of cost and savings estimates from candidate programs would improve the fidelity and completeness in data used to justify multi-year contracts. The Department partially concurred with our recommendation, stating that such validations are done on some programs and that it would consider whether the benefits of requiring validation on

all programs would warrant the delays and costs of validation. Our review found that third party validations are rarely done, and we continue to believe that third party reviews would be cost-effective and result in more accurate and comprehensive cost and savings information critical to congressional and DOD decisionmaking on multi-year candidates. Lastly, we recommended DOD conduct after-action assessments of multi-year contracts. These assessments should provide lessons learned for informing and improving future multi-year candidates and empirical data to gauge whether DOD is earning sufficient returns on its multi-year contract investments. In their initial response to our draft report, DOD partially concurred with this recommendation, noting that such assessments may have value in some cases, but questioned its worth in all instances. DOD later revised its response, indicating that it fully concurred with the recommendation and intends to require the Services to complete after-action assessments.

EARMARKS

29. Senator MCCAIN. Secretary Young and Ms. Schinasi, recently, the DOD Inspector General (IG) reviewed the Fiscal Year 2007 Appropriations Act Conference Report to, among other things, determine the overall impact of earmarks on advancing the primary mission and goals of DOD. The DOD IG determined that 70 earmarks totaling over $6.4 billion did not fully support the mission and goals of DOD. Please describe how congressional earmarks harm a sound acquisition process and deter the DOD from buying weapon systems that meet the requirements of the joint warfighter.

Mr. YOUNG. Defense acquisition is a complex process that involves a constant reevaluation of priorities, taking into account availability of resources. The DOD uses the Planning, Programming, Budgeting, and Execution (PPBE) process to establish priorities and allocate resources. Within the process, departmental objectives are established based on desired capabilities and national military strategy. Limited resources are allocated based on these objectives, and programs are developed within these parameters according to the needs of the DOD and the joint warfighter. The acquisition process results in a DOD program to acquire specific equipment, in specific quantities, to address specific defense requirements. Earmarks have the effect of diverting valuable resources from projects and programs considered necessary by the Department, reallocating these limited funds to projects or programs that may be considered of lesser or no value to the DOD's mission. In addition, it is of utmost importance that the acquisition process allow for complete competition in the awarding of contracts for R&D, procurement and sustainment of military systems. Earmarks generally contain specific language that does not allow for free, open competition, which must exist in order to ensure the most efficient use of funds.

Further, the process of trying to get value from these directed projects consumes enormous effort on the part of DOD program managers and contract officers. Finally, the process is detrimental to the culture and values of the acquisition team. After carefully considering the needs of the warfighters and working through a complicated and difficult DOD budget process to find a project, program managers watch an alternate system that earmarks funds for lower priority, non-competitive projects.

Ms. SCHINASI. Our current work on earmarks does not provide insights into how congressional directives impact the requirements of the joint warfighter. However, in prior work, we interviewed DOD officials who had responsibility for budgeting, financial management, and legislative issues regarding congressional directives impact on budget and program execution.[7] DOD officials from the six components we interviewed provided a range of views on this topic. Among the views we heard were the following:

- DOD officials indicated that congressional directives can sometimes place restrictions on the ability to retire some programs and invest in others. These restrictions have an effect on the budget because they require the components to support an activity that was not in their budget.
- Congressional directives could tend to displace "core" programs that have been requested through the formal budget submission.
- There has always been a feeling that the billions of dollars of congressional directives must come from somewhere, but it is not possible to determine whether any specific directive resulted in reducing funding for another program.

[7] GAO, Congressional Directives: Selected Agencies' Processes for Responding to Funding Instructions, GAO–08–209 (Washington, DC: Jan. 31, 2008).

- Congressional directives are viewed as tasks to be implemented and are opportunities to enhance their mission requirements through additional funding in areas that would not have been priority areas due to budget constraints.

30. Senator MCCAIN. Secretary Young and Ms. Schinasi, in about as aggressive of remarks as I have seen from a Service Chief regarding earmarks, here is what the Commandant of the U.S. Coast Guard, Admiral Thad Allen, said in a interview to Defense Daily:

> "[I am] happy with the fiscal year 2009 budget, but, the Coast Guard needs all of the fiscal year 2009 funds. There is no fat, no largess in the fiscal year 2009 request. We need every single penny of it. And to the extent we can have it not diluted by earmarks and get exactly what we ask for. If you don't get the full President's request then you are increasing your risk position for what you are able to do for the country. Or if you have to absorb other commitments in terms of earmarks that divert money from what you are doing. Then you are also increasing risk in what you can do for the country."

Do you agree with Admiral Allen's statement? Please explain.

Mr. YOUNG. I agree with Admiral Allen's statement. Earmarks greatly impede the ability of any program or agency to fully and cost-effectively carry out its duties, and in no agency is this more of a problem than in the DOD. Earmarks that reward companies in specific Congressional districts as recipients increase risk due to decreased competition. Competition for contracts provides incentives for thorough research, testing, and cost-reduction, steps which are necessary to avoid the problems of cost growth and schedule delays that already challenge the Department. Another central problem is that most earmarked projects are not included in the original DOD budget, and therefore do not usually address specific agency needs. DOD's formal, cyclical process called PPBE is used to determine optimal resource allocation for the Department. Within PPBE, four overlapping phases work to establish organizational priorities, develop new programs and enhance existing ones to satisfy these priorities, find cost-effective solutions, and forward these funding recommendations as part of the President's budget to Congress. Throughout this process, important programs and activities often get sacrificed due to sheer lack of funds. An organization that must constantly realign resources among its own prioritized programs cannot afford to devote time, money, and personnel to non-essential activities. For every earmark in a defense appropriations bill, there is a Departmental priority that will not achieve completion.

Ms. SCHINASI. We have not analyzed the Coast Guard's budget and the potential effect of congressional earmarks on the agency's risk position. However, officials in other agencies have raised similar concerns. For example, in December 2006, we found that the Department of Energy (DOE) diverted funds to accommodate earmark.[8] DOE officials indicated that the rising number of biomass earmarks shifted funds away from R&D programs causing them to change priorities and terminate some cost shared programs.

ANALYSIS OF ALTERNATIVES AND OPERATIONAL REQUIREMENTS DOCUMENT

31. Senator MCCAIN. Secretary Young and Ms. Schinasi, during the 109th Congress, this committee passed legislation that was enacted into law which requires that, before the DOD acquires a major defense system, among other things, the Department has completed an Analysis of Alternatives (AOA), the Vice Chairman of the Joint Chiefs of Staff has completed an Operational Requirements Document (ORD)—now called a Capabilities Decision Document (CDD)—and the program is affordable given the total resources available during the period covered by the 6-year defense budget in the year the certification is made. What effect has this legislation had to improve cost-, scheduling- and performance-outcomes and better align the requirements, acquisition, and budget spheres in a way that will help the Pentagon make more informed, powerful investment decisions on weapons programs?

Mr. YOUNG. Congress has instituted a number of legislative changes that are useful in this respect, but there is still considerable work to be done by the acquisition community. Many of these changes have been in place only a short time, and significant changes will take time to be visible across the entire acquisition portfolio.

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[8] GAO, Department of Energy Key Challenges Remain for Developing and Deploying Advanced Energy Technologies to Meet Future Needs, GAO–07–106 (Washington, DC: Dec. 20, 2006).

Ms. SCHINASI. Although we have not done any work directly assessing the effect of this legislation on cost, schedule, and performance outcomes, we believe that the requirements it establishes have the potential to drive more discipline into the early phases of the acquisition process. If implemented properly by DOD, we believe that the legislative requirements could ultimately result in the attainment of higher levels of knowledge about requirements, technologies, costs, and schedules before DOD commits to a new development program—a best practice that much of our work over the past decade has emphasized. At the same time, DOD must also move towards a joint, portfolio management approach to weapon system acquisitions—with functionally aligned entities that have the requisite responsibility, authority, and control over resources—in order to effectively prioritize requirements, make informed tradeoffs, and achieve a balanced mix of weapon systems that are affordable, feasible, and provide the best military value to the warfighter.

LEASING OF MAJOR WEAPONS PROGRAMS

32. Senator MCCAIN. Secretary Young and Ms. Schinasi, in the 109th Congress, this committee passed legislation that was enacted into law which requires that, before acquiring combat vehicles, aircraft, or vessels under a lease, the Secretary of Defense certify to Congress that leasing these systems is more cost-effective than buying them. This legislation was meant to reverse the tendency for the Services toward leasing of weapon systems by directing the Department to treat leases the same way as a purchase and to ensure a more rigorous, disciplined process supported by adequate empirical data for preparing and reviewing candidate programs for leases. In your view, has this legislation had its desired effect and improved acquisition processes, thereby injecting proper oversight to costs and pricing, among other things, and ensuring that monstrosities like the Boeing tanker lease do not occur again?

Mr. YOUNG. There have been no major lease proposals subject to the provisions of the statute since it was enacted in January 6, 2006.

Ms. SCHINASI. We have not evaluated the effects of the recent legislation on DOD's use of equipment leases. However, the legislation addressed some of the problems and concerns we previously raised about leasing by providing direction to treat leases the same way as purchases and to use a more rigorous, disciplined approval process. In addition, while we have not taken a position on the overall policy of leasing versus purchasing defense equipment, we believe an analysis of the costs and benefits should be done on a case-by-case basis, and should consider issues in addition to cost, such as the nature of the equipment, the criticality of the need, readiness impacts, and industrial base issues. Also, to make informed judgments on resource allocation, decisionmakers need accurate comparisons of the relative long-term effects of acquisition decisions. Before the recent legislation was enacted, we noted that leases could obscure those comparisons. The military Service was not required to set aside funds for the full term of the lease (as it would for a purchase). In addition, the lease would likely be paid through the operation and maintenance budget and would not have to compete for procurement funding with other defense priorities. The recent legislation directs that a lease-purchase shall be treated as an acquisition, subject to all applicable statutory and regulatory requirements for defense weapon systems, and cannot use operation and maintenance funds.

INAPPROPRIATE LOBBYING BY THE SERVICES FOR WEAPON SYSTEMS

33. Senator MCCAIN. Secretary Young, against the backdrop of wholly inappropriate communications between the Air Force and the Boeing Company that facilitated the folly that we now know as the Boeing tanker scandal, at the request of this committee, the DOD IG has opened an investigation to examine apparently improper communications between Air Force officials and Boeing on the C–17 program, in a manner that induced the company into putting up millions of its shareholders' dollars to keep the production line for spare parts associated with that program open. As you of course appreciate, doing so was contrary to the administration's commitment to the program of record and could compromise other Department-wide acquisition priorities. What are your thoughts about the appropriateness of the Air Force's role in influencing earmarks then, in the Boeing tanker scandal, and now, in lobbying for nearly $4 billion in C–17 aircraft?

Mr. YOUNG. I am not aware of any such communications, but I do discourage such actions. It would be entirely inappropriate to have any such communications with a contractor, other than via formal contracting actions.

34. Senator MCCAIN. Secretary Young, as the DOD's top acquisition executive and number three official, is this type of Service lobbying helpful as you determine priorities across all the Services?

Mr. YOUNG. I am not aware of any such lobbying efforts, and I do not condone efforts to undermine full support for the President's budget.

35. Senator MCCAIN. Secretary Young, what can be done to end this practice of blatant and aggressive Service lobbying for huge weapons systems, the purchase of which may compromise defense-wide procurement priorities?

Mr. YOUNG. I am not aware of any such lobbying efforts, and I do not condone efforts to undermine full support for the President's budget.

36. Senator MCCAIN. Secretary Young, what policies can be instituted within DOD to ensure that even into future administrations, the same problem will not occur?

Mr. YOUNG. I do not condone efforts to undermine support of the President's budget. As I have stated, I am not aware of the lobbying efforts you have described and believe it is inappropriate to comment on policy changes while the DOD IG has an ongoing investigation.

USE OF OTHER TRANSACTION AUTHORITY FOR MAJOR WEAPONS SYSTEMS

37. Senator MCCAIN. Secretary Young and Ms. Schinasi, in the 109th Congress, this committee investigated the Future Combat System (FCS) Other Transaction Authority (OTA) and determined that FCS OTA negotiated by Boeing and the Army lacked many of the standard legal protections that accompany major DOD acquisitions. This committee passed legislation that was enacted into law which restricts the DOD from buying large weapons systems under a prototype contract which does not provide the government with a number of significant protections, including cost and pricing data, Truth in Negotiations Act, and Procurement Integrity Act protections, among other things. Did this legislation significantly improve the Department's oversight and stop the growing practice by certain Services to extend OTA to production contracts, as was the case with the FCS?

Mr. YOUNG. The Department implemented a rigorous review and approval process to implement section 823 of the NDAA for Fiscal Year 2006. It includes the requirement for me, as the Under Secretary of Defense for Acquisition, Technology, and Logistics, to approve the use of Other Transaction Authority for a prototype project that is expected to cost the DOD in excess of $100,000,000. This process has ensured that the Other Transaction Authority is used only for prototype projects.

Ms. SCHINASI. We have not looked at the DOD-wide effect of the legislation passed by the committee as described in the Senate report accompanying the NDAA for Fiscal Year 2006. That legislation included two specific provisions that added to previous legislation on contracting approaches; specifically:

> (1) Prohibition of "other transactions" in excess of $100 million and ensuring that the Procurement Integrity Act (41 U.S.C. 423) applies to all such transactions; and
>
> (2) Requirement for a specific authorization for the purchase of major weapon systems under procedures established for the procurement of commercial items. We have, however, reported in 2007 that the Army converted its "other transaction agreement" (OTA) with the Lead Systems Integrator (LSI) for the Future Combat System (FCS) program—the Boeing Company—to a Federal Acquisition Regulation (FAR) based contract.[9] A FAR-based contract provides significant oversight mechanisms for the government customer that are not required under an OTA. These items were included in the FAR contract for FCS SDD as definitized in 2006.

CHANGES TO ACQUISITION REFORM

38. Senator MCCAIN. Secretary Young and Ms. Schinasi, what specific changes do you recommend in the area of acquisition reform, to ensure that we can get the right equipment first and the best equipment at the best price for the taxpayer?

Mr. YOUNG. I have taken a number of actions to implement my vision for Acquisition, Technology, and Logistics. My approach is focused into four strategic thrust areas, each of which has a guiding principle, desired outcomes, and specific initia-

[9] GAO, Defense Acquisitions: Role of Lead System Integrator on Future Combat Systems Program Poses Oversight Challenges. GAO–07–380 (Washington, DC: Jun. 6, 2007).

tives with metrics or steps against which we can measure progress. These four strategic thrust areas are:

- Define Effective and Affordable Tools for the Joint Warfighter
- Responsibly Spend Every Single Tax Dollar
- Take Care of Our People
- DOD Transformation Priorities

In identifying both the problems we face, and the solutions we are seeking, I am committed to transparency throughout the acquisition process. It is my belief that we need to be clear, concise, and open with regard to what the DOD is seeking, and the work it is completing.

As I mentioned in my testimony, it is our responsibility as stewards of tax dollars to ensure complete openness, fairness, and objectivity in the acquisition process. I intend that we will be accountable to ensure the success of these initiatives.

I have charged the acquisition team to create an inspired, high-performing organization where:

- We expect each person must make a difference;
- We seek out new ideas and new ways of doing business;
- We constantly question requirements and how we meet them;
- We recognize that we are part of a larger neighborhood of stakeholders interested in successful outcomes at reasonable costs.

My testimony highlighted specific initiatives that capture these philosophies and are fundamental to transforming the acquisition process and workforce. They are:

(1) Program Manager Empowerment and Accountability

Program managers play a critical role in developing and fielding weapon systems. I have put in place a comprehensive strategy to address improving the performance of program managers.

(2) Configuration Steering Boards

I have directed the military departments to establish CSBs. My intent is to provide the program manager a forum for socializing changes that improve affordability and executability. Boards will be in place for every current and future ACAT I program and will review all proposed requirement changes, and any proposed significant technical configuration changes which potentially could result in cost and schedule changes. Boards are empowered to reject any changes, and are expected to only approve those where the change is deemed critical, funds are identified, and schedule impacts are truly mitigated.

(4) Prototyping and Competition

I have issued policy requiring competitive, technically mature prototyping. My intent is to rectify problems of inadequate technology maturity and lack of understanding of the critical program development path. Prototyping employed at any level—component, subsystem, system—provides the best value to the taxpayer.

(5) AT&L Notes

I am writing weekly notes to the acquisition workforce. These notes share lessons learned and provide leadership guidance on expected procedures, processes and behaviors within the acquisition workforce. These notes provide a powerful training tool directly from me.

Ms. SCHINASI. The first step toward improving acquisition outcomes is implementing a new DOD-wide investment strategy for weapons systems. We have reported that DOD should develop an overarching strategy and decisionmaking processes that prioritize programs based on a balanced match between customer needs and available department resources—that is the dollars, technologies, time, and people needed to achieve these capabilities.[10] We also recommended that capabilities not designated as a priority should be set out separately as desirable but not funded unless resources were both available and sustainable. This means that the decisionmakers responsible for weapon system requirements, funding, and acquisition execution must establish an investment strategy in concert. Once DOD has prioritized capabilities, it should work vigorously to make sure each new program is executable before the acquisition begins. More specifically, this means assuring requirements for specific weapon systems are clearly defined and achievable given available resources, and that all alternatives have been considered. DOD should also require

[10] GAO, Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes, GAO–07–388 (Washington, DC: Mar. 30, 2007); and Best Practices: Better Matching of Needs and Resources Will Lend to Better Weapon System Outcomes, GAO–01–288 (Washington, DC: Mar. 8, 2001).

all new programs have manageable development cycles, realistic cost estimates, and have planned and programmed full funding for the entire development cycle. Finally, DOD should pursue an evolutionary path toward meeting user needs rather than attempting to satisfy all needs in a single step. One way to do this is to limit the time available for weapon system development. Constraining development cycles would make it easier to more accurately estimate costs, and as a result, predict the future funding needs and effectively allocate resources. Program managers could also be kept for the entire development cycle. It would also force programs to conduct more detailed systems engineering analyses, lend itself to fully funding programs to completion, and thereby increase the likelihood that their requirements can be met within established timeframes and available resources.

FIXED-PRICE CONTRACTS

39. Senator MCCAIN. Secretary Young and Ms. Schinasi, in the 109th Congress, this committee passed legislation that was enacted into law which requires that DOD gives a preference to fixed-price contracts for major developmental defense programs. Fixed-price contracts shift the risk to the contractor and incentivizes the contractor to increase the reliability of the system components. GAO determined that cost-type contracts cost the taxpayer $80 billion in cost overruns over the past decade. What has been the practical effect of this legislation in helping the military Services to not continue the practice to over-promise capabilities and under-estimate costs of developing and buying weapon systems?

Mr. YOUNG. Section 818 of the John Warner NDAA for Fiscal Year 2007 requires the Milestone Decision Authority (MDA) to select the contract type for a development program at the time that Milestone B is approved and to make a written determination if the MDA authorizes the use of a cost type contract. The required determination has been made for each program for which a cost type contract has been authorized since the enactment of this requirement. In each case, the facts have justified the use of a cost type contract because there have been uncertainties involved in contract performance that did not permit costs to be estimated with sufficient accuracy to permit use of a fixed price contract, and the circumstances justified proceeding with Milestone B approval before the program risk could be reduced.

Ms. SCHINASI. We have not assessed the practical impact of this legislation on DOD's choice of contract types for major defense acquisition programs. DOD awards cost reimbursement type contracts for the development of major weapon systems because of the risk and uncertainty involved with its programs. Because the government often does not perform the necessary systems engineering analysis before a contract is signed to determine whether a match exists between requirements and available resources, significant contract cost increases can occur as the scope of the requirements change or become better understood by the government and contractor. The legislation addressed this issue by stating that DOD's decisions to use cost-reimbursable contracts for weapon system development cannot be driven by its failure to meet other statutory requirements designed to put programs on solid footing at their start. In other words, DOD can not use contract type to manage risks that could be avoided through better management of its acquisition system. Examples of these requirements include certifying that: the technology in the program has been demonstrated in a relevant environment; the program demonstrates a high likelihood of accomplishing its intended mission; the program is affordable when considering the per unit cost and the total acquisition cost in the context of the total resources available during the period covered by the Future Years Defense Program (FYDP) submitted during the fiscal year in which the certification is made; and the DOD has completed an AOA with respect to the program. As a result, the legislation has the potential to improve the way DOD does business because it ties contracting strategy to the development of sound executable business cases.

REALISTIC BUDGET ESTIMATES

40. Senator MCCAIN. Secretary Young and Ms. Schinasi, there is a lot of pressure on the military Services to gain funding for a weapons program. According to GAO, to gain funding, often a program manager will drastically under-estimate the cost of a program. Then once in the FYDP, the true costs begin to emerge. What causes a program manager to go to these extremes and how can DOD avoid that in the future?

Mr. YOUNG. I fundamentally disagree with the implication that our program managers intentionally or deliberately underestimate costs. Rather, underestimating results from a lack understanding of what is needed to satisfy warfighter require-

ments, exercise requirements, a lack of technology maturity, weakness in software development and what is needed to fully integrate and test the system, all combined with schedules and budgets that are too optimistic. Frankly, in many cases, the program manager tells the enterprise what a program will cost and then the defense enterprise budgets significantly less money and asks the program manager to deliver the full result on schedule. There are entirely too many programmer and comptroller decisions to underfund a program. A classic example is the DDX program, where initial budget, provided DDX procurement costs at levels about 20 percent greater than DDG–51s in order to buy a destroyer with twice the displacement tonnage and significantly more technology.

Thus, to improve program outcomes we must "start programs right." I have instituted a Materiel Development Decision (MDD) as the formal entry point into the acquisition process. The MDD will assess potential materiel solutions and is mandatory for all programs. I am insisting that, with rare exceptions, we conduct robust a Technology Development phase that provides for two or more competing teams producing prototypes of the system and/or key system elements prior to, or through, Milestone B. Prototypes reduce technical risk, validate designs and cost estimates, evaluate manufacturing processes, and refine requirements. These steps will ensure that with program initiation at Milestone B the program is positioned to develop a system or an increment of capability; complete full system integration (technology risk reduction having occurred during Technology Development), and develop an affordable and executable manufacturing process. The improvement in program definition resulting from "starting programs right" will result in more realistic cost estimates.

I am also holding the acquisition team, including program managers, accountable for program performance. For program managers, there is a renewed emphasis on tenure agreements so that program managers will remain with their programs longer. Signed Program Management Agreements (PMAs) establish a "contract" between a program manager and the enterprise setting expectations for cost, schedule, and performance against the Acquisition Program Baseline. The PMA must be reaccomplished if conditions change. Overarching CSBs review requirements changes and technical configuration changes that have the potential to increase costs or delay schedules.

This combination of better definition at the start of the program and holding the acquisition team accountable will provide for more realistic cost estimates and improve program outcomes.

Ms. SCHINASI. Inaccurate cost estimates are often the result of limited knowledge and optimistic assumptions about requirements and technologies. The acquisition environment encourages launching programs that embody more technical unknowns and less knowledge about the performance and production risks they entail. In the absence of knowledge, cost estimators must rely heavily on assumptions about system requirements, technology, and design maturity as well as the time and funding needed. In addition, a new weapon system is encouraged to possess performance features that significantly distinguish it from other systems and promises the best capability. A new program will not be approved unless its costs fall within forecasts of available funds and, therefore, look affordable. Because cost and schedule estimates are comparatively soft at the time, successfully competing for funds encourages the program's estimates to be squeezed into the funds available. This practice often leads to programs being initiated without adequate funding. Further, as programs progress and costs increase, DOD often makes unplanned and inefficient funding adjustments, such as moving money between programs, deferring work and associated costs into the future, or reducing procurement quantities. Ultimately, such reactive practices obscure true program costs and contribute to the instability of many programs and poor acquisition outcomes.

In a recently issued report we made recommendations that we believe would help DOD avoid these cost estimating and funding problems in the future.[11] Specifically we recommended that the Secretary of Defense take the following actions:

- Develop and implement a strategy to bring the department's current portfolio into balance by aligning the number of programs and the cost and schedule of those programs with available resources. In developing and implementing a strategy, the department should determine ways to prioritize needs and identify whether the budget and the FYDP should be increased to more accurately reflect the actual costs of current programs or whether

[11] GAO, Defense Acquisitions: A Knowledge-Based Funding Approach Could Improve Major Weapon System Program Outcomes, GAO–08–619 (Washington, DC:Jul. 2, 2008).

the portfolio of current programs should be reduced and lower-priority programs terminated to match available resources.

• Require that all new programs have manageable development cycles, realistic cost estimates, and have planned and programmed full funding for the entire development cycle.

• Require all cost estimates submitted for funding a program at milestone decisions to be reported as a range of likely costs and reflect the associated levels of risk and uncertainty. At Milestone A, require estimates that allow for a wide range of likely costs. At Milestone B, require estimates that, based on knowledge gained, are more precise.

PASS-THROUGH CHARGES

41. Senator MCCAIN. Secretary Young and Ms. Schinasi, in the 109th Congress, this committee passed legislation that was enacted into law which requires that DOD prescribe regulations prohibiting excessive pass-through fees on defense contracts and subcontracts. I understand that DOD is requiring a contract clause in all eligible contracts, which allows it to recoup contractor payments that contracting officers determine to be excessive. Has this worked?

Mr. YOUNG. To implement section 852 of the NDAA of Fiscal Year 2007, on April 26, 2007, we published an interim rule changing the DFARS. However, this first interim rule resulted in significant public comment in response to the rule. Consequently, we made significant changes to the first interim rule, and we issued a second revised interim rule on May 13, 2008. As a result, there has not been adequate time since the issuance of the second interim rule to assess the impact of this legislation.

Ms. SCHINASI. At this point, it is too early to determine the effectiveness of DOD's efforts to prohibit excessive pass-through charges. In May 2008, DOD issued a second interim rule that includes a solicitation provision and a contract clause requiring offerors and contractors to identify the percentage of work that will be subcontracted and, when subcontract costs will exceed 70 percent of the total cost, to provide information on indirect costs and profit and value added with regard to the subcontract work. While this provision and the clause are currently in place, we have not examined their effectiveness. In addition, DOD has yet to develop implementing guidance for contracting officers that addresses the rule or recommendations from our January 2008 report, which include taking contract risk into account when assessing value added.[12] Further, while the regulation allows contracting officers to recoup charges that they determine to be excessive, it does not specify the roles of the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Agency (DCMA)—organizations that play a key role in assessing cost information. Officials from both of these agencies indicated that they would play a role in implementing this regulation and in assisting contracting officers in determining whether costs are excessive, but have not fully considered the extent or the resources needed to do so. DOD procurement policy officials have told us that, in accordance with the recommendations in our January 2008 report, they will develop implementing guidance and emphasize that contracting officers need to include contract risk in conducting their contractor value added assessments, document the results, and obtain assistance from DCAA and DCMA as appropriate.

42. Senator MCCAIN. Secretary Young and Ms. Schinasi, I understand that the DOD is also requiring detailed information from contractors on their value-added when subcontracting costs reach 70 percent or more of total contract cost. However, the GAO has reported that the DOD rule on this issue needs improvement and specifically, more guidance to ensure effective implementation and consistent application of cost and pricing tools to mitigate excessive costs. What is DOD doing to address this critical issue to provide greater insight into DOD's supply chain and costs—information companies say they use to mitigate costs?

Mr. YOUNG. As a result of numerous public and government comments received, we revised the initial interim rule on Excessive Pass-Through Charges that we had added to the DFARS on April 26, 2007. We issued the revised DFARS interim rule on May 13, 2008. Once the final DFARS rule is in place, the Department intends to issue extensive guidance in our Procedures Guidance and Instructions (PGI) to ensure a clear understanding of the new DFARS rule on Excessive Pass-Through Charges.

[12] GAO, Defense Contracting: Contract Risk in a Key Factor in Assessing Excessive Pass-Through Charges, GAO–08–269 (Washington, DC: Jan. 25, 2008).

Ms. SCHINASI. Historically, DOD has lacked insight into its supply chain and subcontractor costs, raising questions about the value added when multiple layers of contractors perform the work. DOD contracting officials generally apply tools in Federal and DOD acquisition regulations to assess contractor value added. However, as we stated in our January 2008 report, the extent to which these tools are applied depends on the contract risk—that is, whether the contract was competed and whether the type of contract required the government to pay a fixed-price or costs incurred by the contractor. Under DOD's interim rule, prime contractors are required to inform a contracting officer of the value added that they are providing when subcontract costs exceed 70 percent of the total contract value. While the rule may enhance insight into contractor value added under these circumstances, it alone will not address DOD's challenges in obtaining insight into its supply chain and costs. Successfully identifying and preventing excessive pass-through charges requires DOD to obtain insight into their supply chain and incorporate contract risk into the assessment of contractor value added.

AWARD AND INCENTIVE FEES

43. Senator MCCAIN. Secretary Young and Ms. Schinasi, in the 109th Congress, this committee passed legislation that was enacted into law which ensures award and incentive fees in military contracts reward only outstanding performance by linking them to excellent acquisition outcomes and are used appropriately as an incentive for excellent performance. This legislation limits taxpayers' exposure in defense contracts. The GAO reported that the DOD's use of neither award nor incentive fees was effective in helping the Department achieve the outcomes it desired. Has the statute and following DOD regulations improved this situation and reversed what the GAO referred to DOD's use of award and incentive fees as a waste of taxpayers' dollars?

Mr. YOUNG. The Department initially revised award fee policies in response to the GAO report in a memorandum signed out by the Under Secretary of Defense (AT&L) on March 29, 2006. Also, in response to section 814 of the John Warner NDAA for Fiscal Year 2007, two additional memoranda, signed by the Director, Defense Procurement and Acquisition Policy (DPAP) on April 24, 2007, were issued focusing on both award fee and incentive fee contracts and effective for all solicitations issued on August 1, 2007, and thereafter. Since most contracts based on this latest policy have only recently been awarded, it is too early to gauge effectiveness. Nonetheless, I remain strongly committed to ensuring the Department's use of award and incentive fee contracts is properly incentivizing contractor performance.

Ms. SCHINASI. DOD has taken actions to strengthen the link between award and incentive fees and desired program outcomes, which could increase the accountability of DOD programs for fees paid and of contractors for results achieved. DOD is collecting data that could be used to evaluate the effectiveness of DOD's actions, but we have not yet conducted any follow up analysis. In response to congressional actions and GAO recommendations, the Director, DPAP issued a memo in April 2007 that required each military department and defense agency to collect information on the amount of award fees and performance incentives available and paid as well as the contractor's cost and schedule performance for all contracts with a value of greater than $50 million.[13] This information is to be reported to the Director, DPAP, and used by the military Services and defense agencies to ensure that the fees paid are commensurate with performance. The policy stated that this data collection was supposed to occur semi-annually starting with the 6 month period ending June 30, 2007.

RESISTANCE TO CHANGE

44. Senator MCCAIN. Secretary Young, the problems of cost growth and delays in getting new weapons into warfighters' hands seem to be persistent despite the efforts of DOD and Congress to fix them. We have given the Department more money and that has not worked; DOD has changed acquisition policies to reflect best practices and that has not worked; commissions and panels have been chartered; and yet nothing changes. Why are these issues so immune to change?

Mr. YOUNG. I think things can and have changed. But those changes will take some time to be visible in the macro level cost performance of the entire acquisition portfolio. I focus a tremendous amount of attention on ensuring we have things

[13] GAO, Defense Acquisitions: DOD Has Paid Billions in Award and Incentive Fees Regardless of Acquisition Outcomes, GAO–06–66 (Washington, DC: Dec. 19, 2005).

"right" before we start a major program. Congress has instituted a number of certifications that are useful in this respect, but those have been in place less than 3 years and therefore applied to roughly 10 percent of the Major Defense Acquisition Program (MDAP) portfolio.

I require each MDAP to have a CSB to review all proposed changes to a program with the intent to ensure requirement "creep" is minimized, cost growth is understood and addressed proactively, and trade-offs are considered at senior levels to preserve cost and schedule objectives. These trade-offs are expected to include reducing capability if necessary. However, committing to always reduce content or requirements in each and every program that experiences cost or schedule growth doesn't consider the strategic or performance impacts that are essential to the warfighter and national security. We have to be smart and balanced in our approach and manage program-by-program, while considering impacts across the DOD enterprise.

I also seek to ensure we have the right kinds of contractual mechanisms to incentivize industry to control costs, and avoid rewarding poor cost performance with unreasonable profit margins. I want industry to clearly understand the difference between good and poor performance.

We also have to realize that some cost increases in programs are a result of valid reasons. Some cost increases in programs are due to choices to increase quantities or content for legitimate reasons. We need to recognize that program estimates are subject to a variety of factors that are impossible to control in the long run. Assumptions about labor rates, productivity and materials costs are some factors that can significantly affect an estimate. We try to base our estimates on the best available data at the time, but usually cost estimates are developed many years before a system is actually produced. In addition to the program office estimate, I ensure that an independent cost estimate is also done prior to program initiation.

Some cost and schedule growth should be avoidable with good management and oversight and it is those issues that I attempt to address with the policies that I have put forth and am enforcing.

Finally, it is important to note that many, many programs are successfully executed. The media and congressional attention is focused on the much smaller set of programs which do indeed have cost growth and delays that we must take action to avoid.

45. Senator McCain. Secretary Young, what makes your efforts to address them different than all those efforts in the past?

Mr. Young. My efforts are different than historical efforts because I am personally enforcing policies that:

1. Ensure tenure agreements and program management agreements exist to improve accountability.
2. Ensure CSBs are used to review and approve or reject requirement changes that may increase costs or schedules.
3. Ensure that Defense Support Teams are used to accurately assess technical risks and resolve technical and management challenges.
4. Ensure competitive prototyping is used to reduce cost and schedule risk during development.
5. Ensure technology readiness assessments are performed and that no technology moves forward before it is ready to do so.
6. Ensure that the independent cost estimates are fully considered during any MDAP's milestone review and that realistic cost estimates and schedule projections are adopted.
7. Ensure that programs consider cutting content prior to realizing cost or schedule growth and impacting other acquisition programs.

It will take time to show the impact of my commitment to enforce these policies, but I believe that lasting change starts with good common-sense policies that are measurable, enforceable, and widely accepted as good policy. I believe my policies are embraced as good ideas by the acquisition community and Congress. My actions will be consistent with these policies, and I believe that future leaders will be held accountable for their decisions according to these policies.

46. Senator McCain. Secretary Young, during your career, you have seen things from the industry perspective, congressional perspective, military Service perspective, and now the Department's perspective. What needs to change to get the incentives for each of those groups aligned to get better outcomes on individual programs?

Mr. YOUNG. I agree that alignment among stakeholders in the domains you mention, as well as with resource and requirements stakeholders, is necessary for better outcomes on individual programs. Gaining that alignment for each program is one of the key challenges of my current position. My approach is continuous involvement of all domains as programs are conceived, developed, tested, fielded and sustained. One of the domains may be leading the definition of the program at a particular stage, as does the requirements domain early in program definition; but even in that example industry, resources and acquisition domains must be represented. When a program transitions to the development and production phases, I ensure the other domains remain involved to maintain the alignment achieved during the requirements phase. My bottom line for stakeholder alignment on performance, cost and schedule is continuous involvement—no domain ever totally "owns" a program during its life-cycle—all domains must be continuously involved and all aspects of the program must be totally transparent to, and understood by, key stakeholders in each of the domains.

At the macro level, I see a need for several changes. The hardest change is to change the culture. I believe the competition for funds among the Services is a cancer on the defense enterprise. This competition encourages overstating requirements and excessive inventory objectives. This competition leads to underfunded development programs and low rate procurement programs—partially driven by a desire to compete for more resources within the Pentagon, at the White House, and with Congress. I offer as evidence the Service Unfunded Requirements (UFR) lists. These cultural behaviors need to change.

The Services budget, allocate and execute the vast majority of DOD funds. I have repeatedly found that joint programs struggle to gain adequate manpower, budget, and support. Alternately, the Services have many Service-unique programs that could be joint. For example, each Service is buying or developing their own unique satellite communications terminal. In many areas, these Service-unique systems, which are not interoperable, create operational problems for combatant commanders (COCOMs). As the Department moves to greater reliance on network systems and shared intelligence, surveillance and reconnaissance, these issues grow even more complicated and problematic for the COCOMs. Thus, another change required is greater corporate activism and direction in the formulation of program requirements and budgets. OSD leadership must drive and fund jointness and interoperability.

A related issue is derived requirements applied by military technical certification authorities. The application of technical authority standards to the VH–71 Presidential helicopter led to a significant and costly redesign of what was planned as a modified commercial helicopter. There are very few mechanisms that question whether the application of technical authority results in costly excessive margins or good value for the taxpayer. We need to review and pragmatically change the Services' implementation of technical authority.

Another needed change is greater funding stability. Program managers are held accountable for successful execution and blamed for cost growth. However, program managers have almost no control over their budgets. The programming and budgeting offices in the Services and OSD make final decisions on program budgets. End game cuts, trims, taxes, balancing and other reductions become fact of life adjustments to a program manager's budget. A program manager's budget is generally linked to a signed contract. When the budget is adjusted by the "system," the program manager has to replan his work and schedule and potentially renegotiate the contract. As many people know, changing your house plans during construction is expensive—this is equally true in defense acquisition.

Similarly, we must stop changing requirements. As we speak, the Navy is reconsidering a DDX requirement that has been validated for over 10 years and led to the expenditure of over $8 billion. We need greater discipline in requirements, and we should avoid letting the rotation of requirements officers lead to churn in requirements, and thus program execution plans.

In addition to the cultural and process changes, there are a number of changes we are making in the actual management and execution of DOD programs. For example, I am insisting that, with rare exceptions, we conduct a robust Technology Development phase that provides for two or more competing teams producing prototypes of the system and/or key system elements prior to, or through, Milestone B. Prototypes reduce technical risk, validate designs and cost estimates, evaluate manufacturing processes, and refine requirements. These steps will ensure that with program initiation at Milestone B the program is positioned to develop a system or an increment of capability; complete full system integration (technology risk reduction having occurred during Technology Development), and develop an affordable and executable manufacturing process.

I have directed the establishment of Configuration Steering Boards to address program changes with the potential to drive cost increases and schedule delays. Proposed requirement changes are coordinated with key program stakeholders throughout the program's life. I also require technical maturity of programs before program initiation (Milestone B). Where I have questions about a program's readiness for program initiation, I use Independent Program Assessments, Defense Support Teams, and other tools to do a thorough assessment of the program and to present their findings to me and other members of the Defense Acquisition Board. I also give explicit funding and schedule direction to programs at their milestone decisions, and ensure those funding directions are implemented in the budget process. In addition, I am focusing a great deal of attention on the contractual incentives put in place for programs I review to ensure we incentivize improved outcomes and not reward poor ones.

The Department is engaging with industry continuously. That dialogue occurs not only on a program-by-program basis where industry holds a contract, but also via industrial associations that involve many contractors. For example, we participate in the National Defense Industrial Association's Industrial Committee on Program Management (ICPM). The ICPM is working with us on topics of interest to both industry and government, for example the use of new Program Startup Workshops and improved application of Earned Value Management Systems. Forums like this also help align interests of the various domains.

INSTITUTIONALIZING BEST PRACTICES

47. Senator McCAIN. Secretary Young, with a new administration taking office next year, you may or may not find yourself in your current position. What actions are you taking to ensure your initiatives take hold and endure potential leadership changes?

Mr. YOUNG. I have undertaken a number of initiatives to implement my vision for Acquisition, Technology, and Logistics. Two of these initiatives, which are fundamental to transforming the acquisition process, are CSB and Competitive Prototyping. Using the authorities of the Office of the Under Secretary of Defense, I have directed the establishment of Departmental policy for CSBs and Competitive Prototyping.

Concerning CSBs, my intent is to provide the program manager a forum for socializing changes that improve both affordability and executability. Boards will be in place for every current and future ACAT I program and will review all proposed requirement changes and any proposed significant, technical configuration changes which could result in cost and schedule changes. These boards are empowered to reject any changes, and expected to only approve changes deemed critical, in which funds are identified and schedule impacts are truly mitigated.

Also, I have issued policy requiring competitive, technically mature prototyping. My intent is to rectify problems of inadequate technology maturity as well as a lack of understanding of critical program development paths. Prototyping employed at any level-component, subsystem, system-whatever provides the best value to the taxpayer.

It is my intent that these polices be institutionalized in the forthcoming update to DOD Instruction 5000.2. As importantly, I have written weekly AT&L notes to the broadest possible acquisition team audience. These notes convey my principles and lessons, seeking to change the acquisition community culture and develop better practices. These efforts to influence the broadest possible audience in the acquisition community represent critical efforts to produce lasting, enduring improvements.

48. Senator McCAIN. Secretary Young, given the problems that DOD has had ensuring that sound policy translates into practice, what do we need to do to support you on this?

Mr. YOUNG. I believe we have the necessary authority and the management ability to translate those policies into effective day-to-day business practice and improved acquisition outcomes. However, funding instability detracts from our ability to achieve those outcomes. While we are doing all we can to ensure that program costs are accurately estimated and fully funded, we would appreciate your support in eliminating funding instability as an issue that inevitably contributes to increased costs and extended cycle times.

STRATEGIC VISION

49. Senator MCCAIN. Secretary Young, in your Acquisition, Technology, and Logistics strategic goals implementation plan, you stated that DOD needs to accurately price programs and insist that the program's schedule and budget reflect this realistic pricing. How do you plan to accomplish this?

Mr. YOUNG. Strategic Thrust 2 of my Strategic Goals Implementation Plan describes how I intend for the Department to responsibly spend every single tax dollar. We must ensure that every program reflects realistic costs and schedules. To do this, we must adhere to proven practices and institute new promising ones. It has been the Department's policy to fund programs at the Cost Analysis Improvement Group's (CAIG) estimate. Over the years, this has proven to be the most accurate prediction of actual costs. We will continue this policy. To ensure that the cost estimates and programs deliver expected capabilities in a timely manner, I am supporting and monitoring a number of initiatives, including the following:

- Competitive Prototyping: Successful competitive prototyping will inform us on the realism of requirements, mature technology before final development phases, and significantly improve our cost estimates.
- Technology Readiness Assessments (TRA): TRAs will ensure technology is appropriately mature at each sequential phase of development and ensure the Department budgets adequate funds for necessary technology maturation.
- Incentive Policies: Careful, aggressive use of profit and incentives are critical to the program manager's efforts to achieve cost control and disciplined behavior by industry.
- Enhanced Acquisition Decision Memorandum (ADM): I am signing ADMs which specify the requirements document and its date and prohibit changes to program requirements. The ADMs also require full program funding.
- CSBs: CSBs will review requirements and technical configuration changes, which have the potential to result in significant increases to program cost and schedule.
- Concept Decision (CD): CD is designed to develop DOD policy and procedures that will synchronize affordable, risk-informed, strategic investment decisions to ensure that priority joint warfighter needs are addressed. It will result in portfolio-based investment decisions that enable predictable acquisition performance that is responsive to warfighter needs.
- Life Cycle Management (LCM): By integrating LCM principles into the acquisition and sustainment processes, we will increase system readiness while lowering total life cycle costs.

50. Senator MCCAIN. Secretary Young, who will be responsible for developing these cost estimates and program baselines?

Mr. YOUNG. The Department has an established process for developing cost estimates and program baselines. The responsibility is shared among offices from the requirements, programming, budgeting, acquisition, and other appropriate functional communities. Depending on the size of the program, this is done at either the component or OSD level. Each Service has one or more independent cost estimating offices which operate independent of the program offices. After the cost estimates and program baselines are developed, they must be approved. Again, depending on the size of the program, they may be approved by the SAE, or, if the program is an Acquisition Category (ACAT) ID program, they must be approved by me. For ACAT ID programs, my policy is to ensure the program is funded at the level estimated by the CAIG. This estimate, over the years, has consistently been the most accurate. I will not approve cost estimates and program baselines unless I am convinced they reflect accurate pricing and scheduling, and that they recognize the technical risks involved.

51. Senator MCCAIN. Secretary Young, you added that DOD would then hold itself accountable for delivering to the schedules and budgets established. What does it mean to hold people or programs accountable for delivering these results?

Mr. YOUNG. I am insisting that program managers build coherent acquisition programs with manageable risk. These programs must then be fully funded to the program manager or an independent cost estimate. Finally, the requirements for the program cannot change. If these criteria are met, I will have a basis for holding program manager's fully accountable and taking management or disciplinary action for poor performance.

Program Manager Empowerment and Accountability is a piece of the strategy I am putting into place which captures this philosophy. Program managers play a

critical role in developing and fielding the weapon systems. I have put into place a comprehensive strategy to address improving the performance of program managers. Key to this is program manager tenure agreements for ACAT I and II programs, our largest programs. My expectation is that tenure agreements should correspond to a major milestone, and last approximately 4 years.

Also, I think we have to make improvement in the education and training of our program managers. Our current acquisition program execution is deficient, and some responsibility for this must be attributed to our education and training programs.

Another fundamental piece I have established is Program Management Agreements—a contract between the program manager and the acquisition and requirements/resource officials—to ensure a common basis for understanding and accountability. This ensures that plans are fully resourced and realistically achievable and that effective transparent communication takes place throughout the acquisition process.

PROTOTYPING AND COMPETITION

52. Senator MCCAIN. Secretary Young, you recently signed out a memo calling for the increased use of prototyping and competition prior to starting a development program to gain more knowledge about costs and technical risks. What is your intent and how would you like to see this implemented?

Mr. YOUNG. My intent is to understand the technical risks inherent in a system development effort through physical demonstrations that help us reduce risk prior to initiating new programs. Competing teams producing prototypes of key system elements will not only reduce technical risk but also validate designs and cost estimates, evaluate manufacturing processes, and refine requirements. In total, this approach will also reduce time to fielding. Further, this approach can help the DOD make source selection decisions based on hardware and performance instead of thousands of pages of paper. This policy will be implemented in the technology development phase for emerging acquisition programs, and it will be included in the next publication of DOD Instruction 5000.2.

53. Senator MCCAIN. Secretary Young, do you expect programs to fund full-up prototypes by competing contractors (fly-off)?

Mr. YOUNG. Prototypes may be full-up systems or subsystems depending upon the technical risks that need to be assessed. I expect programs to fully fund the prototype activities that will be defined in the technology development strategy for the program.

54. Senator MCCAIN. Secretary Young, how does the approach outlined in your memo differ from that used on the JSF and F–22 programs—both of which held fly-offs but still experienced billions in cost growth and years in schedule delays?

Mr. YOUNG. Both the F–22 and F–35 JSF programs held thorough, competitive prototyping phases that captured many of the key elements identified in my September 19, 2007, memorandum. In both cases, the prototypes provided valuable information that reduced program risk, validated key technical concepts, and reduced costs.

The simple answer to this question is that the program manager must carefully and wisely choose to prototype the right components to reduce risk and provide confidence in production. The JSF prototypes did not incorporate any production representative structure, even if only in selected areas. As the prototypes were transitioned to a production design, the short takeoff and vertical landing (STOVL) variant was overweight. This fact is the dominant reason for JSF development cost growth. I am less familiar with the prototype phase of F–22. However, F–22 cost grew because of the highly integrated avionics architecture and the demanding manufacturing process. I believe it is likely that a detailed review of the history would reveal that the F–22 prototypes failed to adequately focus prototype development effort on these key issues.

The F–35 JSF held an almost 5-year Concept Development Phase (CDP). During CDP, the 2 competing teams built 4 prototypes, and achieved 700 test points apiece. The CDP enabled the program to better understand many of the risks involved in designing a family of common aircraft that would satisfy the requirements for three U.S. Services and eight international partners. While the JSF program experienced cost growth and schedule delays, the JSF prototype efforts almost certainly helped avoid cost growth and schedule slips in other areas of the JSF program.

F–35 cost growth and schedule delay are mainly attributed to the weight issues surrounding the design of the STOVL variant. The program was extended during the SDD phase to make sure the design could meet the rigorous requirements necessary to operate in the STOVL's expeditionary role. Additional cost growth in the unit cost of the aircraft is primarily the result of a reduced Department of the Navy procurement objective, the rising cost of specialty metals, and increased labor and overhead rates; all of which would have affected the program regardless of the prototyping and competition phase.

The F–22 also conducted a thorough competition with two competitors developing two prototype aircraft. The F–22 CDP was valuable in validating the 5th generation capabilities in the areas of propulsion, aircraft handling, and stealth. Much of the program cost growth experienced by the F–22 program is attributed to technology challenges associated with design complexities. These complexities led to numerous restructures, caused funding instability and extended the Engineering and Manufacturing Development phase to 14 years. In addition, procurement quantities decreased due to changing national defense strategies, the evolution of the less costly F–35 aircraft to complement the capabilities of the F–22, and requirements to fund other Department priorities.

55. Senator McCain. Secretary Young, what lessons learned did you draw from those programs?

Mr. Young. The key lesson learned is that competitive prototyping is an effective component for acquisition excellence and is only part of a tool kit that includes stable requirements, mature technology, manufacturing and integration levels, funding stability, upfront integrated planning baselines, and CSBs.

SHIFT MORE RISK AND RESPONSIBILITY TO CONTRACTORS

56. Senator McCain. Secretary Young, we have recent examples, such as the Expeditionary Fighting Vehicle and Advanced SEAL Delivery System, in which the contractor delivered an item that failed to perform. In both cases, the government accepted full responsibility and gave the contractor a do-over. What causes the Department to make those types of decisions?

Mr. Young. Decisions to significantly restructure, terminate, or continue troubled acquisition programs are complex. We have found the principal drivers for troubled programs are unstable requirements, immature technologies, and funding instability. Additionally, we are focusing a great deal of attention on contractual incentives—and ensuring we incentivize improved outcomes, with demonstrated performance, and not reward poor outcomes. I am an extreme advocate for back-end loading fees in contracts, that is, reserving a very significant portion of the contract fee until the final stages of development and product delivery when it is clear and measurable that the warfighter and taxpayer received value for the Nation's investment. As stewards of tax dollars, our responsibility for acquisition decisions must ensure complete openness, fairness, and objectivity. We in the acquisition enterprise are accountable for those decisions to deliver successful outcomes at reasonable costs.

The decision related to the Expeditionary Fighting Vehicle acquisition was based on detailed assessments which determined the capability required was critical, the reliability performance shortfalls were correctable, and the replanned program was the most cost-effective means to deliver the required capability.

The Advanced SEAL Delivery System (ASDS) program was cancelled based on numerous subsystem reliability issues identified by operator use. U.S. Special Operations Command has employed a reliability improvement program in order to field and deploy the ASDS–1 unit produced. The Department continues to evaluate ways to address the capability gap that now exists.

Many of these cases come down to a very difficult, straightforward determination. The Department and the taxpayer have invested millions of dollars to get to the initial item delivery which has problems. If the requirement for the capability remains valid, then the DOD must decide whether to start over with a new competition or invest additional dollars to correct the deficiencies. Starting over means a new development program which likely requires the Nation to spend twice to develop the required capability. Further, while there is some value in terminating the failed effort, the industry team that failed to perform would have a very substantial competitive and cost advantage in any new competition. These are difficult issues to weigh and judge in seeking to recover from program failures to perform. One of my fundamental goals is to structure programs initially with a higher probability of success, using technology readiness assessments, prototyping, CSBs, realistic require-

ments, and full funding. This is critical to our efforts to avoid ever having to make difficult decisions on failed programs.

57. Senator MCCAIN. Secretary Young, what can we do to shift appropriate risk back on the contractors?

Mr. YOUNG. The fundamental lesson that we have learned is that we must have stable requirements to hold contractors accountable for performance. It starts with having a clear understanding of what available technology can accomplish before we invest in the development of a new system. We can use competitive prototyping to anchor our predictions of performance with physical demonstrations of capability. This requires financing multiple approaches to develop a materiel solution, and while the benefits from a long-term perspective justify this investment, there are affordability pressures on programs in the near term that make it difficult to execute. After prototype demonstrations have reduced risk for the program, it is essential that contract requirements remain stable. I have implemented CSBs to provide oversight over the evolution of system designs during development and testing which carefully evaluate the introduction of changes to contract requirements. It is also important to focus the attention of contractors on the program objectives. I favor the use of measurable performance incentives whereby in order to earn fee, the contractor must deliver product that demonstrates the required capability. Taken together, along with support of Congress to maintain funding stability for well managed programs, these actions will have the effect of reducing opportunities for increasing contract costs while rewarding contractors who deliver what was promised.

In general, Industry will price risk into their contracts and proposals. In more instances, the price of this risk is unaffordable and poses the risk of the DOD overpaying for a particular program. The key is for the government to recognize and understand risk and build appropriate program plans, acquisition strategies, and execution schedules to deal affordably with risk.

UNDERSTANDING THE ACQUISITION PROCESS

58. Senator MCCAIN. Secretary Young, the cost of the VH–71 program has now grown from around $6 billion to over $11 billion. The contractor, Lockheed Martin, claims that the Navy changed its requirements, while the Navy claims that it did not understand the technical challenges. What does it say about the acquisition process when the Navy can sign a multibillion dollar contract with a company who does not understand the requirements of the system it is supposed to build and the government does not know enough to say the contractor's proposal won't work?

Mr. YOUNG. On VH–71, the Department purposely accepted more cost and schedule risk than is normal. The post-September 11 security environment drove an urgent need to replace legacy VH–3D/VH–60N with a safer, more reliable and more survivable presidential transport helicopter. To help meet the high risk schedule the program executed a short risk reduction period with potential vendors vice entering a technology development phase. A more thorough technology development phase prior to entering the SDD phase would have helped ensure complete flow down of the government's performance-based specification into the contractor's proposed configuration. It would have allowed the government to fully define the technical scope of this highly concurrent Increment 1 and Increment 2 VH–71 program and to develop more accurate cost and schedule baselines.

Increment 1 was to address the immediate need of providing the President with safe, reliable and survivable transportation. Increment 2 was to address the full set of requirements capable of performing both administrative and contingency missions. While the technical baseline for Increment 2 should have been fully defined at contract award, the urgency was of a sufficient concern that a programmatic decision was made to proceed forward with Increment 1. Although the program's cost and schedule have increased significantly, the Department believes that had it known at the beginning of the program what it knows now the cost would have been very close to current projections.

A performance-based contract was competitively awarded in January 2005 to Lockheed Martin Systems Integration-Owego (LMSI–O). Slow progress in requirements and technical definition of the performance contract (not requirements changes), design completion, and lack of coordination of the proposed design between LMSI–O and their subcontractors adversely affected an already high risk schedule. Solid systems engineering processes were not adhered to in this program as it made compromises in order to keep schedule, which compounded the problem. Concurrency in the Increment 1 and Increment 2 development, and a larger amount

of Increment 2 redesign than was originally planned, caused further schedule delays and cost increases.

With this factual history as background, I would offer a few additional summary comments. First, the initial White House requirements have not changed. However, there are classified aspects of this program. In my reviews, there seems to have been some confusion between the Navy and industry on Appendices F and G related to structural and performance requirements for the VH–71 and how industry was to consider these requirements in their proposal. Some members of the government feel industry exploited this confusion to argue that performance requirements were tradeable, thus choosing not to flow down all requirements and produce a more realistic estimate of workload and cost. This confusion should not have existed or occurred because the White House requirements were firm and never changed. It is unclear whether this confusion had a real impact on underestimation of program cost or this confusion is a convenient explanation for a dramatic underestimation of the VH–71 program cost.

There have been changes in the "derived requirements" relative to initial assumptions. The White House assumed it would be a straightforward process to integrate new communications and safety equipment on an existing commercial helicopter. Industry may have legitimately believed that this was the government objective. However, the Naval Air Systems Command (NAVAIR), which has technical authority for selected military aviation systems including the Presidential helicopter, imposed derived requirements for the VH–71 to improve safety and reliability. NAVAIR required changes in the helicopter fuel system, structure, tail design and other areas to meet their airworthiness certification requirements. These changes have led to substantial redesign of the proposed commercial helicopter and significant additional cost. Industry may reasonably perceive these as changed requirements. In early discussions about the program, I did not perceive or understand the Navy would demand so many design changes in the commercial helicopter, such as dictating the number of bolts attaching the transmission to the airframe. I think a full understanding and recognition of these derived requirements should have called into question the initial industry and government cost estimates.

I believe that all of these issues could have been better understood. An existing EH–101 will not meet the White House range and payload requirements. Adding several thousand pounds of weight to the EH–101, even with a new engine, further guarantees that the helicopter will not meet range and payload requirements. In reviewing the VH–71 program, I asked for a comparison to the CH–53 redesign effort. Indeed, the CH–53 effort will require about $5 billion of new design and test work—a number comparable to the new estimate for VH–71 Increment 2 development. The initial estimate of $800 million for Increment 2 development was clearly incorrect. The stringent requirements and the application of government certification requirements and standards have driven substantial cost growth on VH–71 over the original estimates. While risk and urgency can account for some of the growth, it is clear that misunderstandings on the requirements and failed assumptions about the use of a commercial helicopter airframe were significant contributors. Even in light of all of these issues, I believe errors were made in planning and pricing the VH–71 program which should not have been made.

Despite initial difficulties with regard to what was necessary to fulfill program requirements, the Program Office, LMSI–O and its major subcontractors now understand and agree on contract requirements. A restructured program has been proposed which meets the White House military requirements on a schedule with better understood risk.

59. Senator McCAIN. Secretary Young, is DOD fulfilling its fiduciary responsibilities when it enters into long-term, cost-plus contracts for development when it knows so little about what it intends to develop and build?

Mr. YOUNG. I agree that DOD is responsible for ensuring that every taxpayer dollar is spent in the most efficient and effective manner in providing for the Nation's defense. Consistent with that objective, the contract vehicles we employ should be consistent with our assessment of overall program risk. When we determine that the program is so complex and technically challenging that it would not be practical to reduce program risk to a level consistent with the use of a fixed price contract vehicle, we should choose a cost type contract because we believe that approach is the one most likely to provide the greatest benefit to national defense and the taxpayer. These decisions must be made on a contract-by-contract basis and with a full appreciation of our fiduciary responsibility.

I would agree that the Department should avoid entering contracts with excessive, unknown risks. The Department must spend more in the early phases of program development, including investing in competitive prototypes or component level tech-

nology demonstrations. The Department must also complete Quick Look Technology Readiness Assessments to guide program planning and investment in the early stages. Even with these tools, industry will conservatively price risk into contracts if the department insists on fixed price contracts. This strategy runs the risk of DOD significantly overpaying for development programs. With proper planning, risk reduction and management, I believe the taxpayer gets the lowest price and the best product by using cost type contracts when the requirements are demanding and the level of risk is substantial. In other situations, DOD may be able to consider fixed price incentive fee contracts for development programs.

ACCOUNTABILITY

60. Senator MCCAIN. Secretary Young, Congress has expressed its intent to have the Missile Defense program follow the same rules as other major programs, i.e. accountability for cost increases, full funding with procurement dollars, and budgeting from the right pots of money—Procurement; Research, Development, Testing, and Evaluation; Military Construction; Operations and Maintenance; etc. Are you in support of this?

Mr. YOUNG. For the Ballistic Missile Defense program, I support the implementation of program oversight and processes that contribute to efficient execution. I intend to ensure that a rigorous Ballistic Missile Defense System baseline agreement with defined cost, schedule and performance parameters be fully implemented to allow continuous evaluation of program execution and accountability for changes to program plans. Consistent with the NDAA for Fiscal Year 2008, MDA was authorized to use incremental procurement authority for fiscal years 2009 and 2010. The Department will assess the impact of full versus incremental funding applied to MDA procurement actions beyond fiscal year 2010, and will formulate direction. The Missile Defense Executive Board initiated activity to develop a Ballistic Missile Defense System Life Cycle Management Process to assess Missile Defense Agency requirements, development, procurement and transition plans. Future budget submissions will include appropriate requests, to the extent possible, for the different types of funding to include: Procurement, Research Development Test and Evaluation, Military Construction, and Operations and Maintenance.

ACQUISITION WORKFORCE

61. Senator MCCAIN. Secretary Young, there is a debate over whether the acquisition workforce is sufficient in terms of skill mix and quantity. What is your view?

Mr. YOUNG. I'm well aware of the debate. At the highest level, I do not believe the acquisition workforce is adequately manned, and I believe there are a number of areas where we need more robust and comprehensive skills. There is not an all-or-nothing answer. I am working to adjust skill mixes and to build up numbers where that is the right thing to do. To ensure our defense acquisition workforce is sufficient in terms of skill mix and quantity, we deployed several initiatives under my AT&L strategic thrust, "Take Care of Our People." Two primary initiatives are Competency Management and Human Capital Strategic Planning. The Competency Management initiative is taking a hard look at critical acquisition occupations such as Program Management, Cost Estimating, Financial Management, Contracting, Systems Engineering Management, Testing and Evaluation, and Logistics. We will learn about existing skill mixes and gaps. The Human Capital Strategic Planning initiative addresses the gaps between the mix and size needed and in place; a report to Congress is in process. We will use the DOD Acquisition Workforce Development Fund (10 U.S.C. 1705) to address both skill and quantity gaps through recruiting and hiring; training and development; and recognition/retention initiatives.

62. Senator MCCAIN. Secretary Young, are we relying too much on contractors to perform work the government used to perform?

Mr. YOUNG. Consistent with applicable laws and regulations defining inherently governmental functions, the DOD identifies opportunities where competitive sourcing of contractor support allows DOD to concentrate its manpower on distinctly military activities. The department recognizes the extent to which our use of contractors has grown. I am concerned that we may not have the right balance between government personnel and contractors.

63. Senator MCCAIN. Secretary Young, does the government have the systems engineering talent needed to execute the policies you enumerated in your recent memo on prototyping?

Mr. YOUNG. The promulgation of DOD's competitive prototyping policy does indeed place additional emphasis on systems engineers during early phases of the acquisition lifecycle. We are addressing this critical need through several initiatives as part of our Human Capital Strategic Plan. First, we are working to leverage Section 852 (the DOD Acquisition Workforce Development Fund) of the NDAA for Fiscal Year 2008 to recruit, train, and retain systems engineers. Second, we are in the process of conducting a top-to-bottom assessment of our systems engineering workforce to identify the number of systems engineers needed and the specific skills they require. Third, we continue to enhance our systems engineering guidance, tools, and education and training certification courses to assist the workforce in implementing new policies such as competitive prototyping, integrated developmental and operational test, and preliminary design reviews. Finally, as I mentioned in my prototyping policy memorandum, our intent is that the demand for earlier knowledge and reduction of risk provide the incentive to further develop and enhance the systems engineering skills in our current workforce. System engineering talent is vital for program success, and we are actively working to ensure we meet and sustain our acquisition workforce needs.

IMPROVING PROGRAM OUTCOMES

64. Senator MCCAIN. Ms. Schinasi, in your written statement you note that GAO designated DOD weapon system acquisitions as a high risk area in 1990, and that programs continue to experience poor cost, schedule, and performance outcomes. Your statement identifies problems at the strategic level and at the program level that you believe continue to contribute to these poor outcomes. At the strategic level, what is needed to improve program outcomes?

Ms. SCHINASI. We recently recommended that the Secretary of Defense develop and implement a strategy to bring the department's current portfolio into balance by aligning the number of programs and the cost and schedule of those programs with available resources.[14] In developing and implementing a strategy, the department should determine ways to prioritize needs and identify whether the budget and the FYDP should be increased to more accurately reflect the actual costs of current programs or whether the portfolio of current programs should be reduced and lower-priority programs terminated to match available resources. We have also recommended in the past that the Secretary of Defense implement an enterprise-wide portfolio management approach to making weapon system investments that integrates the assessment and determination of warfighting needs with available resources and cuts across the Services by functional or capability area.[15] To ensure the success of such an approach, the Secretary should establish a single point of accountability at the department level with the authority, responsibility, and tools to ensure that portfolio management for weapon system investments is effectively implemented across the department. In addition, the Secretary should ensure that the following commercial best practices are incorporated:

- implement a review process in which needs and resources are integrated early and in which resources are committed incrementally based on the achievement of specific levels of knowledge at established decision points;
- prioritize programs based on the relative costs, benefits, and risks of each investment to ensure a balanced portfolio;
- require increasingly precise cost, schedule, and performance information for each alternative that meets specified levels of confidence and allowable deviations at each decision point leading up to the start of product development;
- establish portfolio managers who are empowered to prioritize needs, make early go/no-go decisions about alternative solutions, and allocate resources within fiscal constraints; and
- hold officials at all levels accountable for achieving and maintaining a balanced, joint portfolio of weapon system investments that meet the needs of the warfighter within resource constraints.

65. Senator MCCAIN. Ms. Schinasi, at the program level, what is needed to increase the likelihood of program success?

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[14] GAO, Defense Acquisitions: A Knowledge-Based Funding Approach Could Improve Major Weapon System Program Outcomes, GAO–08–619 (Washington, DC: Jul. 2, 2008).

[15] GAO, Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes, GAO–07–388 (Washington, DC: Mar. 30, 2007).

Ms. SCHINASI. To increase the likelihood of program success, DOD must ensure that appropriate knowledge is captured and used at critical junctures to make decisions about moving a program forward and investing more money. While DOD has incorporated into policy a framework that supports a knowledge-based acquisition process similar to that used by leading organizations, it must establish stronger controls to ensure that decisions on individual programs are informed by demonstrated knowledge. Moreover, congressional approval of programs that have not taken these steps encourages DOD's subsequent requests for additional funding.

A path can be laid out to make decisions that will lead to better program choices and better outcomes. Much of this is known and has been recommended by one study or another. GAO itself has issued hundreds of reports. The key recommendations we have made have been focused on the product development process:

- constraining individual program requirements by working within available resources and by leveraging systems engineering;
- establishing clear business cases for each individual investment;
- enabling S&T organizations to shoulder the technology burden;
- ensuring that the workforce is capable of managing requirements trades, source selection, and knowledge-based acquisition strategies; and
- establishing and enforcing controls to ensure that appropriate knowledge is captured and used at critical junctures before moving programs forward and investing more money.

66. Senator MCCAIN. Ms. Schinasi, what changes in the acquisition environment need to be made to ensure program success?

Ms. SCHINASI. DOD is not enforcing a knowledge-based approach, discipline is lacking, and business cases do not measure up. This is occurring, in part, because there are no consequences for actions that run counter to the intent of DOD acquisition polices—officials responsible for approving program starts are no longer in their positions by the time the consequences of their actions become evident. The department routinely accepts high levels of technology risk at the start of major acquisition programs. Mature technologies are pivotal to developing new products. Without mature technologies at the outset, a program will almost certainly incur cost and schedule problems. However, DOD's acquisition community moves forward on programs with technologies before they are mature and takes on responsibility for technology development and product development concurrently. Our work has also shown that DOD allows programs to begin without establishing a sound business case that matches requirements with technology, acquisition strategy, time, and funding. And once these programs begin, their requirements and funding change over time. In fact, program managers consider shifting requirements—which can result in added program complexity and costs—and funding instabilities—which occur throughout the program—to be their biggest obstacles to success. Fundamentally, DOD will need to reexamine the entirety of its acquisition process and how it is affected by requirements and funding processes. This includes making significant changes to program requirements setting, funding, and execution; as well as to the incentives that drive the behavior of DOD decisionmakers, the military Services, program managers, and the defense industry. Finally, no real reform can be achieved without a true partnership among all these players and Congress.

67. Senator MCCAIN. Ms. Schinasi, GAO cites tenure or turnover issues for both program managers and senior DOD leaders as impediments to better program outcomes and lasting reform. What recommendations would GAO make to alleviate this issue?

Ms. SCHINASI. We have made several recommendations related to the issue of management tenure as it relates to weapon system development programs. For example, in our November 2005 report on program managers, we recommended that DOD develop and implement a process to instill and sustain accountability for successful program outcomes.[16] In developing this process, we note that, in part, DOD should consider matching program manager tenure with delivery of a product or for system design and demonstration, and tailoring career paths and performance management systems to incentivize longer tenures. We have also noted that if DOD limited development cycle times to between 5 and 7 years it would be possible to extend the tenure for a single program manager to the entire product development phase-providing the manager a more realistic responsibility but with more accountability.

[16] GAO, Best Practices: Better Support of Weapon System Program Managers Needed to Improve Outcomes, GAO–06–110 (Washington, DC: Nov. 30, 2005).

In 1998, the Under Secretary of Defense for Acquisition, Technology, and Logistics stated that the department's objective must and will be to achieve acquisition cycle times no longer than 5 to 7 years.

In 2000, we testified that we had identified a 5-year limit for weapon system development programs—which reflected both commercial practices and DOD guidance. DOD's acquisition policy, revised in 2003, suggests that system development should be limited to a manageable timeframe—about 5 years.[17] An assessment of DOD's acquisition system commissioned by the Deputy Secretary of Defense in 2006 similarly recommended that programs should be time-constrained with development cycles no longer than 6 years from Milestone A to low-rate initial production.[18]

68. Senator MCCAIN. Ms. Schinasi, GAO describes cost growth as reduced buying power and lost opportunity costs for DOD. What are the implications of continued cost and schedule problems?

Ms. SCHINASI. Cost and schedule problems for DOD programs have implications both within the department and for the Federal Government as a whole. Within DOD, continued cost growth results in less funding being available for other DOD priorities and programs, while continued failure to deliver weapon systems on time delays providing critical capabilities to the warfighter. As program costs increase, DOD must request more funding to cover the overruns, make trade-offs with existing programs, delay the start of new programs, or take funds from other accounts. Delays in providing capabilities to the warfighter result in the need to operate costly legacy systems longer than expected, find alternatives to fill capability gaps, or go without the capability. In a broader sense, poor outcomes in DOD's weapon system programs reverberate across the entire Federal Government because of the sheer size of the investment in these programs. Every dollar wasted during the development and acquisition of weapon systems is money not available for other internal and external budget priorities—such as the war on terror and mandatory payments to growing entitlement programs.

69. Senator MCCAIN. Ms. Schinasi, does GAO feel that DOD's recent flurry of initiatives takes acquisition change to needed levels? If so, what steps does DOD need to take to reinforce these initiatives and translate them into practice?

Ms. SCHINASI. DOD's recent initiatives appear to have some promise, but we have found that practices do not always follow promise. DOD must ensure that programs follow the new policies and that people are held accountable for their compliance with them as well. Many of DOD's recent initiatives are contained in policy memos signed by the current Under Secretary of Defense for Acquisition, Technology, and Logistics and are not guaranteed to survive the transition to the next administration. DOD is taking a positive first step by revising its overall acquisition policy, referred to as the DOD 5000 series, to include many of these initiatives. Preliminary indications are that the revised policy will establish more controls and metrics by which to assess program progress. In order to get better outcomes, DOD will need to avoid service- and program-centric investment decisions that allow the military Services to overpromise capabilities and, underestimate costs and enforce the controls in its revised policy. For its part, Congress should support DOD's efforts to instill discipline and accountability into its acquisition process, while continuing to monitor the department's efforts through vigorous oversight.

70. Senator MCCAIN. Ms. Schinasi, what additional guidance and steps are needed to bolster DOD's recent initiatives?

Ms. SCHINASI. DOD's recent initiatives indicate that in large part the department knows what needs to be done to improve acquisitions. However, we have found that the department does not apply the controls or assign the accountability necessary to achieve successful outcomes. To strengthen accountability, DOD must also clearly delineate responsibilities among those who have a role in deciding what to buy as well as those who have role in executing, revising, and terminating programs. At the program level once a program begins, DOD will need to: (1) match program manager tenure with development or the delivery of a product; (2) tailor career paths and performance management systems to incentivize longer tenures; (3) strengthen training and career paths as needed to ensure program managers have the right qualifications to run the programs they are assigned to; (4) empower program managers to execute their programs, including an examination of whether and

[17] GAO, Defense Acquisitions: Employing Best Practices Can Shape Better Weapon System Decisions, GAO/T–NSIAD–00–137 (Washington, DC: Apr. 26, 2000).

[18] Assessment Panel of the Defense Acquisition Performance Assessment Project for the Deputy Secretary of Defense, Defense Acquisition Performance Assessment Report (Jan. 2006).

how much additional authority can be provided over funding, staffing, and approving requirements proposed after the start of a program; and (5) develop and provide automated tools to enhance management and oversight as well as to reduce the time required to prepare status information. In addition, rewards and incentives must be altered so that success can be viewed as delivering needed capability at the right price and the right time, rather than attracting and retaining support for numerous new and ongoing programs.

71. Senator MCCAIN. Ms. Schinasi, do you believe there are sufficient controls embedded in DOD's policy and processes to ensure a knowledge-based decision process is followed?

Ms. SCHINASI. Twice in the last 5 years, we have reported that DOD's acquisition process did not contain sufficient controls to ensure a knowledge-based approach is followed. We reported in November 2003 that DOD's leaders had taken noteworthy steps by incorporating into the policy a framework that supports a knowledge-based, evolutionary acquisition process, similar to one used by leading commercial companies to get successful outcomes.[19] This framework was an important and significant step. However, we noted that while DOD's policy included some controls that leading companies use to capture knowledge at the start of a program, additional controls were needed to ensure that decisions made throughout product development are informed by demonstrated knowledge. In April 2006, we reported again that DOD's revised acquisition policy lacked sufficient controls and noted that acquisition officials were not effectively implementing the policy's knowledge-based process.[20]

72. Senator MCCAIN. Ms. Schinasi, what additional controls are needed in place to ensure the intent of the policy (evolutionary and knowledge-based process) is carried out?

Ms. SCHINASI. DOD must instill discipline and accountability into the acquisition process and ensure that practice follows policy. DOD must demand that appropriate knowledge is captured and used at critical junctures to make decisions about moving a program forward and investing more money. Our 2003 assessment of DOD's revised acquisition policy found that it included some of the controls that leading companies use to capture knowledge at the start of a program—such as holding decision reviews—but additional controls were needed. We recommended that the Secretary of Defense require program officials to demonstrate that they have captured knowledge at three key points—program start, design review for transitioning from system integration to system demonstration, and production commitment—as a condition for investing resources. In our subsequent 2006 report, we noted that, at a minimum, those controls should require program officials to demonstrate that they have achieved a level of knowledge that meets or exceeds the following criteria at each respective decision point:

Program start (Milestone B): Start of product development

- Demonstrate technologies to high readiness levels
- Ensure that requirements for the product are informed by the systems engineering process
- Establish cost and schedule estimates for product on the basis of knowledge from preliminary design using system engineering tools
- Conduct decision review for program start

Design readiness review: Beginning of system demonstration

- Complete 90 percent of design drawings
- Complete subsystem and system design reviews
- Demonstrate with prototype that design meets requirements
- Obtain stakeholders' concurrence that drawings are complete and producible
- Complete the failure modes and effects analysis
- Identify key system characteristics
- Identify critical manufacturing processes
- Establish reliability targets and growth plan on the basis of demonstrated reliability rates of components and subsystems
- Conduct decision review to enter system demonstration

[19] GAO, Defense Acquisitions: DOD's Revised Policy Emphasizes Best Practices, but More Controls are Needed, GAO–04–53 (Washington, DC: Nov. 10, 2003).

[20] GAO, Defense Acquisitions: Major Weapon Systems Continue to Experience Cost and Schedule Problems under DOD's Revised Policy, GAO–06–368 (Washington, DC: Apr. 13, 2006).

Production commitment (Milestone C): Initiation of low-rate Production

- Demonstrate manufacturing processes
- Build production-representative prototypes
- Test production-representative prototypes to achieve reliability goal
- Test production-representative prototypes to demonstrate product in operational environment
- Collect statistical process control data
- Demonstrate that critical processes are capable and in statistical control
- Conduct decision review to begin production

Over the past several years, Congress has taken legislative action to establish controls that we believe have the potential to instill more discipline into the front-end of the acquisition process and ultimately improve program outcomes. For example, the NDAA for Fiscal Year 2006 requires that before a major defense program can receive approval to start system development, the MDA must certify that the program meets specified criteria, such as:

- the technology in the program has been demonstrated in a relevant environment;
- the program is affordable when considering DOD's ability to accomplish the program's mission using alternative systems and the per unit and total acquisition costs in the context of the FYDP;
- reasonable cost and schedule estimates have been developed for system development and production; and
- appropriate market research has been conducted prior to technology development to reduce duplication of existing technology and products.

COST TRACKING SYSTEM

73. Senator MCCAIN. Secretary Young, you dispute the GAO's finding that our acquisition system is broken—and you have testified that "it is on a path to improvement"—however, in the press today we are learning that the Pentagon has found "significant concerns . . . regarding [Lockheed Martin's] ability to mitigate emerging costs and schedule issues in a timely manner . . . this undisciplined approach to program . . . diminishes the purchasing power of the Department." How can you suggest that DOD's acquisition process is not broken—and that DOD fully understands the costs for developing and buying weapon systems?

Mr. YOUNG. The specific example you cite deals with a single contractor and its compliance with standard Earned Value Management procedures. This system is one tool we use in program management, and this case is not, in my view, indicative of a systemic problem associated with the acquisition system. I take this matter very seriously and as I testified, there is a corrective action plan in place, Lockheed has agreed to it and met three of the milestones already. There are substantial financial incentives associated with meeting the milestones. One specific instance among thousands of programs, thousands of contracts and hundreds of companies does not constitute a broken acquisition system. The media and Congress have failed to focus any attention on the vast number of successfully executed and managed DOD acquisition programs which deliver extraordinary capability and develop world class technology.

74. Senator MCCAIN. Ms. Schinasi, what is the impact of this failed cost tracking system?

Ms. SCHINASI. We recently reported that the current JSF program cost estimate is not reliable; in part because it is based on the prime contractor's earned value management data and other information which has been found to be inaccurate and misleading.[21] The immediate impact of this unreliable estimate is that Congress and DOD management do not have an accurate picture of JSF current cost and schedule performance and future funding requirements. In our report, we recommended specific improvements needed to prepare a new estimate that is comprehensive, accurate, well-documented, and credible.

JSF program officials told us that they use Lockheed Martin earned value management data in creating their estimate of JSF development costs. The Defense Contract Management Agency (DCMA) identified this data as being of very poor quality, calling into question the accuracy of any estimate based on these data. In November 2007, DCMA issued a report saying that Lockheed Martin's tracking of cost and

[21] GAO, Joint Strike Fighter: Recent Decisions by DOD Add to Program Risks, GAO–08–388 (Washington, DC: Mar. 11, 2008).

schedule information at its aerospace unit in Fort Worth, TX—where the JSF program is managed—is deficient to the point where the government is not obtaining useful program performance data to manage risks. Among other problem areas, DCMA found that Lockheed Martin had not clearly defined roles and responsibilities, and was using management reserve funds to alter its own and subcontractor performance levels and cost overruns. DCMA officials who conducted the review at Lockheed Martin told us that the poor quality of the data invalidated key performance metrics regarding cost and schedule, as well as the contractor's estimate of the cost to complete the contract. In 2005, the Naval Air Systems Command (NAVAIR) raised similar concerns about Lockheed Martin's earned value system. NAVAIR officials told us that most deficiencies identified in the DCMA report have the effect of underreporting costs, and that the official program cost estimates will increase if the deficiencies are corrected.

75. Senator McCAIN. Ms. Schinasi, isn't it true that this failure to adequately track costs has reduced DOD's flexibility by causing it to cut two developmental test JSFs?

Ms. SCHINASI. Cutting two development test aircraft, especially one of the carrier variants for testing mission systems and ship suitability, reduces DOD's flexibility in completing development testing on time to support the start of operational testing and the subsequent full-rate production decision. The decision to cut two test aircraft was part of the Mid-Course Risk Reduction Plan—a risky and controversial plan put in place to replenish management reserves. Specifically, the plan reduces development test aircraft and test flights, and accelerates the reduction of the contractor's development workforce in order to restore management reserves to the level considered prudent to complete the development contract as planned and within the current cost estimate. The test community and others within DOD believe the plan puts the development flight program at considerable risk and trades known cost risk today for unknown cost and schedule risk in the future. The number of development flight tests had already been reduced twice before the Mid-Course Risk Reduction plan. Over the last 2 years, test flights have been reduced by more than 1,800 flights or 26 percent.

76. Senator McCAIN. Ms. Schinasi, what impact could this setback in testing have on the entire program?

Ms. SCHINASI. The program had originally planned to conduct development flight tests using 15 aircraft. The recent decision to reduce test aircraft to 13 (including a non-production representative prototype), cut back the number of flights, and change how some capabilities are tested will stress resources, compress time to complete testing, and increase the number of development test efforts that will overlap with the planned start of operational testing in October 2012. Test officials are concerned that capacity will be too constrained to meet schedules and adequately test and demonstrate aircraft in time to support operational testing and the full-rate production decision in October 2013. The full extent of changes and impacts from a revised test verification strategy are still evolving. Program officials reported that if test assets become too constrained, production aircraft may eventually be used to complete development testing. This would reduce the number of operational assets and delay training pilots.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

PROCUREMENT OF LPD–17 CLASS SHIPS

77. Senator COLLINS. Secretary Young, the committee recently approved the President's budget request to fund the third of seven planned DDG–1000 *Zumwalt* class destroyers in fiscal year 2009. The House, however, failed to approve the budget request for the DDG–1000 shipbuilding program and would leave only $400 million of a $2.5 billion budget request for surface combatant ship procurement in fiscal year 2009. This would amount to only a small down payment for a delayed third DDG–1000 in fiscal year 2010 or a down payment toward the procurement of unplanned DDG–51 class ships in fiscal year 2010. The House approach would mean that no destroyer of any kind would be procured or contracted for construction in fiscal year 2009 from either surface combatant shipbuilder and would basically eliminate surface combatant shipbuilding to procure an additional LPD–17 class ship for which funds were not requested in the President's budget. Can you please comment on the likely impact on shipbuilding acquisition costs, program continuity, as well as industrial base stability, workforce retention, and cost efficient production

at our surface combatant shipyards, if Congress fails to fund the procurement of the third DDG–1000 this year?

Mr. YOUNG. The failure to fully fund the third DDG–1000 ship in fiscal year 2009 would pose risk to the surface combatant shipbuilding industrial base, would pose risk to the overall shipbuilding plan, and would inject additional cost. Direct production hours for one DDG–1000 ship are about 2.5 times that of one DDG–51 restart ship. This validates DOD's experience that two to three DDG–51 destroyers need to be purchased annually to sustain the production workload base for two surface combatant shipyards. Current estimates project that two DDG–51 ships would cost more per year than one DDG–1000 follow ship. The cost per year for modified DDG–51 ships would be even higher. Several ship and vendor base issues including equipment obsolescence, main reduction gears, configuration change issues, and re-start of production lines would need to be resolved in order to award and construct additional DDG–51 class ships in the following years. If the DDG–1000 program is truncated after only two ships, the costs for the two DDG–1000 lead ships would increase by $2–4 billion according to Navy estimates, and program shutdown costs would have to be funded. It also is important to recognize that the research, development, testing, and evaluation efforts for the DDG–1000 program must continue in order to deliver two complete lead ships and to support the Dual Band Radar for the CVN 21 program. With a gap year in fiscal year 2009, as the House plan would insert, industrial base stability, workforce retention, and cost efficiency would suffer at the surface combatant shipyards regardless of whether the Navy continues DDG–1000 production in fiscal year 2010 or restarts DDG–51 production in fiscal year 2010.

78. Senator COLLINS. Secretary Young, does the DOD support congressional funding of an additional LPD–17 class ship at the expense of surface combatant shipbuilding procurement in fiscal year 2009?

Mr. YOUNG. No. The Department's position is reflected in the President's budget fiscal year 2009 submission. It represents the Department's funding requirements after balancing needs across all product lines.

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

TAX INCREASE PREVENTION AND RECONCILIATION ACT

79. Senator CHAMBLISS. Secretary Young, your office recently submitted a letter to Congress outlining impacts on the DOD of implementing Section 511 of the Tax Increase Prevention and Reconciliation Act (TIPRA) of 2005. I understand that complying with TIPRA will require DOD to modify the Defense Financial Accounting System, increase personnel requirements, and pay an additional $17 billion to DOD contractors over the next 5 years. I understand that the intent of this law is to crack down on government contractors who do not pay their taxes, but I am wondering if there will not be some unintended consequences. Although the cost to DOD is $17 billion over 5 years, I understand the reduction in the tax gap is miniscule compared to this, and also that DOD also gets no savings but is only burdened with the cost. What do you think the impact to DOD will be if this requirement is not repealed?

Mr. YOUNG. The Department is concerned that the withhold will limit the number of companies willing to enter into the government market. As a result, it will reduce competition and our access to new technologies. Also, it would significantly restrict the available cash of tax-compliant companies that would otherwise be used to develop new technologies. In addition, the withhold will apply to payments made by third parties such as those made to banks under the government commercial credit card program. The banks processing payments under this commercial credit card program have already informed the government that they do not intend to implement the section 511 withholds on behalf of the government. Therefore, the Department will lose its ability to use the commercial purchase card and other third party payment mechanisms and will have to bring these small purchase functions back in-house. This will exacerbate the Department's current procurement personnel staffing shortages by the additional workload that would result from the alternate use of purchase orders or other paper intensive processes.

80. Senator CHAMBLISS. Secretary Young, where do you envision the money coming from to pay the additional costs since it is doubtful Congress will be appropriating more money specifically for this?

Mr. YOUNG. The additional costs associated with changing DOD financial management systems and processes will be borne by either the Defense Finance and Accounting Service (DFAS) or the military departments and other defense agencies (ODAs), depending on the systems. Since DFAS is a working capital fund organization, it would make the necessary changes to the systems it owns or controls and increase the costs to its customers. The cost to modify the systems owned or controlled by the military departments and ODAs would come from appropriated funds. In addition, commercial vendors are expected to pass on the incremental cost of goods and services due to added cost for commercial vendors to modify their systems and processes. These costs will also be passed on to the military departments and ODAs.

81. Senator CHAMBLISS. Secretary Young, will there be an impact on force readiness due to the extra funds that will have to be expended to comply with this law?

Mr. YOUNG. Yes. The cost to the contractors to comply with this law will be passed to the government through increased costs of systems, spares, supplies and services purchased by the Department. Without additional funds to offset either these increases or the additional costs the Department will have to bear to implement this additional withholding requirement, the Department will have fewer funds to support our warfighters.

82. Senator CHAMBLISS. Secretary Young, while the 3 percent withholding requirement does not go into effect until 2011, when does the DOD expect to change its regulations and financial management systems to become compliant with TIPRA?

Mr. YOUNG. The Internal Revenue Service (IRS) is developing implementing regulations to establish the process for section 511 withholds. Once the IRS issues the implementing regulations, the requirements will be known, and DOD can begin modifying its regulations and financial management systems. If DOD can begin these modifications in fiscal year 2009, we would expect to have them completed in time to be in compliance when section 511 goes into effect on January 1, 2011.

83. Senator CHAMBLISS. Secretary Young, how do you expect TIPRA to affect future contracts as well as small businesses that are pursuing military contracts?

Mr. YOUNG. The Department is concerned the withhold will limit the number of companies willing to enter into the government market, thereby reducing competition and access to new technologies. We believe many small businesses will no longer do business with the government due to the potential cash flow problems created by TIPRA of 2005.

MILITARY HOUSING PRIVATIZATION INITIATIVE

84. Senator CHAMBLISS. Secretary Young, your responsibilities as Under Secretary for Acquisition, Technology, and Logistics include oversight of installation and environmental issues within DOD. Over the past year I have been heavily involved with an issue relating to DOD's military housing privatization initiative (MHPI) which falls within this area. To be honest, we have four extremely successful housing privatization projects in the State of Georgia. However, we have a disaster at Moody Air Force Base. The Air Force has four projects known as the American Eagle projects at four different Air Force bases. Work has ceased at all these projects and they are years behind schedule and, collectively, hundreds of millions of dollars in debt. Specifically at Moody Air Force Base, approximately $9 million has been owed to around 30 subcontractors for over a year and at least one of these subcontractors has lost both his hope and his business as a result of this failed project.

As I have looked at this, I believe there is enough blame to go around and that everyone involved, the bondholders, the project owner, but also the Government, made mistakes here that should not have been made, could have been avoided, and need to be prevented in the future.

Senator Mark Pryor and I included legislation in this year's NDAA to increase DOD's oversight process in this area and require closer attention to the way these projects are designed, executed, and requiring the Services to more closely oversee the projects so that problems are detected and corrected early on.

It greatly concerns me that, in the case of the project at Moody, there was not a single government person on site monitoring the project, that the government representative on site had essentially no authority, and that after being aware of problems with the Moody project for several years, that the Air Force either did not have the necessary mechanisms or did not use the mechanisms they had to either correct the problem or replace the project owner in a timely fashion. And obviously it con-

cerns me greatly that we are almost 4 years into this project and that we have essentially no houses built, are millions of dollars in debt, and that there are small businesses suffering as a result. Above all, I'm concerned that there are thousands of airmen moving to Moody Air Force Base and that they may not have a place to live. Are you aware of this issue, and what is your assessment?

Mr. YOUNG. Since the MHPI was enacted in the NDAA for Fiscal Year 1996, the military Services have awarded 87 housing privatization projects. Over 174,000 housing units have been privatized and more than 130,000 previously inadequate units will be revitalized during the initial 10 years of the program. DOD's $2 billion contribution has generated $24 billion in upfront private sector housing construction.

One developer, American Eagle, currently owns five projects and is performing poorly. American Eagle is comprised of Carabetta Enterprises and the Shaw Group. In November 2007, American Eagle sold its Navy Northwest, WA, project to Forest City Enterprises, Inc., who assumed the role of general partner. American Eagle is the general partner in one Army project at Fort Leonard Wood, MO, which is stable and in the process of being sold to another developer. This project sale is expected to close in June 2008. American Eagle owns four Air Force projects at Hanscom Air Force Base, MA; Patrick Air Force Base, FL; Little Rock Air Force Base, AR; and Moody Air Force Base, GA. At the four Air Force installations, American Eagle is behind its construction schedule, behind in paying subcontractors, and in default under private and Air Force project documents. The bondholders have stopped funding construction draws while the projects are sold to another developer. Execution of the purchase and sale agreement for the Air Force projects is expected in fall 2008.

The Air Force did monitor and was aware of the Moody project deficiencies and reported them to the project owner and bondholders as early as 2005. Since the Government was not a party to the private sector contract between the Moody project owner and its contractors, the government had no authority to intervene in those contracts. The Air Force sent cure notices to the project owner in August 2007 and continued to work closely with the bondholders regarding the project owner's deficiencies. The Moody project was put into receivership in late summer 2007, and all action on the project requires the court's approval. The Air Force continues to work the project owners and the bondholders for a consensual sale of the Moody project to a new owner by the fall 2008. As part of the consensual sale, Air Force is working with the prospective project owners to properly size the project to meet future Air Force housing needs and ensure adequate housing is available for the military families moving to the installation.

The current MHPI authorities provide a creative and effective solution to addressing the shortage of quality family rental housing for servicemembers and their families. The proposed MHPI authority amendments contained in Section 2803 of S. 3001 would impose undesirable and unnecessary additional government oversight and reporting on MHPI projects, contrary to the privatization model and the legislative intent of the original authorizing language. Under the original MHPI, private sector developers and lenders develop, maintain, and operate the privatized housing and resolve issues when they arise. Market forces drive contractor performance and the primary enforcement mechanism is the ability of the military members to choose where to live. If a housing project fails to meet performance expectations lenders have the option, with the approval of the Services, to replace the owner with a more viable entity. The American Eagle problems have been unfortunate, but the MHPI has enabled the military Services to revitalize their housing significantly faster than they would have under traditional military construction.

85. Senator CHAMBLISS. Secretary Young, can you give me your assurances that you will review DOD's policies in this area to ensure yourself that DOD has the proper oversight policies in place to protect the Government's interests and ensure that our soldiers, sailors, airmen, and marines receive the quality housing they deserve in a timely manner through housing privatization initiative projects such as these?

Mr. YOUNG. The MHPI is key to the Department's efforts to ensure that servicemembers and their families have access to high quality, safe, secure, and affordable housing. The Department continually reviews its policies regarding military housing privatization, to ensure that the Department maintains an effective oversight program for MHPI project performance. Current Department policy includes detailed upward reporting by the military Services, completion of a biannual program evaluation plan (PEP report), and mandatory project reviews and approvals by the Office of the Deputy Under Secretary of Defense for Installations and Environment. In addition, the Department's quarterly reports and biannual PEP reports

are submitted to the congressional defense committees for ongoing congressional oversight. The difficulties with American Eagle projects were identified as early as the MHPI PEP Report #10, which was submitted to Congress on March 30, 2006. The Department is willing to work with the congressional defense committees to improve these areas of our oversight.

[The report referred to follows:]

United States Government Accountability Office

GAO

Report to Congressional Committees

May 2008

DEFENSE CONTRACTING

Post-Government Employment of Former DOD Officials Needs Greater Transparency

GAO

Accountability * Integrity * Reliability

GAO-08-485

GAO
Accountability-Integrity-Reliability

Highlights

Highlights of GAO-08-485, a report to congressional committees

Why GAO Did This Study

Department of Defense (DOD) officials who serve in senior and acquisition positions and then leave for jobs with defense contractors are subject to the restrictions of post-government employment laws, in order to protect against conflicts of interest. Congress required GAO to report on employment of such officials by contractors who received more than $500 million in DOD's 2005 contract awards. In response, this report (1) provides information on how many former DOD employees worked for contractors in 2006 and estimates how many worked on contracts that were related to their former agencies or to their direct responsibilities and (2) identifies the practices used to monitor restrictions and information challenges in monitoring post-DOD employment. To do this work, GAO matched data from DOD for all employees who left DOD over a 6-year period with data from the Internal Revenue Service (IRS) and from 52 contractors; conducted surveys; and interviewed DOD and contractor officials.

What GAO Recommends

To achieve greater transparency, GAO recommends that DOD consider what contractor disclosure and certification information is needed on former DOD officials to ensure compliance with applicable post-government employment restrictions. DOD concurs with GAO's recommendation.

To view the full product, including the scope and methodology, click on GAO-08-485. For more information, contact Cristina Chaplain at (202) 512-4841 or chaplainc@gao.gov.

May 2008

DEFENSE CONTRACTING

Post-Government Employment of Former DOD Officials Needs Greater Transparency

What GAO Found

In 2006, 52 contractors employed 2,435 former DOD senior and acquisition officials who had previously served as generals, admirals, senior executives, program managers, contracting officers, or in other acquisition positions which made them subject to restrictions on their post-DOD employment. As the table shows, most of the 2,435 former DOD officials were employed by seven contractors. On the basis of a stratified random sample of contractor-supplied information, GAO estimates that at least 422 former DOD officials could have worked on defense contracts related to their former agencies and that at least nine could have worked on the same contracts for which they had oversight responsibilities or decision-making authorities while at DOD. The information GAO obtained from contractors was not designed to identify violations of the restrictions. While contractors could have employed quite a few former DOD officials on assignments related to their prior DOD positions, there could be appropriate justification for each of these situations.

Contractors with Most Employment of Former DOD Senior and Acquisition Officials in 2006

Contractor	Number of former officials employed	Percentage of post-DOD employment
Science Applications International Corporation	263	10.8%
Northrop Grumman Corporation	260	10.7%
Booz Allen Hamilton, Inc.	243	10.0%
L3 Communications Holding, Inc.	241	9.9%
Lockheed Martin Corporation	221	9.1%
General Dynamics	207	8.5%
Raytheon Company	146	6.0%
Subtotal	1,581	64.9%
Total, all 52 contractors	**2,435**	**100%**

Sources: GAO analysis, DOD and IRS data.

Most of the contractors who responded to our survey reported using a range of practices to ensure awareness and compliance with post-government employment restrictions, although GAO's request proved challenging for contractors to provide accurate information identifying their former DOD officials. According to the surveyed contractors, they can identify former DOD officials with post-government employment restrictions and track their assignments during their cooling-off periods. However, GAO's analysis found a significant under-reporting of the contractors' employment of former DOD officials. Specifically, contractor-supplied data showed they employed 1,263 former DOD officials in 2006, while IRS data showed the contractors employed 2,435. New post-government employment requirements enacted in January 2008 are likely to make written ethics opinions for former DOD officials more readily available to contractors. DOD also must now keep ethics opinions in a central database. This information was not designed to provide a mechanism for DOD to effectively monitor former DOD officials' post-government employment compliance after they begin working for contractors on specific contracts.

Contents

Letter		1
	Results in Brief	4
	Background	6
	Contractors May Employ a Substantial Number of Former DOD Senior and Acquisition Officials in Assignments Related to Their Former DOD Agencies or Their Direct Responsibilities	9
	Contractors Report Using a Range of Practices to Ensure Compliance with Post-Government Employment Restrictions, but Face Challenges in Providing Information for Monitoring Such Employment	15
	Conclusions	23
	Recommendations for Executive Action	24
	Agency Comments	24
Appendix I	**Scope and Methodology**	27
Appendix II	**Comments from the Department of Defense**	36
Appendix III	**Contractors' Employment of Former DOD Senior and Acquisition Officials in 2006**	38
Appendix IV	**Questionnaire for Survey of Contractors on Post-Government Employment Job Histories for Former DOD Officials**	41
Appendix V	**Results of Survey of Contractors on Practices to Ensure Awareness of and Compliance with Post-Government Employment Restrictions**	48
Appendix VI	**GAO Contact and Staff Acknowledgments**	63

Tables

Table 1: Analysis of Contractors' Employment in 2006 of Former DOD Personnel 10
Table 2: Contractors with the Most Employment of Former DOD Senior and Acquisition Officials in 2006 11
Table 3: Characteristics of 52 Contractors Post-Government Employment, by Former DOD Position (Acquisition or Senior-Level Officials) 12
Table 4: Characteristics of Contractors' Post-Government Employment, by Former DOD Military or Civilian Service and Organization 13
Table 5: Contractor Responses on Practices to Ask Applicants If They Are Former DOD Military or Civilian Employees, by Category of Contractor Job Position 16
Table 6: Contractor Responses Regarding Asking Employees for a Copy of the DOD Ethics Advice Letter, by Contractor Job Category 17
Table 7: Contractor Responses on Practices to Monitor Compliance with Employees Post-Government Employment Restrictions 18
Table 8: Contractor Responses on Post-Government Employment Training Practices 19
Table 9: Analysis of Sufficiency of Contractor Information for Monitoring Compliance with Post-Government Employment Restrictions 20
Table 10: Contractors Reviewed by GAO, by Value of Total Contract Awards from DOD in Fiscal Year 2005 28
Table 11: Design for GAO's Statistically Based Random Sample to Survey Contractors on DOD Post-Government Employment Job Histories 32
Table 12: Contractors' Post-Government Employment of Former DOD Senior and Acquisition Officials in 2006 38
Table 13: Summary of Demographic Information for Contractors Employing More Than 50 Former DOD Senior-Level and Acquisition Officials 40

Abbreviations

DOD	Department of Defense
DPAP	Defense Procurement and Acquisition Policy
EDS	Electronic Data Systems Corporation
FAR	Federal Acquisition Regulation
IRS	Internal Revenue Service
SAIC	Science Applications International Corporation
SES	Senior Executive Service
SSN	Social Security number

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United States Government Accountability Office
Washington, DC 20548

May 21, 2008

Congressional Committees

Each year, civilian and military personnel leave the Department of Defense (DOD) and go to work for contractors that do business with DOD—sometimes the same contractors they were working with before leaving DOD. Officials who serve in senior or acquisition positions[1] and then leave DOD for jobs with defense contractors are subject to laws restricting their new employment activities.[2] The laws seek in part to protect against conflicts of interest—such as former DOD officials using their DOD contacts to the benefit of the contractor to the detriment of the government. The laws also seek to promote public trust in the integrity of the government's decision-making process, which facilitates the award of contracts worth hundreds of billions of dollars each year. Violation of these laws may result in criminal or civil penalties for former DOD officials and, in some circumstances, the defense contractors that employ them.

Beginning as early as 1969, efforts to maintain public trust and monitor compliance with post-government employment restrictions have included laws requiring certain former DOD officials to self-report their employment with defense contractors for up to 2 years after leaving DOD and requiring contractors to report annually on the employment of these former officials to various DOD ethics offices. Several of our reports on these past strategies to make post-DOD employment with defense contractors more transparent to DOD, the most recent in 1990, found problems with the implementation and enforcement of those reporting requirements, and questioned the extent to which former DOD officials or defense contractors complied with them and the effectiveness of DOD's

[1] For purposes of this report, former DOD officials include senior military officials such as generals, admirals (ranked O-7 and above) and senior civilians in the Senior Executive Service (SES) or executive-level appointees. Former DOD officials also refers to military (grades O-3 to O-6: captain, major, lieutenant colonel and colonel –Army, Air Force, and Marine Corps– lieutenant, lieutenant commander, commander, and captain–Navy) and civilian (from grades GS-12 through GS-15) acquisition officials who performed such jobs designated as part of DOD's acquisition workforce, including program managers, deputy program managers, and contracting officers.

[2] 18 U.S.C. § 207 and 41 U.S.C. § 423(d).

monitoring.[3] Congress repealed these reporting requirements in 1995 when enacting new provisions to impose a 1 year compensation ban for former procurement officials with certain contractors and provide ethics advice and counseling concerning applicable employment restrictions for subsequent work for contractors.[4]

More recently, our work and the work of others have raised concerns that the monitoring of former DOD officials' compliance with post-government employment restrictions may be inadequate.[5] Congress included a provision in the John Warner National Defense Authorization Act for Fiscal Year 2007 requiring us to report on recent employment of former DOD officials by major defense contractors.[6] In response, this report (1) provides information on how many former DOD military and civilian personnel worked for major defense contractors in 2006 and an estimate of how many of these were former DOD senior or acquisition officials who worked on defense contracts for these employers that were the responsibility of their former agency or their direct responsibility at DOD and (2) identifies the practices used to monitor compliance with post-government employment restrictions and the information challenges that contractors and DOD face in monitoring the movement of former DOD employees to defense contractors.

To conduct this work and based on our analysis of DOD's fiscal year 2005 contract award data, we focused on 52 contractors we identified for review of post-government employment of former DOD officials. To determine how many former DOD officials worked for these 52

[3] GAO, *DOD Revolving Door: Processes Have Improved but Post-DOD Employment Reporting Still Low*, GAO/NSIAD-89-221 (Washington, D.C.: Sept. 13, 1989) and *DOD Revolving Door: Few Are Restricted from Post-DOD Employment and Reporting Has Some Gaps*, GAO/NSIAD-90-103 (Washington, D.C.: Feb. 27, 1990).

[4] 41 U.S.C. § 423(d).

[5] GAO, *Defense Ethics Program: Opportunities Exist to Strengthen Safeguards for Procurement Integrity*, GAO-05-341 (Washington, D.C.: Apr. 29, 2005). See also Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), *Report of the Defense Science Board Task Force on Management Oversight in Acquisition Organizations* (Washington, D.C.: Mar. 2005) and Statement of Paul J. McNulty, United States Attorney Eastern District of Virginia, before the Committee on Armed Services Subcommittee on Airland, United States Senate (Washington, D.C.: Apr. 14, 2005).

[6] Section 851 required us to report on employment during the most recent year for which data are available which, for purposes of this report, is 2006. Section 851 also defined major defense contractor to include any company that received more than $500 million in contract awards from DOD in fiscal year 2005. Pub. L. No. 109-364 § 851(2007).

contractors, as agreed with your offices, we matched personnel data from DOD for all military and civilian employees who left DOD service in a 6 year period since January 2001 (including about 35,000 former DOD senior and acquisition officials[7]) with (1) taxpayer data from the Internal Revenue Service (IRS) and (2) personnel data from the contractors on individuals they directly compensated in 2006 as employees, independent contractors, consultants, or members of their boards of directors. To estimate how many former DOD officials subject to post-government employment restrictions these contractors may have assigned to work on DOD contracts related to their former DOD positions, we drew a stratified random sample of former DOD officials for whom contractor-provided information indicated direct employment in 2006 and used a questionnaire to obtain job histories (both DOD and contractor) from their contractor employers.

To identify practices major defense contractors report using to comply with post-government employment restrictions, we surveyed all 52 contractors on personnel assignment record-keeping, practices for identifying, screening, and tracking former DOD officials, and training for employees on post-government employment restrictions. We analyzed responses from 47 contractors who responded to the survey, but we did not corroborate or test contractors' self-reported practices for effectiveness. To identify monitoring challenges, we analyzed the extent to which contractors were able to submit sufficient information to us on how many former DOD officials worked for them in 2006 and provide us with copies of DOD's written ethics opinions and related job histories for a random sample of former DOD officials. It should be noted that there is no statutory or regulatory requirement that a contractor collect, have, or maintain this information. We also met with DOD ethics and procurement policy officials in the Office of the Secretary of Defense to discuss DOD's practices and information challenges for monitoring former DOD officials employed by defense contractors. We conducted this performance audit from November 2006 through May 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit

[7] See footnote 1 on how we defined DOD senior and acquisition officials for purposes of this report.

objectives. Appendix I provides additional details on our scope and methods, including a list of the 52 contractors reviewed.

Results in Brief

In 2006, 52 major defense contractors employed 86,181 of the 1,857,004 former military and civilian personnel who had left DOD service since 2001. This number includes 2,435 former DOD officials who were hired between 2004 and 2006 by one or more of the contractors and compensated in 2006, according to our match of DOD and IRS data. These officials had previously served as generals, admirals, senior executives, program managers, contracting officers, or in other acquisition positions which made them subject to restrictions on their post-DOD employment. We found 1,581 of the 2,435 former DOD officials—about 65 percent—were employed by seven of the contractors: Science Applications International Corporation (SAIC), Northrop Grumman, Lockheed Martin Corporation, Booz Allen Hamilton, Inc., L3 Communications Holding, Inc., General Dynamics, and Raytheon Company. In addition, to estimate how closely related work assignments of former DOD officials were to their previous assignments at DOD, we examined in greater detail the job histories of a randomly selected sample of former DOD senior and acquisition officials employed by the contractors.

While there may be proper justification for their post-government employment with a contractor, when we extrapolate from this sample, we estimate that at least 422 individuals' post-government employment could have been working on defense contracts under the responsibility of their former agency, office, or command. In addition, we estimate that at least nine individuals could have not been performing services under the same defense contracts for which they had program oversight responsibilities or decision-making authorities while at DOD. The information we obtained from contractors was not designed to identify post-government employment improprieties (such as whether required duration of the restrictions—cooling-off period—had not passed) and contractors provided justification for the employees' work on the contracts for those in the sample. Nonetheless, our results indicate that defense contractors may employ a substantial number of former DOD officials on assignments related to their former DOD agencies or their direct responsibilities.

Most of the contractors who responded to our survey reported using a range of practices to ensure awareness of and compliance with post-government employment restrictions, although we found contractors were challenged to provide accurate information identifying their former DOD officials or copies of ethics advisory letters. According to most of the

contractors we surveyed, their practices allow them to identify former DOD officials with restrictions and to track their assignments for the duration of their cooling-off periods. For example, before making permanent job offers, 38 of the 47 contractors reported asking job applicants whether they were former DOD military or civilian officials. If the applicants were former DOD employees, 34 contractors said they asked for a copy of the written DOD ethics advice describing their post-government employment restrictions.

However, our analysis found a significant under-reporting of the contractors' employment of former DOD officials. Specifically, contractor data provided to us showed they employed 1,263 individuals in 2006 who matched our criteria as former DOD senior and acquisition officials, while our analysis of IRS data showed the contractors employed 2,435 former DOD senior and acquisition officials in 2006, or almost twice as many. For DOD's part, it is not required nor does it have a mechanism for monitoring former senior and acquisition officials when they begin their new jobs with defense contractors. In addition, according to DOD officials, its practice of providing written ethics opinions to senior and acquisition officials who request them provides only limited transparency on such individuals who may be working to the benefit of contractors responding to DOD's contract solicitations. New requirements enacted in the National Defense Authorization Act for Fiscal Year 2008 are likely to make written ethics opinions for former DOD officials more readily available to contractors. However, it should be noted that these requirements were not intended to provide a mechanism for DOD to monitor its former officials after they begin working for defense contractors.

Given (1) the numbers of former DOD officials who are working for contractors, (2) the estimated numbers of those who could be working on defense contracts related to their prior agencies or to their direct responsibilities, and (3) limitations in the processes currently being used to ensure there are no conflicts, we are recommending that DOD consider the relevant recent statutory changes and determine if additional reporting or other requirements should be imposed on contractors to guard against violations of the government's post-employment rules.

We provided a draft of this report to DOD for comment. In its written comments, DOD concurs with the recommendation. See appendix II for DOD's comments in their entirety.

Background

Congress has long been concerned about the movement of government officials from DOD to private employers who do business with their former agencies and has passed laws that place limitations on the employment of former government officials. The laws include penalties for violations by the former government employee and civil or administrative penalties for the contractors who employ them. There are acknowledged benefits to employing former government officials for both DOD and defense contractors; for example, former DOD officials bring with them the knowledge and skills in acquisition practices they have developed at DOD which also benefit DOD when communicating with these contractor personnel. However, a major concern with post-government employment has been that senior military and civilian officials and acquisition officials working for defense contractors immediately after leaving DOD could lead to conflicts of interest and affect public confidence in the government by creating the following perceptions, among others:

- DOD personnel who anticipate future employment with a defense contractor might be perceived as using their position to gain favor with the contractor at the expense of the government, and
- former DOD personnel who work for a defense contractor might be perceived as using their contacts with former colleagues at DOD to the benefit of the defense contractor and to the detriment of the public.

Implementation of Post-Government Employment Laws

The principal restrictions concerning post-government employment for DOD and other federal employees after leaving government service are found in 18 U.S.C. § 207 (post-employment conflict of interest) and 41 U.S.C § 423 (restrictions on former officials' acceptance of compensation from a contractor). Importantly, the laws do not prohibit an individual from working on a contract under the responsibility of the official's former agency or even a contract that was under the official's direct responsibility if the appropriate cooling-off periods are met or if the former officials restrict their activities to behind-the-scenes work and do not represent their new company to their former DOD employer.[8] The laws

[8] As implemented under 5 C.F.R. § 2637.201, section 207 permits DOD and other government personnel to take a job providing behind-the-scenes assistance in connection with their contractor employers' contacts with their former agencies. For example, the law allows a former DOD official who administered a particular contract during government service to assist a defense contractor with a matter involving the contract as long as he or she does not have direct contact with the agency.

are complex, and brief summaries here are intended only to provide context for the issues discussed in this report.

- The title 18 U.S.C. § 207 provision generally prohibits an individual from representing a contractor to their former agency on particular matters involving specific parties that they handled while working for the federal government; for example, a specific defense contract.[9] The law restricts representing the contractor to the official' s former agency for defined cooling-off periods that vary according to the former official's involvement and seniority (i.e., high-level) for example:
  - former personnel are permanently barred from representing their new employer to their former agencies for matters on which they were personally and substantially involved;
  - even if the officials were not directly involved in the matter, former personnel may not represent their new employer to their former agency on matters that were pending under their official responsibility in their last year of service for 2 years after leaving federal service; and
  - former senior-level officers and employees may not contact their former agency on particular government matters (such as a contract) that is pending or is of substantial interest to the former agency for 1 year after leaving federal service.

- The 41 U.S.C. § 423 provision more narrowly applies to the work former DOD and other government acquisition officials may do after leaving federal service.[10] The law restricts former DOD acquisition officials from accepting compensation from a defense contractor during a 1 year cooling-off period. Specifically, this provision prohibits employment with a contractor if the acquisition official performed certain duties at DOD involving the contractor and a contract valued in excess of $10 million. However, the law permits former acquisition officials to accept employment from "any division or affiliate of a contractor that does not produce the same or similar products or services" that were produced under the contract.[11]

[9] 18 U.S.C. § 207.

[10] 41 U.S.C. § 423.

[11] 41 U.S.C. § 423(d)(2) and Federal Acquisition Regulation (FAR) 3.104-3(d)(3).

The laws establish penalties for individuals and contractors who do not comply with the restrictions. [12]

High-Profile DOD Cases Illustrate Importance of Ethics Issues

Recent high-profile cases involving former senior DOD officials' violations of these laws or related conflict of interest law on seeking post-government employment with contractors have resulted in serious consequences for both the officials and their defense contractor employers. Examples are as follows:

- In July 2007, a retired Navy rear admiral pleaded guilty to a charge of violating 18 U.S.C. § 207. The former admiral admitted to signing a major contract proposal and cover letter on behalf of his new contractor employer and sending it to his former Navy command in San Diego within the 1-year cooling-off period. In his plea, the former officer admitted that his intent in sending the letter was to influence the Navy's decision and obtain the contract award for his new company. The former admiral was sentenced to a year's probation and fined $15,000. In response to the conflict of interest, the Navy also eliminated the contractor's bid before awarding the contract.

- In 2006, the Boeing Company was fined $615 million and had a lease contract valued at $20 billion canceled, in part, due to the failure of Ms. Darleen Druyun, a former senior Air Force procurement officer, to obey conflict of interest laws that prohibit officials from continuing to participate in work with a company while pursuing future employment. Specifically, when she was working for the Air Force, Ms. Druyun negotiated a job with Boeing for her daughter, son-in-law, and herself, while Boeing was seeking a $20 billion contract to lease tanker aircraft to the Air Force. Ms. Druyun served a prison sentence for the violations, and the Boeing Company's Chief Financial Officer pleaded guilty to aiding and abetting fraud and was sentenced to 4 months in prison, fined $250,000, and given 200 hours of community service.

[12] For example, penalties and injunctions of 18 U.S.C. § 207 are codified in 18 U.S.C. § 216. If convicted, a person violating § 207 may receive a civil fine of up to $50,000 and possible incarceration. Under 41 U.S.C. § 423(e)(2), a contractor who knowingly hires a former acquisition official in violation of section 423(d) is subject to a civil penalty of up to $500,000, plus twice the amount received for the prohibited conduct. In addition, the agency may initiate suspension or debarment proceedings against the contractor, cancel the procurement if a contract has not been awarded, disqualify the offeror, or take other action as appropriate. 41 U.S.C. § 423(e)(3)(A)(iii).

Contractors May Employ a Substantial Number of Former DOD Senior and Acquisition Officials in Assignments Related to Their Former DOD Agencies or Their Direct Responsibilities

About 86,000 military and civilian personnel who had left DOD service in a 6 year period since 2001 were employed in 2006 by the 52 major defense contractors, including 2,435 former DOD officials who were senior civilian executives, generals, admirals, and acquisition officials including program managers, deputy program managers, and contracting officers. This latter group of contractor employees, hired between 2004 and 2006, served at DOD in positions that made them subject to post-government employment restrictions. Contractors' employment of former DOD officials was highly concentrated—1,581 former DOD officials were employed by seven of the 52 contractors. To estimate how closely related work assignments of former DOD officials were to their previous assignments at DOD, we examined in greater detail the job histories of a randomly selected sample of former DOD senior and acquisition officials employed by the contractors. While there may be proper justification for their post-government employment with a contractor, on the basis of this sample we estimate that at least 422 individuals could have been working on defense contracts directly related to their former DOD agency and we estimate at least nine could have been working on the same defense contracts for which they had program oversight responsibilities or decision-making authorities while at DOD. The information we analyzed to make this estimate was not designed to identify, nor should this estimate be used to suggest, that we found any violations of the restrictions on post-government employment. Moreover, contractors provided justification for the former government employees in our sample to work on the contracts. However, the estimated number of former DOD officials who could have worked on defense contracts related to their prior agencies or to their prior direct responsibility indicates why there is concern over how contractors monitor their former DOD employees.

Contractors' Employment of Former DOD Officials in 2006

The 1,857,004 military and civilian employees who left DOD service over 6 years since 2001 included 35,192 who had served in the type of senior or acquisition official positions that made them subject to post-government employment restrictions if they were to subsequently be hired by defense contractors. As shown in table 1, our analysis of the major defense contractors' employment found that contractors employed 86,181 former DOD military and civilian personnel in 2006. This tally includes 2,435 former senior-level and acquisition officials who one or more of the contractors hired since 2004 and employed in 2006.

Table 1: Analysis of Contractors' Employment in 2006 of Former DOD Personnel

Category of former DOD personnel	Number of personnel who left DOD service from 2001 through 2006	Number employed by contractors
Military and civilian senior or acquisition officials subject to post-government employment restrictions	35,192	2,435
All other military and civilian employees	1,821,812	83,746
Total	**1,857,004**	**86,181**

Sources: GAO analysis; DOD and IRS data.

Although the number of former DOD senior-level and acquisition officials employed in 2006 varied greatly across the 52 defense contractors, as shown in table 2, post-DOD employment was highly concentrated at seven contractors—Science Applications International Corporation, Northrop Grumman Corporation, Lockheed Martin Corporation, Booz Allen Hamilton, Inc., L3 Communications Holding, Inc., General Dynamics, and Raytheon Company. These contractors accounted for about 65 percent of the former DOD senior and acquisition officials hired at the 52 companies and for over 40 percent of the value of contract awards for the 52 contractors. Employment of former DOD senior and acquisition officials at the remaining 45 contractors was much less concentrated. Specifically, in 2006, employment of the former DOD officials totaled 10 or fewer at 24 of the contractors, and 4 of these contractors did not employ any former DOD senior or acquisition officials in 2006. Appendix III presents more detail on the employment of former DOD senior and acquisition officials in 2006 for each of the 52 contractors.

Table 2: Contractors with the Most Employment of Former DOD Senior and Acquisition Officials in 2006

(Dollars in millions)

Contractor	Value of DOD contract awards in fiscal year 2005	Number of former DOD senior and acquisition officials employed	Percentage of total post- government employment
Total, all 52 contractors	**$142,833**	**2,435**	**100%**
SAIC	$2,796	263	10.8%
Northrop Grumman Corp.	13,512	260	10.7%
Booz Allen Hamilton, Inc.	1,163	243	10.0%
L3 Communications Holding, Inc.	4,714	241	9.9%
Lockheed Martin Corporation	19,447	221	9.1%
General Dynamics	10,641	207	8.5%
Raytheon Company	9,109	146	6.0%
Total	**$61,382**	**1,581**	**64.9%**

Sources: GAO analysis ; DOD and IRS data.

Note: Individual percentages do not equal the total due to rounding.

Contractors Employed More Former DOD Acquisition Officials Than Senior Officials; Other Post-Employment Characteristics More Evenly Divided

To obtain an understanding of the characteristics of the major defense contractors' employment of former DOD senior and acquisition officials in relationship to these officials' prior DOD positions—i.e., military or civilian, senior-level, or acquisition-related, and DOD employer (such as Air Force or Army)—we analyzed contractor employment at the 52 companies to look for significant differences, if any, across categories related to the officials' former DOD positions.

As shown in table 3, of the total former DOD officials that the contractors employed in 2006, we found there were nearly five times as many former acquisition officials (2,021 individuals) as former senior officials (414 individuals). In their former DOD positions, these 2,021 acquisition officials served in key procurement-related positions—such as program manager, deputy program manager, or contracting officer—and generally had the type of critical responsibilities, relationships, and influence that characterize DOD's business interactions with its contractors.

Table 3: Characteristics of 52 Contractors Post-Government Employment, by Former DOD Position (Acquisition or Senior-Level Officials)

Former DOD position	Number employed by contractors in 2006	Percentage of total employed by contractors in 2006
Acquisition officials		
Civilian officials (equivalent to GS-12 to GS-15 positions)	854	35.1%
Military officers (officer ranks O-3 to O-6)[a]	1,167	47.9%
Subtotal	**2,021**	**83.0%**
Senior officials		
Senior civilians (SES, including consultants and advisors)	237	9.7%
Senior military officers[a]	177	7.3%
Subtotal	**414**	**17.0%**
Total	**2,435**	**100.0%**

Sources: GAO analysis; DOD and IRS data.

[a]Military officer ranks O-3 to O-6 are as follows: captain, major, lieutenant colonel and colonel (Army, Air Force, and Marine Corps); lieutenant, lieutenant commander, commander, and captain (Navy). Senior military officers are the various flag officer ranks of generals and admirals.

Also shown in table 3, in 2006 the contractors employed 414 former senior DOD officials. Our analysis of these senior officials' DOD positions before their post-government employment with the contractors found they had served in a range of high-level positions—including generals, admirals, and civilian senior executives. As such, in their former positions, these DOD senior officials had served in key positions that could influence DOD's mission-related decision-making.

We also found contractors' post-DOD employment was almost evenly divided across former military and civilian officials, as shown in table 4. In addition, most of the former DOD officials employed by the contractors in 2006 had previously served in positions at the Air Force and Navy, followed by those who had previously served in Army positions.

Table 4: Characteristics of Contractors' Post-Government Employment, by Former DOD Military or Civilian Service and Organization

Former DOD officials' employer	Number who served in military positions before contractor employment in 2006	Number who served in civilian positions before contractor employment in 2006	Total contractor employment of former DOD officials in 2006	Percentage of total contractor employment in 2006 of former DOD officials
Air Force	527	201	728	29.9%
Army	255	301	556	22.8%
Navy	436	336	772	31.7%
Marine Corps	126	14	140	5.7%
Defense agencies	0	239	239	9.8%
Total	**1,344**	**1,091**	**2,435**	**100%**

Sources: GAO analysis; DOD and IRS data.

Note: Individual percentages do not equal the total due to rounding.

Estimates Are That Many Former DOD Officials Could Have Worked on Contracts Related to Their Prior DOD Agencies and a Few Could Have Worked on Contracts Related to Their Prior Direct Responsibilities

To provide information about former DOD officials work assignments with contractors, we analyzed job histories and work assignments for a stratified random sample of former DOD officials to determine if these individuals worked on defense contracts or programs for which they had direct responsibility at DOD or which were the responsibility of their former DOD agency, office, or command. We estimate that many former DOD officials could have been working on defense contracts under the responsibilities of their prior DOD agencies and a few could have been working on the same defense contracts for which they had program oversight responsibilities or decision-making authorities while working at DOD.

It is important to keep in mind, however, that post-government employment in these instances could be lawful depending on the role the employee had with the government, the role the employee had with the contractor, and the length of time between government service or work relating to the contract and the private employment. Also, contractors responding to our survey were self-reporting on a sensitive issue dealing with circumstances that could indicate potential conflicts of interest. As such, the information we sought from contractors was not designed or expected to elicit specific cases of post-government employment violations, nor did we identify any. Further, contractors provided justifications for the former DOD officials in our sample working on the defense contracts.

Nevertheless, the results provide insight on the estimated magnitude of former officials' post-government employment with major defense contractors tied to their prior agencies and direct responsibilities. In our view, the results also indicate the importance of careful monitoring to ensure that conflicts of interest do not occur.

To estimate how many former DOD officials were working on assignments that were the responsibilities of their former DOD agencies or for which they had program oversight responsibilities or decision-making authorities at DOD, we drew a stratified random sample of 125 individuals from the former DOD senior and acquisition officials identified by contractors as being employed in 2006.[13] We sent a questionnaire asking the contractor for information concerning the individual's job history, including the circumstances of the assignment if the job history showed that they were working on assignments related to their former positions while they were at DOD. (App. IV provides a copy of the questionnaire we used.) Extrapolating from the sample results, we estimate that at least 422 officials could have had contractor assignments working on defense contracts that were the responsibilities of their former DOD agencies.[14] We estimate that at least nine could have worked on contracts for which they had program oversight responsibilities or decision-making authority at DOD.

The contractors reported other information about the sampled individuals that justified why these work assignments would not involve potential conflicts of interest or violations of post-government employment restrictions, including the following:

[13] Our stratified random sample was drawn from a match of personnel data from DOD and 51 of the 52 major defense contractors that identified 1,288 former DOD senior and acquisition officials employed with these companies. Of the 1,288 former DOD officials, 23 were individuals who worked for two contractors in 2006 and two were individuals who worked for three contractors in 2006. As such, our sample was drawn from a contractor-reported population of 1,263 individuals. More specifically, the stratified random sample was comprised of 131 employment records representing 125 individuals. We sent the questionnaire to the 32 contractors who reported employing these individuals. Appendix I provides additional detail on our sample and questionnaire methodology.

[14] Extrapolating results from this sample across the study group to estimate the magnitude of post-government employment work tied to former DOD agencies and direct responsibilities achieves an estimate precision of ± 8 percent at a 95-percent confidence level. Due to the difference between the population identified from IRS data and that identified from major defense contractor-reported data, we only present the lower bound of the confidence interval.

- The individuals' cooling-off (i.e., restriction) periods had expired.
- The individuals were performing behind-the-scenes work and did not have direct contacts with their former DOD agencies about the particular defense contracts.
- The individuals were working on different defense projects than they had worked on while at DOD but for the same agencies. For example, while the contractors reported that 20 former Navy officials in our sample worked on Navy contracts, the contractors also reported that none of the individuals were working on the same project they were responsible for when in the Navy.

Contractors Report Using a Range of Practices to Ensure Compliance with Post-Government Employment Restrictions, but Face Challenges in Providing Information for Monitoring Such Employment

Most of the 47 major defense contractors who responded to our survey on practices related to post-government employment report using a range of techniques to ensure awareness of and employee compliance with restrictions, although we found contractors were challenged to provide accurate information identifying their former DOD officials. Notably, information from the contractors showed little more than half the level of employment of former DOD officials than information we derived from matching IRS and DOD data, suggesting the information challenge defense contractors and DOD face in monitoring former DOD officials. Moreover, what information the contractors may have on former DOD officials' assignments on defense contracts is, for the most part, not available to DOD. New legislation requiring former officials to obtain ethics advisory letters and DOD to keep them in a central database could provide some additional information, but will not give DOD the kind of information needed—that is, the names of contractor employees who are former DOD officials and are working on a particular contract and the contractor's assurance that these employees are in compliance with their post-government employment restrictions related to the contract.

Survey of Contractors' Post-Government Employment Compliance Practices

Post-government employment restrictions on former DOD officials can affect every aspect of defense contractors' hiring practices, including when employment discussions may occur, who may be hired, and what tasks they may perform during a 1 to 2 year period after leaving DOD. Post-government employment laws do not require contractors to identify, monitor, or provide reports on former DOD employees regarding compliance with their restrictions. However, violating existing laws may result in civil and criminal penalties for aiding misconduct of former government officials and thus, according to contractors' ethics and personnel representatives, provide an impetus for adopting a range of practices to ensure awareness and compliance.

In initial interviews with some of the major defense contractors on the need for and scope of corporate compliance with post-government employment practices, ethics and personnel representatives told us about a variety of ways and means for identifying, screening, tracking, training, and keeping personnel records for former DOD officials. To gain a better understanding of the scope of major defense contractors' practices in these areas, we surveyed the 52 contractors on their practices. The following is a summary and analysis of information from the 47 contractors who responded. Appendix V presents detailed results from the contractor survey.

Reported Practices to Conduct Initial Screening

Our survey asked contractors if they seek affirmation about a potential employee's previous DOD or other government status prior to offering employment. As shown in table 5, most of the contractors reported that they ask potential permanent hires if they were formerly a DOD official, and a majority of contractors ask the same question of independent contractors (e.g., self-employed consultants), temporary employees, and members of the Board of Directors. Contractors were about evenly split on the use of the question on a job application and use of a special form to capture this information from job applicants. Similarly, contractors were divided on the use of electronic or paper collection of an applicant's information with some contractors citing the use of both methods.

Table 5: Contractor Responses on Practices to Ask Applicants If They Are Former DOD Military or Civilian Employees, by Category of Contractor Job Position

Category of job position	Number of contractors who report asking categories of applicants if they were employed by DOD
Permanently hired employees	38
Independent contractors (taxable income reported on IRS Form 1099-Miscellaneous)	27
Directly hired temporary employees	32
Members of the Board of Directors	29

Sources: GAO analysis; contractor survey responses data.

Reported Practices to Collect DOD Ethics Advice Letters

Our survey asked contractors if they request that employees provide a copy of their written ethics advice letters and if so, how long, if at all, do they keep these letters on file once they hire these applicants.[15] As shown in table 6, a majority of contractors responded that they request permanently hired employees, temporary employees, and members of the Board of Directors to provide a copy of their DOD ethics advice letters from the agencies' ethics counselors detailing their DOD experience and providing an opinion on whether employment with a specific contractor is permitted under post-government employment restrictions. Nearly half of the contractors said they also ask for these letters from independent contractors they hire. Some contractors indicated that they were not sure if the DOD ethics advice letters were requested from applicants who are potential job candidates. Regarding how long the DOD ethics advice letters are kept on file, the contractors reported varying practices, with many keeping them throughout the former DOD official's employment and other contractors keeping them for the period of restriction or for a specified time.

Table 6: Contractor Responses Regarding Asking Employees for a Copy of the DOD Ethics Advice Letter, by Contractor Job Category

Category of job position	Number of contractors that report asking employee for DOD ethics advice letter	Number of contractors that report that they do not ask employee for DOD ethics advice letter	Number of contractors that report they are unsure if they ask employee for DOD ethics advice letter
Permanently hired employees	34	6	7
Independent contractors (taxable income reported on IRS Form 1099-Miscellaneous)	22	14	10
Directly hired temporary employees	27	10	8
Members of the Board of Directors	25	7	10

Sources: GAO analysis; contractor survey responses data.

[15] The Federal Acquisition Regulation (FAR) and DOD have established procedures that allow current or former senior-level and acquisition officials to request an advisory opinion from their DOD ethics official on the permissibility of accepting employment from a particular contractor. These ethics opinions are available on request to persons leaving DOD. Typically, ethics officers at the last assignment write these letters based on information provided by the individuals. Regulations provide that individuals may rely on the opinions expressed, and if they have fully disclosed information to the ethics official, they will not suffer the penalties assessed for violations of post-government employment restrictions should the opinions be incorrect.

Reported Practices to Monitor Assignments and Train Employees on Post-Government Employment Restrictions

Our survey asked contractors to describe what steps, if any, they take to ensure that former DOD officials working for them comply with their post-government employment restrictions. As shown in table 7, a majority of contractors cited counseling/legal review and recruitment/hiring processes as the primary methods to ensure former DOD employees comply. Further analysis of contractor survey responses indicates that 12 contractors track former DOD employees' government-project-related job assignments electronically to ensure compliance and nine indicated that such records are not kept. However, more than half of the contractors indicated that they use internal and external audits to ensure the sufficiency of their procedures to track assignments, including post-government assignments of former DOD officials.

Table 7: Contractor Responses on Practices to Monitor Compliance with Employees Post-Government Employment Restrictions

Practice to monitor compliance	Number of contractors reporting this practice
Counseling/legal review process	15
Recruitment/hiring process	15
Assignment restrictions	5
Training/personal instruction	1
Individual responsibility	1
No specific policy/unsure	3
Unknown	7
Total, contractors responding to this question	**47**

Sources: GAO analysis; contractor survey responses data.

Note: Analysis of survey was collated from contractors' open-ended responses to our question and thus may not represent all of the practices contractors use.

Our survey asked contractors about training requirements to inform employees about policies regarding post-government employment restrictions for former federal employees or to reinforce them. As shown in table 8, a majority of contractors indicated that they require training for at least some employees. Further analysis of contractor responses indicates that their training is targeted to one or more employee groups such as senior-level managers, human resources staff, middle-level managers, or former federal government employees. Also, the training varies in timing and frequency. Training can take place initially upon employment with refresher training, annually or every 2 years, for example. Twelve contractors reported they mandated training for all employees; five contractors reported mandatory annual training.

Table 8: Contractor Responses on Post-Government Employment Training Practices

Training practice	Number of responses
Company requires training on post-government employment policies and restrictions	31
Company does not require training on post-government employment policies and restrictions	14
Total, contractors responding to this question	45

Sources: GAO analysis; contractor survey responses data.

Information Challenges Defense Contractors Face in Monitoring Compliance with Post-Government Employment Restrictions

As noted, most major defense contractors report using a range of practices for monitoring their DOD hires to ensure compliance with restrictions, even though no laws or regulations require them to track or provide reports to that effect. However, the contractors' ability to access and provide information on former DOD officials' employment and work on specific defense contracts proved challenging.

For example, contractor-provided data on the numbers of former DOD officials working with them was significantly less than what we determined through our match with IRS information. Specifically, our analysis of the status of major defense contractors' employment of former DOD officials in 2006, which was based on matching contractor-supplied information with DOD personnel data, found that the contractors employed a total of 1,263 former DOD senior and acquisition officials, while our match of IRS information and DOD personnel data showed the contractors employed a total of 2,435 former DOD officials, or almost twice as many.[16]

[16] One contractor, FedEx Corporation, declined to supply information on its employment of former DOD officials due to company policy and security concerns. However, our analysis, based on matches with IRS data that 2,435 former DOD officials worked for the contractors, does include data that the FedEx Corporation employed 16 former DOD senior or acquisition officials.

Table 9: Analysis of Sufficiency of Contractor Information for Monitoring Compliance with Post-Government Employment Restrictions

GAO's analysis of contractors' employment in 2006 of former DOD officials	
Type of contractor information made available to GAO	**Number of contractor employees who are former DOD officials**
Contractor-provided information	1,263
IRS information	2,435
GAO's contractor questionnaire on ethics advice and job histories of former DOD officials	
Type of contractor information made available to GAO	**Number of contractors**
Contractors responding to GAO questionnaire on job histories	30
How many companies provided at least one written ethics advice letter	15

Sources: GAO analysis; Defense contractors and IRS data.

In addition, as shown in table 9, only 15 of the 30 major defense contractors who responded to our questionnaire were able to provide ethics advice letters for at least one of the individuals in our stratified random sample. Specifically, 24 of the 30 who responded to our survey on their practices said that they asked employees for their DOD ethics advice letters as one of their practices for ensuring compliance with post-government employment restrictions and many reported keeping these letters on file throughout the former officials' employment. However, 10 of the contractors that reported asking for the letters did not provide any ethics advice letters in response to our questionnaire.

As noted earlier in this report, contractors are not required to keep copies of these letters. In the future however, information on DOD ethics advice letters for former DOD senior and acquisition officials could be more readily available to all DOD contractors as a result of a provision in the National Defense Authorization Act for Fiscal Year 2008 imposing new requirements on defense officials and contractors.[17] Specifically, with this provision (enacted January 28, 2008), defense contractors may not knowingly compensate (i.e., employ) former DOD officials who are subject to post-government employment restrictions without first determining that the official has sought and received a written ethics advice opinion from DOD within 30 days of seeking the opinion.[18] To implement this

[17] Requirements for Senior Department of Defense Officials Seeking Employment with Defense Contractors, Pub. L. No. 110-181 § 847 (2008).

[18] Section 847 requires DOD to provide the opinion to requesters within 30 days.

requirement however, defense contractors are likely to face new information challenges in keeping records that adequately document that they did not knowingly employ a former DOD official who did not seek or receive the applicable DOD written ethics opinion.

Contractors responding to our survey were generally able to provide information about DOD- and contractor-job histories for most of the former DOD officials in our sample. However, according to the corporate headquarters staff for several contractors—who had to collect the detailed job histories from information submitted from across their companies in order to respond to our survey—accumulating this information was challenging. According to these contractor staff, the absence of automated assignment tracking or standardized personnel information systems across their companies made it difficult for them to centrally compile the information. That is, to respond to our survey, for some contractors it appears the currently available information on former officials' post-DOD work on specific pending or awarded contracts is decentralized at the various business units responsible for those defense contracts. We found that the scope and quality of the job histories contractors provided to us were sufficient for our analysis on the magnitude of post-DOD work related to prior agencies and responsibilities. However, our questionnaire was not designed or expected to elicit contractor information on specific conflicts of interest or noncompliance cases, such as whether cooling-off periods were unexpired, for example.

DOD Faces Related Information Challenges in Monitoring Compliance with Post-Government Employment Restrictions

Similar to the requirements of defense contractors, no laws or regulations require DOD ethics or acquisition officials to track or monitor former DOD employees after they begin their new contractor jobs to ensure compliance with applicable post-government employment restrictions. As discussed earlier in this report, past legislative requirements to make the employment of former officials with defense contractors more transparent to DOD by having individuals or contractors report to DOD on the post-government employment with contractors were not successful and were repealed by 1995. However, the changed requirements left DOD without a mechanism to obtain information about its former senior and acquisition officials who go to work for its contractors. In our view, and DOD ethics and procurement officials agree, the information currently available to DOD from providing written ethics opinions to former DOD senior and acquisition officials who request them regarding prospective employment

restrictions has limited utility for monitoring compliance with post-government employment restrictions once former DOD officials go to work for defense contractors for several reasons:

- while officials have been encouraged to seek an ethics advisory opinion, they were not required to obtain them, nor were contractors required to ask for them;
- DOD's record-keeping for its written ethics opinions is decentralized at the many defense ethics offices that issued them; and
- DOD lacks a mechanism for providing the information to contracting officers or program managers for a particular contract.

Nonetheless, for DOD's purposes, ethics advisory opinions may now be more readily available and centrally located because of the 2008 defense authorization act provision that requires former officials to obtain written ethics opinions on applicable post-government employment restrictions from their DOD ethics officials before accepting compensation from defense contractors for a period of 2 years after leaving DOD service.[19] DOD also has a new record-keeping requirement to retain each request and each written opinion provided in a central database or repository for at least 5 years.[20]

While this requirement may help to increase transparency over which former officials are working with contractors and what may raise a potential conflict of interest, its utility may be limited because information is not being tied to specific contracts. Senior ethics officials in DOD's Standards of Conduct Office and the director of Defense Procurement and Acquisition Policy and Strategic Sourcing (DPAP), for example, told us that DOD currently does not have a mechanism to link information on former officials' post-DOD work for their new employers for specific defense contracts that are pending or awarded before their former

[19] Pub. L. No. 110-181, § 847 (2008).

[20] After reviewing a draft of this report, DOD's Acting General Counsel advised us that DOD's Standards of Conduct Office is working with its information technology experts to develop a viable mechanism for collecting and retaining this information, possibly by establishing a single database for all DOD post-employment requests and opinion letters. If unsuccessful, DOD plans to rely on having each of its approximately 43 designated agency ethics officials be responsible for maintaining the required information.

agencies, offices, or commands.[21] They believed that such a mechanism would be valuable to program managers and contracting officers who need to ensure that contracted work being done in their programs is free of conflicts. They also believed that such a mechanism would be relatively cost-effective to implement. After learning of the results of our data collection efforts, in fact, these officials were concerned that current mechanisms do not provide DOD a clear picture of how many former officials are working with contractors and what risks of conflicts are present.

Conclusions

The public needs to be assured that decisions related to the hundreds of billions of dollars spent each year on defense contracts comply with the applicable post-government employment restrictions and are free of conflicts of interest. But this task is highly challenging when it comes to monitoring whether former DOD officials are in compliance with these rules or have a conflict of interest by working for a defense contractor. Our review illustrated aspects of this challenge, including difficulties associated in collecting data on thousands of employees working for just 52 contractors. It is likely our surveys would have been more difficult to accomplish if they had been applied to the entire spectrum of defense contractors, which includes hundreds of small companies that may not have automated or complete information on their employees.

Further, requirements that have been imposed in the past to collect information on former DOD officials working for contractors have not been effective for a variety of reasons. These include difficulties associated with asking private citizens to report back to the government on their employment for extended periods of time and disparities in the way information was collected and reported. Moreover, when information was collected, its value was limited, according to DOD officials, because it could not be tied to specific programs or contracts, where it could inform those responsible for ensuring integrity at the front line of acquisitions. Despite these challenges, there may be ways that more accurate and useful information could be collected, for example, by asking potential contractors to certify that their employees are in compliance with post-

[21] While our analysis was able to identify the number of former DOD officials working for the defense contractors in our study, our analysis could not be replicated by DOD to allow greater transparency into former officials' employment with defense contractors. This is because DOD cannot obtain tax data from IRS under a statutory restriction on disclosure of tax data. 26 U.S.C. § 6103 (2006).

government employment restrictions when contracts are being awarded. The results of our review—particularly results relating to the estimated numbers of former DOD senior and acquisition officials who could be working in areas that tie back to their work at DOD—show that examining such options is worthwhile.

Recommendations for Executive Action

To provide greater transparency during the acquisition process given the fact that former DOD officials can and do work on defense contracts related to their prior agencies or their direct responsibilities, the risk of conflicts of interest and the appearance of conflicts of interest, and the need to maintain public trust in the integrity of defense contracting, we recommend that the Secretary of Defense direct the Under Secretary of Defense (Acquisition, Technology, and Logistics) to consider the relevant recent statutory changes and determine if changes in procurement policy are needed to impose additional reporting requirements or other requirements to guard against violations of the government's post-employment rules. For example, DOD could consider requiring defense contractors who are awarded a contract, within a set number of days after contract award, to (1) disclose to the contracting officer the names of employees who are certain former DOD officials (e.g., civilian senior executives, high-level military officers, or acquisition officials) who worked on the response to the solicitation and (2) certify that these employees are in compliance with the applicable post-government employment restrictions. In addition, after assessing the benefits and costs associated with the certification process, DOD could consider whether and to what extent it should apply a similar mechanism throughout the term of the contract. In responding to a recent report we issued on contractor employee personal conflicts of interest, DOD tasked its Panel on Contracting Integrity to examine issues we raised and potential solutions.[22] It may also want to do the same with regard to post-government employment reporting.

Agency Comments

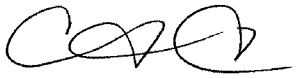
We provided a draft of this report to DOD for comment. The DPAP director wrote that DOD concurs with our recommendation. Specifically, he wrote that the recommendation will be referred to the Panel on Contracting Integrity for consideration and action. DOD's Acting General

[22] GAO, *Defense Contracting: Additional Personal Conflicts of Interest Safeguards Needed for Certain DOD Contractor Employees*, GAO-08-169 (Washington, D.C.: Mar. 7, 2008).

Counsel also provided written technical comments, which we incorporated into the report as appropriate. DOD's comments are reproduced in appendix II.

We are sending copies of this report to the Secretary of Defense, the Director of the Office of Management and Budget, the Director of the Office of Government Ethics, and other interested parties. We will make copies available to others upon request. We will make this report available to the public at no charge on the GAO Web site at http://www.gao.gov.

If you have any questions about this report or need additional information, please contact me at (202) 512-4841 or chaplainc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VI.



Cristina T. Chaplain
Director, Acquisition and Sourcing Management

List of Congressional Committees

The Honorable Carl Levin
Chairman
The Honorable John McCain
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Max S. Baucus
Chairman
The Honorable Charles E. Grassley
Ranking Member
Committee on Finance
United States Senate

The Honorable Ike Skelton
Chairman
The Honorable Duncan L. Hunter
Ranking Member
Committee on Armed Services
House of Representatives

Appendix I: Scope and Methodology

Congress included a provision in the John Warner National Defense Authorization Act for Fiscal Year 2007 requiring us to report on the recent employment of former Department of Defense (DOD) officials by major defense contractors.[1] In response, our report objectives were to (1) develop information on how many former DOD military and civilian personnel recently worked for major defense contractors and develop an estimate of how many of these were former DOD senior or acquisition officials who worked on defense contracts for these employers that were related to their former positions at DOD and (2) identify the practices used to monitor compliance with post-government employment restrictions and the information challenges that contractors and DOD face in monitoring the movement of former DOD employees to defense contractors. This report does not address any government employment restrictions which might be applicable when former private sector employees are employed by DOD or other federal government agencies. In November 2007, in part to meet our reporting requirement, we provided an interim briefing to the Senate and House Armed Services Committees.

Section 851 of the National Defense Authorization Act for Fiscal Year 2007 defined major defense contractors as any company that received at least $500 million in contract awards from DOD in fiscal year 2005. To identify those contractors, we analyzed data on the values of contracts awarded to all companies from DOD's Statistical Information Analysis Division. As a result, we identified the 52 contractors meeting the major defense contractor criteria to include in our review. As shown in table 10, which ranks the 52 major defense contractors by the value of their fiscal year 2005 DOD contract awards, these companies accounted for more than half of DOD's total contract awards in 2005—$142.8 billion of the total $269.2 billion.

[1] Section 851 required us to report by December 1, 2007, on major defense contractors' post-government employment of certain former DOD officials. Pub. L. No. 109-364 § 851 (2007).

Table 10: Contractors Reviewed by GAO, by Value of Total Contract Awards from DOD in Fiscal Year 2005

(Dollars in millions)

Contractor	Value of DOD contract awards	Contractor	Value of DOD contract awards
Lockheed Martin Corporation	$19,447	Armor Holdings, Inc.	$1,296
Boeing Company	18,318	Alliant Techsystems, Inc.	1,275
Northrop Grumman Corporation	13,512	Booz Allen Hamilton, Inc.	1,163
General Dynamics	10,641	Shell Oil Company	1,070
Raytheon Company	9,109	Exxon Mobil Corporation	1,046
Kellogg Brown & Root	5,828	Amerisourcebergen Corporation	1,021
BAE Systems PLC	5,583	Washington Group International	879
United Technologies Corporation	5,022	DRS Technologies	769
L-3 Communications Holding, Inc.	4,714	Cardinal Health, Inc.	766
Computer Sciences Corporation	2,828	CACI International, Inc.	765
Science Applications International Corporation	2,796	Rockwell Collins, Inc.	759
ITT Industries	2,493	Harris Corporation	737
Humana, Inc.	2,261	McKesson Corporation Delaware	686
General Electric Company	2,197	Massachusetts Institute of Technology	611
Health Net, Inc.	2,032	Aerospace Corporation	611
TriWest Healthcare Alliance Company	1,804	Mitre Corporation	585
Textron, Inc.	1,600	Dell, Inc.	584
URS Corporation	1,523	General Atomic Technologies Company	574
Honeywell International, Inc.	1,505	Maersk Line Ltd.	572
BP America Inc.	1,502	Valero Energy Corporation	564
Bechtel Group, Inc.	1,487	Shaw Group, Inc.	561
Oshkosh Truck Corporation	1,474	Johnson Controls, Inc.	553
Electronic Data Systems (EDS) Corporation	1,451	IAP Worldwide Services, Inc.	525
Agility Logistics	1,425	Verizon Communications	516
AM General, LLC	1,406	Rolls-Royce North America	514
FedEx Corporation	1,370	Chugach Alaska Corporation	505
Subtotal, DOD contract awards to these 52 contractors in 2005			**$142,833**
Total, DOD contract awards to all contractors in 2005			**$269,238**

Sources: GAO analysis; DOD data.

Notes: Total dollar values of DOD contract awards in 2005 for each contractor were rounded to the nearest million. Amounts for each contractor added together do not match the subtotal due to rounding.

We conducted this performance audit from November 2006 through May 2008 in accordance with generally accepted government auditing

standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The scope and methods we used to perform this audit are described in greater detail in the remainder of this appendix.[2]

First Audit Objective

To develop information on how many former DOD military and civilian personnel worked for major defense contractors, section 851 required us to report on employment during the most recent year for which data were available. Through initial discussions with five of the major defense contractors and the IRS, we determined that data on former DOD officials' employment were reasonably available for 2006. To determine how many military and civilian personnel left DOD service, as agreed with committee staff, we limited our analysis to data from the Defense Manpower Data Center's databases for all military and civilian employees who left DOD service for any reason other than being deceased in a 6-year period between January 1, 2001, and December 31, 2006 (N=1,857,004). We determined that data from the data center were sufficiently reliable to accurately support our analysis in support of this objective.

DOD's data included personally-identifiable characteristics for each former employee such as name, social security number (SSN), end date of employment, branch of service, military rank, civilian grade, and if the employee's job specialty was coded as any of the several defense acquisition workforce positions. To analyze defense contractors' post-government employment for a subgroup of former DOD senior and acquisition officials, we used DOD's personnel data to include in the subgroup the following range of former DOD officials: senior officials such as military officers ranked O-7 and above (e.g., generals, admirals) and members of the Senior Executive Service (SES) regardless of whether

[2] The scope of our review limits our analysis as follows: (1) we limited this review to 2,435 former DOD senior and acquisition officials working for 52 major defense contractors and thus our results cannot be generalized as representing all defense contractors' post-government employment of all former DOD officials and (2) we limited our review to self-reported responses from contractors on their practices for ensuring compliance with former DOD officials' post-government employment restrictions, which we did not independently corroborate or test for effectiveness.

they also were coded as serving in a defense acquisition workforce position. Acquisition officials include military (from O-3 to O-6) and civilian (from grades GS-12 through 15) officials for which DOD coded their status as members of its acquisition workforce, including program managers, deputy program managers, and contracting officers (N=35,192 individuals).

To determine how many of the 1,857,004 former military and civilian personnel (including the 35,192 former DOD senior and acquisition officials) worked for the 52 major defense contractors in 2006, we matched DOD's personnel data with (1) income tax data from IRS and (2) personnel data from the contractors on former DOD senior or acquisition officials they directly compensated in 2006 as employees or independent contractors.

The data obtained from IRS included Form W-2 and Form 1099-Miscellaneous information. We used data from the returns identifying the contractor who submitted the income tax data and the SSN and name for all individual taxpayers for whom the 52 major defense contractors reported taxable income for the 4-year period between 2003 and 2006.[3] Because contractor-supplied data identified DOD officials they hired between 2004 and 2006, we compared SSNs from 2003 income tax data to the 2006 income tax data and eliminated SSNs for individuals that matched because this showed the contractors hired those individuals prior to 2004.

We also obtained data from 51 of the 52 contractors on individuals who we or they matched to our criteria for former DOD senior and acquisition officials they compensated in 2006 and hired between 2004 and 2006.[4] Contractors were permitted to provide the SSNs for either (1) all individuals compensated in 2006 and hired in the 3-year period between 2004 and 2006 or (2) the individuals they identified as matching our

[3] To guard against disclosure of information, we did not retain records for individuals who did not match DOD's records on leaving DOD service between 2001 and 2006. In addition, once we completed our analysis matching remaining individual records with DOD's records on former DOD service to create aggregate statistics of post government employment for each of the 52 contractors as well as for the income tax data, we did not retain any individually identifiable records that include the names and SSNs of individual former DOD personnel working for the contractors in 2006.

[4] One of the 52 major defense contractors, FedEx Corporation, declined to provide personnel data to us. This contractor notified us that they could not provide us SSN data for their employees due to company policy and security concerns.

criteria for being a former DOD senior or acquisition official and hired between 2004 and 2006. In either case, we analyzed the contractors' SSN data to match against the SSNs in DOD's personnel data.

From the matches we determined that 1,263 individuals matched our criteria as former DOD senior and acquisition officials. For each of the 51 contractors who provided us this SSN data, we assessed the accuracy and completeness of their information by analyzing how many former DOD senior and acquisition officials their information showed were employed in 2006 (N=1,263) compared with our analysis of IRS data for the same purpose (N=2,435). We based our analysis of demographic data for this objective on the IRS and DOD data.

To develop an estimate of how many of the former DOD senior or acquisition officials subject to post-government employment restrictions the major defense contractors assigned to work on defense contracts related to their former DOD agencies or their direct responsibilities, as shown in table 11, we used the contractor-identified population of 1,263 individuals. To ensure that we had adequate representation of these officials from contractors with fewer former DOD officials, we stratified the population into two strata based on the number of former DOD officials reported by each contractor as employees—contractors reporting 50 or more former DOD officials were assigned to one stratum and contractors reporting less than 50 former DOD officials were assigned to another stratum. From this population we selected a statistically based random sample of 125 individuals who worked for 32 of the contractors.

We asked the contractors to respond to a questionnaire on related DOD and contractor job histories for the sampled individuals. We analyzed responses from 30 contractors on job histories and contractor work assignments for their respective individuals in our sample.[5] Based on the sample size and the response rate, the estimate from the results achieves a precision of ± 8 percent at a 95-percent confidence level.

[5] Two of the 32 contractors, Bechtel Group, Inc. and Booz Allen Hamilton, Inc., did not respond to the survey.

Table 11: Design for GAO's Statistically Based Random Sample to Survey Contractors on DOD Post-Government Employment Job Histories

Stratum	Population size	Sample Size	Number of contractors
1. 50 or more officials	950	66	7
2. Fewer than 50 officials	338	59	25
Total	**1,288**[a]	**125**	**32**

Source: GAO.

[a]The total population in our study group is 1,263 individuals. However, some individuals worked for more than one employer during 2006. As a result, the number of employment records and the population size for the sample totals 1,288 individuals. In drawing the sample, 5 of the 125 individuals were employed by more than one of the contractors in 2006. Therefore, we surveyed each of their contractor employers to obtain separate responses for them, for a total of 32 contractors and 131 employment instances.

To obtain the job histories, we used a Web-based questionnaire to collect data on work histories of the individuals in our sample.[6] (App. IV reproduces the Web-based questionnaire used for this survey). The questionnaire was designed to obtain individual information for each of the former DOD senior and acquisition officials in our sample, such as his or her previous DOD assignments and contractor assignments over a 3-year period as well as to request a copy of any DOD ethics advice letters.

Our questionnaire was intended to develop information on defense contracts or programs on which former DOD officials were assigned in order to consider whether the former officials were assigned to work on contracts they or their agencies had previously been responsible for. Recognizing that the contractors responding to our survey were self-reporting on a sensitive issue, the information sought from contractors was not designed or expected to identify specific violations of post-government employment restrictions. Instead, the survey also asked contractors for information on circumstances surrounding the post-DOD work in relationship to prior DOD positions and responsibilities. To protect the confidentiality of the responses concerning these individuals, we took steps to remove personally identifiable information from our analysis and evidentiary files.

[6] We pre-tested the survey with Electronic Data Systems (EDS) Corporation and Lockheed Martin Corporation and incorporated their comments. Between November 2007 and January 2008, we provided instructions and a unique user name and password to each of the contractors.

We projected the results of our sample to estimate the extent that former DOD officials in our study group population of 1,263 individuals engaged in post-government employment tied to their former DOD agencies or to their direct responsibilities. We used these estimates to assess the magnitude of such post-DOD work tied to former DOD agencies, offices, or commands or to direct responsibilities.

Second Audit Objective

To identify the practices major defense contractors report using to ensure awareness of and compliance with post-government employment restrictions for employing former DOD officials, we interviewed ethics and personnel officials with five of the contractors to gain an initial understanding of the variety and scope of information reasonably available concerning a range of practices used for these purposes.[7] We also conducted a survey to collect additional information from all 52 contractors on personnel assignment record-keeping and practices for identifying, screening, tracking, and training former DOD officials for purposes of compliance with post-government employment restrictions

To conduct this survey, we pre-tested it with three contractors before e-mailing a questionnaire to all 52 contractors to collect information on their reported practices.[8] (Appendix V reproduces the questions used for this survey as well as the aggregated responses.) The survey was designed to obtain information on contractors' reported practices to ensure awareness and compliance in various key ways such as (1) how contractors identified new hires with potential post-government employment restrictions, (2) how they tracked post-DOD assignments of former DOD officials during their cooling off periods, (3) whether they collected and maintained copies of DOD ethics advisory letters for former DOD officials, and (4) whether they provided training in post-government employment restrictions to various employee categories in their

[7] These interviews concerning contractor practices for compliance with post-government employment restrictions when employing former DOD officials were with company ethics and personnel officials at SAIC, EDS Corporation, Lockheed Martin Corporation, Harris Corporation, and the Boeing Company.

[8] Between March and April 2007, we pre-tested the survey with Mitre Corporation and CACI International, Inc. to determine if the questions were clear and unbiased, the terminology used to describe practices was precise, and whether the questionnaire placed an undue response burden on companies. After revising the survey to incorporate pre-test comments, between May and August 2007, we sent the survey to all 52 contractors as an e-mail attachment and followed-up with nonrespondents by e-mail and telephone to encourage their responses.

workforce. We analyzed responses from the 47 contractors who responded to the survey. This is a survey response rate of 90 percent. Our survey results cannot be generalized for the purpose of describing nonrespondent contractors' practices. [9]

To identify information challenges contractors and DOD face, we reviewed post-government employment laws and implementing regulations, prior GAO reports, and other studies; and held discussions with and obtained information from officials at the Office of Government Ethics concerning any requirements and performance problems DOD and defense contractors have had regarding the adequacy of monitoring former DOD officials' compliance with restrictions.

To identify information challenges that defense contractors face in monitoring employees' compliance with post-government employment restrictions, we analyzed the extent to which the 52 major defense contractors were able to submit sufficient information to us in response to our data requests. Specifically, we analyzed the extent to which the contractors were able to submit sufficient data on how many former DOD officials worked for them in 2006 and provide us with copies of DOD's written ethics opinions and related job histories for the pre-selected former DOD officials sampled for our survey on post-government employment.

We also met with and reviewed information from ethics officials in the Office of the Secretary of Defense's Standards of Conduct Office[10] and Defense Procurement and Acquisition Policy (DPAP) officials from the Office of the Undersecretary of Defense (Acquisition, Technology, and Logistics). We held these discussions to obtain information and views on DOD's practice of providing written ethics advice concerning prospective employment and restrictions to former DOD senior and acquisition officials who request them. We discussed the sufficiency of this information for DOD transparency on certain former DOD officials'

[9] The following major defense contractors did not provide responses to our survey on practices to ensure awareness of and compliance with post-government employment restrictions: Amerisourcebergen Corporation, Booz Allen Hamilton, Inc., CACI International, Inc., Johnson Controls, Inc., and Verizon Communications.

[10] On behalf of DOD's General Counsel, the Standards of Conduct Office, which is part of the Defense Legal Services Agency, is responsible for overseeing the ethics and standards of conduct programs throughout DOD, including providing guidance to the Army, Navy, Air Force, and defense agencies.

compliance with post-government employment restrictions after these officials begin their new jobs. We also discussed their views on the sufficiency of information available to DOD's contracting officials from defense contractors regarding the names of former DOD senior and acquisition officials who are working on a particular pending defense procurement or defense contracts and whether or not they are in compliance with their post-government employment restrictions. We used this information to assess whether DOD has sufficient insight into post-government employment to reduce the risk for conflicts of interest or apparent conflicts of interest that could undermine public trust in the integrity of defense contracting.

Appendix II: Comments from the Department of Defense

OFFICE OF THE UNDER SECRETARY OF DEFENSE
3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

ACQUISITION
TECHNOLOGY
AND LOGISTICS

MAY 13 2008

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U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. Chaplain:

This is the Department of Defense (DoD) response to the GAO Draft Report, GAO-08-485, "DEFENSE CONTRACTING: Post-Employment of Former DOD Officials Needs Greater Transparency," dated April 11, 2008 (GAO Code 120609).

The Department concurs with the recommendation. A comment on the report recommendation is enclosed.

Sincerely,

Shay D. Assad
Director, Defense Procurement,
Acquisition Policy and
Strategic Sourcing

Enclosure:
As stated

GAO Draft Report Dated April 11, 2008
GAO-08-485 (GAO CODE 120609)

"DEFENSE CONTRACTING: POST-EMPLOYMENT OF FORMER DOD OFFICIALS NEEDS GREATER TRANSPARENCY"

DEPARTMENT OF DEFENSE COMMENT TO THE GAO RECOMMENDATION

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense (Acquisition, Technology and Logistics) to consider the relevant recent statutory changes and determine if changes in procurement policy are needed to impose additional reporting requirements or other requirements to guard against violations of the government's post-employment rules. (p. 23/GAO Draft Report)

DOD RESPONSE: Concur. The recommendation will be referred to the Panel on Contracting Integrity for consideration and action.

Appendix III: Contractors' Employment of Former DOD Senior and Acquisition Officials in 2006

Table 12 presents our analysis of how many former DOD senior and acquisition officials were employed by each of the 52 defense contractors in 2006, ranked in descending order according to how many they employed. In order to prevent reporting of information that could be used to identify specific former officials with post-DOD employment with contractors, the table presents summary analysis that discloses which of the 28 major defense contractors employed 11 or more such individuals in 2006. For those 20 major defense contractors who employed fewer than 11 such individuals, the table presents a limited summary that discloses that they employed "10 or fewer" such individuals. Also shown in table 12, four of the contractors did not employ any former DOD senior and acquisition officials in 2006.

Table 12: Contractors' Post-Government Employment of Former DOD Senior and Acquisition Officials in 2006

(Dollars in millions)

Contractor	Number of former DOD senior and acquisition officials employed	Value of DOD contract awards in fiscal year 2005
Total, all 52 contractors	**2,435**	**$142,833**
SAIC	263	$2,796
Northrop Grumman Corporation	260	$13,512
Booz Allen Hamilton	243	$1,163
L-3 Communications Holding, Inc.	241	$4,714
Lockheed Martin Corporation	221	$19,447
General Dynamics	207	$10,641
Raytheon Company	146	$9,109
CACI International, Inc.	137	$765
BAE Systems PLC	119	$5,583
Computer Sciences Corporation	99	$2,828
Boeing Company	91	$18,318
URS Corporation	71	$1,523
Mitre Corporation	51	$585
United Technologies Corporation	32	$5,022
DRS Technologies	31	$769
Kellogg Brown & Root	30	$5,828
Alliant Techsystems, Inc.	27	$1,275
Textron, Inc.	25	$1,600
General Electric Company	22	$2,197
Rockwell Collins, Inc.	21	$759
ITT Industries	20	$2,493

(Dollars in millions)

Contractor	Number of former DOD senior and acquisition officials employed	Value of DOD contract awards in fiscal year 2005
Aerospace Corporation	17	$611
General Atomic Technologies Company	17	$574
Harris Corporation	16	$737
Honeywell International, Inc.	16	$1,505
Shaw Group, Inc.	16	$561
FedEx Corporation	16	$1,370
Bechtel Group, Inc.	11	$1,487
IAP Worldwide Services, Inc.	10 or fewer	$525
Massachusetts Institute of Technology	10 or fewer	$611
Exxon Mobil Corporation	10 or fewer	$1,046
EDS Corporation	10 or fewer	$1,451
Chugach Alaska Corporation	10 or fewer	$505
Agility Logistics	10 or fewer	$1,425
Shell Oil Company	10 or fewer	$1,070
Washington Group International	10 or fewer	$879
Dell, Inc.	10 or fewer	$584
BP America, Inc.	10 or fewer	$1,502
Rolls-Royce North America	10 or fewer	$514
TriWest Healthcare Alliance Company	10 or fewer	$1,804
Health Net, Inc.	10 or fewer	$2,032
Maersk Line Ltd.	10 or fewer	$572
Armor Holdings, Inc.	10 or fewer	$1,296
Humana, Inc.	10 or fewer	$2,261
AM General, LLC	10 or fewer	$1,406
McKesson Corporation Delaware	10 or fewer	$686
Verizon Communications	10 or fewer	$516
Cardinal Health, Inc.	10 or fewer	$766
Amerisourcebergen Corporation	0	$1,021
Johnson Controls, Inc.	0	$553
Oshkosh Truck Corporation	0	$1,474
Valero Energy Corporation	0	$564

Sources: GAO analysis; IRS and DOD data.

Table 13 shows in greater detail our analysis of the major defense contractors who employed more than 50 former DOD senior and

acquisition officials in 2006 and a breakout of their former status as DOD military and civilian employees.

Table 13: Summary of Demographic Information for Contractors Employing More Than 50 Former DOD Senior-Level and Acquisition Officials

Contractor	Total, former DOD senior and acquisition officials employed	Number of former officials who were senior level	Number of many former officials who were acquisition related	Number of former officials who were military	Number of former officials who were civilian employees
SAIC	263	47	216	145	118
Northrop Grumman Corporation	260	63	197	153	107
Booz Allen Hamilton	243	52	191	160	83
L-3 Communications	241	40	201	130	111
Lockheed Martin Corporation	221	48	173	121	100
General Dynamics	207	27	180	112	95
Raytheon Company	146	39	107	98	48
CACI International, Inc.	137	17	120	56	81
BAE Systems PLC	119	21	98	58	61
Computer Sciences Corporation	99	11	88	40	59
Boeing Company	91	15	76	47	44
URS Corporation	71	10 or fewer	Not shown	30	41
Mitre Corporation	51	12	39	30	21

Source: GAO analysis, IRS and DOD data.

Appendix IV: Questionnaire for Survey of Contractors on Post-Government Employment Job Histories for Former DOD Officials

We surveyed 32 major defense contractors for a sample of the former DOD officials with regard to their job histories at the contractor and previous assignments while still in federal service along with DOD contracts for which they worked. The questions from the survey are reproduced below.

Survey of Employment Assignments of Former DOD Officials

U.S. Government Accountability Office

Introduction

The U.S. Government Accountability Office (GAO) is a federal agency that assists the U.S. Congress in evaluating federal programs. Congressional sponsors of the section 851 mandate have asked GAO to report on the number of former DOD officials who received compensation from major defense contractors in calendar year 2006. The purpose of this questionnaire is to collect information about the job assignments of a sample of former DOD employees who now work for your organization.

Thank you for your help in completing the survey. Your participation is essential to its success and will help to inform Congress about these issues.

If you have a copy of any of these individual's letters from DOD ethics advisors describing post government employment restrictions ("safe haven" or "safe harbor" letters), please send them either as a group or individually to Rick Cederholm. We suggest scanning this letter and providing it as an attachment to an email to cederholmr@gao.gov. If you prefer, you may FAX the letter to Rick Cederholm at (256) 971-9240 or you may send it to:

Mr. Rick Cederholm
US GAO
6767 Old Madison Pike
Building 5, Suite 520
Huntsville, AL 35806

We appreciate your taking the time to participate in our survey - your participation is essential to its success.

Instructions

- To save and temporarily exit the questionnaire at any time, press the "Exit" button at the bottom of a page. Always use the "Exit" button to exit. If you do not, you will lose information you entered on your current page.
- To re-open your questionnaire and enter more responses or change previous responses, return to the Web address we gave you and re-enter your username and password. The questionnaire will restart at the last question you answered.
- You can move forwards and backwards in the questionnaire at any time to revisit parts of the questionnaire and change answers by using the menu window on the left or the buttons at the bottom of each page.
- To learn more about completing the questionnaire, printing your responses, and who to contact if you have questions, click here for help.

Questionnaire for:

____

In the space below, provide a detailed rationale if your company will NOT be providing this information to GAO as requested. Please include the name and contact information of the decision maker.

Job History at Your Company

The following questions refer to _____.

1. What date was _____ first compensated by your company?
   (Enter date using yyyy-mm-dd format)

2. What date was _____ most recently compensated by your company?
   (Enter date using yyyy-mm-dd format)

3. What job title(s) did _____ hold at your company between January 1st, 2004 and December 31st, 2006 and what was the starting date of each job title? *(List all)*

a. 1st Job Title

b. What was the starting date for this job title?

c. 2nd Job Title

d. What was the starting date for this job title?

e. Additional Job Titles

f. What was the starting date(s) for this job title?

4. What Department of Defense (DOD) contracts or programs did _____ work on at your company between January 1st, 2004 and December 31st, 2006, and on what date was he/she assigned to the contract or program?

a. 1st DOD contract or program

b. What date was he/she assigned to this contract or program?

c. 2nd DOD contract or program

d. What date was he/she assigned to this contract or program?

e. Additional DOD contract(s) or program (s)

f. What date(s) was he/she assigned to this contract or program?

g. What other DOD contracts or programs has he/she contributed to indirectly, such as overseeing the program or contract?

h. What date(s) was he/she working in this capacity?

i. No information available for this individual ☐

5. Is a DOD Ethics Counselor letter (i.e. "Safe Haven" or "Safe Harbor" letter) on file with your company for _____?

1. ◯ Yes ***Please provide a copy of this letter to Rick Cederholm***
2. ◯ No
3. ◯ Don't know

Job History at DOD

6. What date did _____ leave DOD?
(Enter date using yyyy-mm-dd format)

7. Is the available information about _____'s DOD work assignments during his/her last 2 years at DOD complete, partial, or is no information available?
   1. ◯ Complete
   2. ◯ Partial
   3. ◯ No information available (Click to go to Question 9.)
   4. ◯ Don't know

8. What DOD Agency(s) did _____ serve or work in during his/her last 2 years at DOD (e.g. U.S. Army, Defense Logistics Agency, etc.)? *(List all)*

   a. 1st DOD Agency

   b. 2nd DOD Agency

   c. Additional DOD Agency(s)

9. What Job title(s) did _____ have during his/her last 2 years at DOD? *(List all)*

   a. 1st DOD Job Title

   b. 2nd DOD Job Title

   c. Additional DOD Job Title(s)

10. Since January 1, 2004, has _____ worked on any contracts or projects at

your company for which he or she had either **program oversight responsibilities or decision making authority** during his or her last 2 years at DOD?

1. ○ Yes
2. ○ No (Click to go to Question 11.)
3. ○ Don't know (Click to go to Question 11.)

a. What were the circumstances of this work?

11. Since January 1, 2004, has _____ worked on any contracts or projects at your company for that the responsibility of their former agency, office or command during his or her last 2 years at DOD?

1. ○ Yes
2. ○ No (Click to go to Question 12.)
3. ○ Don't know (Click to go to Question 12.)

a. What were the circumstances of this work?

12. Which of the following positions with DOD did _____ hold? *(Check all that apply)*

1. ☐ Executive Schedule Civilian
2. ☐ Senior Level Civilian
3. ☐ SES Civilian
4. ☐ General or Flag Officer (07 or above)
5. ☐ Program Manager
6. ☐ Deputy Program Manager
7. ☐ Procuring Contracting Officer
8. ☐ Administrative Contracting Officer
9. ☐ Source Selection Authority

10. ☐ Source Selection Evaluation Board Member
11. ☐ Evaluation Team Chief for a contract above $10M
12. ☐ None of the above
13. ☐ Other *(Please specify below)*

a. If you said other, what was that position?

13. Were you able to answer the questions about _____'s DOD history primarily using records your organization has on file, or was a substantial amount of information needed from other sources?
    1. ○ Primarily information from company records
    2. ○ Primarily from [indv] (Click to go to Question 14.)
    3. ○ Primarily from [indv]'s supervisor (Click to go to Question 14.)
    4. ○ Not available (Click to go to Question 14.)

	Could produce	Not available	Don't know
a. If the information provided was primarily from company records, could your company produce that information for GAO to review if requested to do so?	○	○	

14. Have you finished this questionnaire?
    1. ○ Yes
    2. ◉ No

If you answered "Yes" above and do NOT want to view or print your responses, click on the "Exit" button below.

If you would like to view and print your answers before exiting, click the "Next" button below.

Appendix V: Results of Survey of Contractors on Practices to Ensure Awareness of and Compliance with Post-Government Employment Restrictions

The purpose of the questionnaire was to understand how defense contractors identify former DOD officials, maintain information about the job assignments of former DOD employees, and provide training on post-government employment restrictions.

Background Information

Q1. How many individuals did your company compensate directly either as employees, independent contractors (individuals for whom a form 1099 was generated) or members of the board of directors during any part of calendar year 2006?

Response	Frequency
No response	1
Responses	46
Total	47

Q2. How many of the individuals listed in question 1, were hired directly, engaged as independent contractor, or added to the board of directors on or after January 1, 2001?

Response	Frequency
No response	6
Responses	41
Total	47

Former DOD Employees

Q3. For each of the following compensated positions, does your company ask job candidates whether or not they are former DOD military or civilian employees before offering employment?

a. Permanently hired employees

Response	Frequency
Asked	38
Not asked	9
Total	47

b. Directly hired contractors (Form 1099 contractors)

Response		Frequency
	Asked	27
	Not asked	17
	Subtotal	44
No response/	Not applicable	3
Total		47

c. Directly hired temporary employees

Response		Frequency
	Asked	32
	Not asked	12
	Subtotal	44
No response/	Not applicable	3
Total		47

d. Members of the Board of Directors

Response		Frequency
	Asked	29
	Not asked	10
	Subtotal	39
No response/	Not applicable	8
Total		47

Q3e. If your company currently asks candidates whether they are former DOD employees, what means does it use to collect this information?

	Response	Frequency
	Application only	8
	Form only	10
	Other only	6
	App and form	8
	App and other	3
	Form and other	1
	All three	3
	Subtotal	39
No response/	Not applicable	8
Total		47

Q3f. If your company does collect information on an individual's prior DOD employment status, in what form is this information maintained?

	Response	Frequency
	Electronic	1
	Paper only	19
	Other only	10
	Electronic and paper	8
	Electronic and other	4
	Subtotal	42
No response/	Not applicable	5
Total		47

Q4. How many of the individuals who were compensated by your company during calendar year 2006 and who joined your company in some capacity on or after January 1, 2001, were previously employed by DOD?

Response		Frequency
	Do not know	35
	Number given	9
	Subtotal	44
No response/	Not applicable	3
	Total	47

Q5. Does your company ask individuals it is compensating or considering for each of the following positions if they have any restrictions on their employment as a result of being former DOD military or civilian employees?

a. Permanently hired employees

Response	Frequency
Asked	39
Not asked	5
Not sure	3
Total	47

b. Directly hired contractors (Form 1099 contractors)

Response		Frequency
	Asked	27
	Not asked	13
	Not sure	6
	Subtotal	46
No response/	Not applicable	1
Total		47

c. Directly hired temporary employees

Response		Frequency
	Asked	32
	Not asked	9
	Not sure	5
	Subtotal	46
No response/	Not applicable	1
Total		47

d. Members of the Board of Directors

Response		Frequency
	Asked	26
	Not asked	8
	Not sure	9
	Subtotal	43
No response/	Not applicable	4
Total		47

Q6. Does your company request compensated individuals in each of the following positions who have current employment restrictions as a result of previous DOD employment to provide a copy of the written advice from DOD Ethics Counselors regarding post-government employment restrictions known as a "Safe Haven" letter?

a. Permanently hired employees

Response	Frequency
Requested	34
Not requested	6
Not sure	7
Total	47

b. Directly hired contractors (Form 1099 contractors)

Response		Frequency
	Requested	22
	Not requested	14
	Not sure	10
	Subtotal	46
No response/	Not applicable	1
Total		47

c. Directly hired temporary employees

Response		Frequency
	Requested	27
	Not requested	10
	Not sure	8
	Subtotal	45
No response/	Not applicable	2
Total		47

d. Members of the Board of Directors

Response		Frequency
	Requested	25
	Not requested	7
	Not sure	10
	Subtotal	42
No response/	Not applicable	5
Total		47

Q6e. How long, if at all, does your company keep "Safe Haven" letters on file for individuals it compensates?

	Response	Frequency
	Not kept	3
	Employment	23
	Other	15
	Employment + Other	2
	Subtotal	43
No response/	Not applicable	4
Total		47

Q7. What steps, if any, does your company take to ensure that former DOD employees comply with their post-government employment restrictions?
N=45 (Open-ended responses)

Personnel Record Systems for Compensated Individuals

Q8. Did your company compensate directly any INDEPENDENT CONTRACTORS (individuals for whom a form 1099 was generated) during 2006?

Response	Frequency
Yes	44
No	3
Total	47

Q8a. [If 'yes' in Q7] How, if at all, does your company maintain records of which government project related assignments independent contractors worked on while paid by your company?
N=42 (Open-ended responses)

Q9. In what form does your company maintain records of which government project related job assignments EMPLOYEES have worked on?

Response		Frequency
	Not kept	9
	Electronic only	12
	Paper only	3
	Other only	12
	Electronic and paper	4
	Electronic and other	5
	Three forms used	1
	Subtotal	46
No response/	Not Applicable	1
Total		47

Q10. How is information on which government project related job assignments employees' have worked on entered into your records?
N=36 (Open-ended responses)

Q11. What procedures, if any, are in place to ensure that the record of government project related job assignments for each employee accurately record ALL of the assignments the employee has worked on?
N=35 (Open-ended responses)

Q11a. Are any of these procedures documented?

Response		Frequency
	Yes	29
No response/	Not applicable	18
Total		47

Q12. Are any audit checks performed to assure that ALL of an employee's government project related job assignments are included in their record?

Response		Frequency
	Yes	25
	No	5
	Subtotal	30
No response/	Not applicable	17
Total		47

a. What checks are performed to assure all assignments are included?
N=28 (Open-ended responses)

b. How often are these checks performed?
N=26 (Open-ended responses)

c. Who performs these checks?
N=26 (Open-ended responses)

d. What are the procedures to correct any errors found?
N=26 (Open-ended responses)

Q13. How often are the records of government project related job assignments updated?
N=36 (Open-ended responses)

Q14. How would you characterize the completeness of your personal data records regarding the government project related job assignments employees have worked on at your company?

Response		Frequency
	Very complete	23
	Somewhat complete	8
	Not very complete	3
	Subtotal	34
No response/	Not applicable	13
Total		47

Q15. What limitations, if any, are there of the government project related job assignments data your company maintains?
N=36 (Open-ended responses)

Q16. What reviews, if any, have there been of the integrity of your company's government project related job assignments record keeping system? *[Please attach any relevant documentation]*
N=36 (Open-ended responses)

Training

Q17. Does your company require training that informs and reinforces its policies regarding post-employment restrictions for former federal government employees?

Response		Frequency
	Yes	31
	No	14
	Subtotal	45
No response/	Not applicable	2
Total		47

[If No] Continue to question 18.

Which groups are required to take this training?

Q17a.1 All Employees

Response		Frequency
	Yes	12
	No	17
	Subtotal	29
No response/	Not applicable	18
Total		47

Q17b1. [If yes,] about how often are they required to take this training?

Response		Frequency
	1 per year	5
	< 1 per 2 yrs	1
	Other	4
	Subtotal	10
No response/	Not applicable	37
Total		47

Continue to question 17c.

If all employees are not required to take this training, which of the following groups of employees are?

Q17a2. Human Resources staff

Response		Frequency
	Yes	14
	No	2
	Subtotal	16
No response/	Not applicable	31
Total		47

Q17b2. [If yes,] about how often are they required to take this training?

Response		Frequency
	1 per year	3
	1 per 2 yrs	4
	< 1 per 2 yrs	1
	Other	3
	Subtotal	11
No response/	Not applicable	36
Total		47

Q17a3. Former federal government employees

Response		Frequency
	Yes	13
	No	3
	Subtotal	16
No response/	Not applicable	31
Total		47

Q17b3. [If yes,] about how often are they required to take this training?

Response		Frequency
	1 per year	2
	1 per 2 yrs	2
	Other	6
	Subtotal	10
No response/	Not applicable	37
Total		47

Q17a4. Middle-level managers

Response		Frequency
	Yes	9
	No	5
	Subtotal	14
No response/	Not applicable	33
Total		47

Q17b4. [If yes,] about how often are they required to take this training?

Response		Frequency
	1 per year	3
	1 per 2 yrs	2
	< 1 per 2 yrs	1
	Other	3
	Subtotal	9
No response/	Not applicable	38
Total		47

Q17a5. Senior-level managers

Response		Frequency
	Yes	13
	No	1
	Subtotal	14
No response/	Not applicable	33
Total		47

Q17b5. [If yes,] about how often are they required to take this training?

Response		Frequency
	1 per year	5
	1 per 2 yrs	2
	< 1 per 2 yrs	2
	Other	3
	Subtotal	12
No response/	Not applicable	35
Total		47

Q17a6. Other [*please specify*]

Response		Frequency
	Yes	17
	No	2
	Subtotal	19
No response/	Not applicable	28
Total		47

Q17b6. [If yes,] about how often are they required to take this training?

Response		Frequency
	1 per year	3
	1 per 2 yrs	4
	< 1 per 2 yrs	1
	Other	6
	Subtotal	14
No response/	Not applicable	33
Total		47

Q17c. Does your company maintain records of whether people who are required to take the training have completed it?

Response		Frequency
	Yes	25
	No	7
	Subtotal	32
No response/	Not applicable	15
Total		47

Q18. Has any government agency or independent entity assessed the adequacy of your company's procedures for hiring current and former government employees?

Response	Frequency
Yes	4
No	27
Do not know	16
Total	47

Appendix VI: GAO Contact and Staff Acknowledgments

GAO Contact	Cristina T. Chaplain, (202) 512-4841
Acquisition and Sourcing Management	Carolyn Kirby, Assistant Director Carol Mebane, Analyst in Charge Richard Cederholm, Senior Analyst Ronald Dains, Analyst Matthew Ebert, Senior Analyst Matt LaTour, Senior Analyst Greg Campbell, Communications Analyst
Applied Research and Methods	James Ashley, Senior Mathematical Statistician William Bates, Senior Data Analyst Lynn Milan, Senior Data Analyst James Ungvarsky, Supervisory Information Systems Analyst Monica Wolford, Senior Survey Methodologist
Office of General Counsel	John Krump, Deputy Assistant General Counsel

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[Whereupon, at 11:41 a.m., the committee adjourned.]

○