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ISSUES RELATING TO DEFENSE ACQUISITION REFORM

HEARING

BEFORE THE

COMMITTEE ON ARMED SERVICES HOUSE OF REPRESENTATIVES ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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ISSUES RELATING TO DEFENSE ACQUISITION REFORM

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, Washington, DC, Wednesday, March 29, 2006.

The committee met, pursuant to call, at 10:06 a.m., in room 2118, Rayburn House Office Building, Hon. Joel Hefley presiding.

OPENING STATEMENT OF HON. JOEL HEFLEY, A REPRESENT-ATIVE FROM COLORADO, COMMITTEE ON ARMED SERVICES

Mr. HEFLEY. The meeting will come to order.

Today the committee meets to continue its oversight of the defense acquisition system. Over the past several years, this committee has made major strides in the area of acquisition reform. Some of our most recent initiatives include rapid acquisition authority to field equipment needed to prevent combat fatalities; a statutory requirement for the Department of Defense to comply with its own policies, regulations and directives; and the revision of the Nunn-McCurdy amendment, one of the most powerful tools in the oversight arsenal.

These reforms, however, aren't enough. Year after year, we face the same problems: rapid cost growth, an unconstrained requirements process which delays fielding of new systems, and assurances from the Department of Defense that these problems will be corrected.

To the credit of the Department, they have commissioned numerous studies to identify the most pressing issues and to identify areas requiring reform. Today, our witnesses will review the results of these studies and share their findings with us.

Next Wednesday, the committee will reconvene with senior leaders from the Department's acquisition, requirements and financial management communities to discuss their plans for implementation of the numerous reform recommendations.

But, first, we have a unique opportunity to hear from the leading experts in the field of acquisition reform. Their perspectives on these ongoing challenges will be invaluable to the committee, as we continue our efforts to overcome these acquisition challenges.

Our first three witnesses served as the key members of major acquisition reform studies and will provide a brief synopsis of their findings.

First we will hear from Lieutenant General Ronald Kadish, United States Air Force, retired, for an overview of the recently completed Defense Acquisition Performance Assessment Panel commissioned in June 2005 by Deputy Secretary of Defense Gordon England. General Kadish will be followed by former Assistant Secretary of the Air Force Dr. Robert Hermann, who recently served as task force co-chair for a Defense Science Board Summer Study on Transformation.

Our third witness, Pierre Chao, recently served as principal author of the Center for Strategic and International Studies' "Beyond Goldwater-Nichols" report, and is senior fellow and director of The Defense Industrial Initiatives Group (DIIG), with the International Security Program.

Finally, we are fortunate to have a representative of the current acquisition system and one of the most experienced program managers in the entire Department of Defense. Terry Little, currently Acquisition Adviser to the Missile Defense Agency, offers a unique perspective as the voice of the current defense acquisition system.

I should note that Mr. Little is here today not to discuss his current position, but rather to speak about some of his previous successes in the acquisition system as program manager of the Joint Direct Attack Munition and Small Diameter Bomb. His testimony will offer a perspective as to how aggressive program management testing and risk control are able to keep a program on cost and on schedule all within the current acquisition system.

Gentleman, we are pleased that you are here today, and we look forward to your testimony.

Let me recognize first, though, the committee's ranking Democrat, Mr. Skelton, for any remarks that he would like to make.

[The prepared statement of Mr. Hunter can be found in the Appendix on page 33.]

STATEMENT OF HON. IKE SKELTON, A REPRESENTATIVE FROM MISSOURI, RANKING MEMBER, COMMITTEE ON ARMED SERVICES

Mr. SKELTON. Thanks so much, Mr. Chairman.

And I commend the holding of this hearing today on acquisition reform.

Acquisition has been an area of focus for both of us over the years, and now is the time for this committee to provide aggressive oversight, because our acquisition system has gotten seriously off track.

Last fall, when we examined the issue, I laid out the problems as I saw them. They are unchanged today.

Our existing weapons systems are aging rapidly, the cost of buying new weapons is growing astronomically, and in the past 4 years, the cost of the top 5 acquisition programs grew 46 percent. The budget for procurement grew hardly at all. As a result, we buy less and what we have keeps getting older.

I believe a handful of mistakes are driving this negative cycle. First, we are too aggressive in setting our requirements because we have become fixated on technology over soldiers. Second, we no longer have the right mix of people in our acquisitions system, and we have to invest in these professionals to get better results. Third, we have to repair a process that routinely ignores the time-honored policies and practices that have led to success in acquisition. Now, Mr. Chairman, we took many good steps to fix the process in our bill last year, and I know we will continue to focus on this as we put this bill together this year.

Today's witnesses are uniquely qualified to help us find solutions. They have studied them in depth. And the sheer number of major studies that have been performed in recent years tells us just how serious a problem we have.

I must note, Mr. Chairman, in particular, that we have with us today Pierre Chao from the Center for Strategic and International Studies.

Dr. Chao, I want you to know I hold very little grudge for the fact that you stole from me my ex-acquisition expert J.J. Gertler. I don't hold grudges too long, a couple years maybe. But we will get through it.

I might say, Mr. Chairman, "Beyond Goldwater-Nichols"—I will review your study with complete objectivity, Mr. Chao.

Thank you so much.

[The prepared statement of Mr. Skelton can be found in the Appendix on page 38.]

Mr. HEFLEY. General Kadish, the floor is yours.

STATEMENT OF LT. GEN. RONALD T. KADISH, CHAIRMAN, DE-FENSE ACQUISITION PERFORMANCE REVIEW PROJECT, U.S. AIR FORCE (RET.)

General KADISH. Thank you, Mr. Chairman.

I am pleased to be here today to talk about the commission that I chaired. I am here in my capacity as chairman of the Defense Acquisition Performance Assessment Panel, in accordance with the Federal Advisory Committee Act of 1972, to outline the assessments and the findings of the panel and to provide a perspective on the issues.

The panel's review process was held in an open and transparent as possible to engage the public while gathering as much input as practical from all the practitioners and stakeholders in the Department of Defense (DOD) acquisition process.

This initiative was established by then-acting Deputy Secretary of Defense Gordon England on June 7, 2005, in a memo that he wrote. And he directed "an integrated acquisition assessment to consider every aspect of acquisition, including requirements, organizational issues, legal foundations, decision methodology, oversight, checks and balances—every aspect."

The deputy secretary requested that the results be a recommended acquisition structure and process with clear alignment of responsibility, authority and accountability.

Our findings were reported to the deputy secretary in November of 2005, and a final report was released in January 2006.

Our conclusions covered a broad scope of recommendations.

We determined that the problems we faced are deeply embedded in many, many DOD acquisition management systems, not just in a narrow field called acquisition. Also, a new approach to improvements is needed to adapt to a new security environment that we face.

We reviewed over 1,500 documents to establish a baseline of previous recommendations. We held open meetings and maintained a Web site to solicit comments from the public. We heard from over a hundred experts and received over 170 hours of briefings. Over 130 government and industry acquisition professionals as well as organized labor union executives were interviewed.

From all this, we developed over 1,000 observations. Then we boiled them down to 42 areas, and ended up outlining in our report the major elements of the acquisition system. And we boiled them down to organization, workforce, budget, requirements, acquisition and industry.

History shows numerous studies and reform initiatives have occurred over the years. It still remains, however, plagued by numerous and highly publicized shortfalls in efficiency.

For example, 20 years ago, the president's Blue Ribbon Commission on Defense, most commonly known as the Packard Commission, ushered in an era of acquisition reform with its findings that DOD's weapons systems take too long and cost too much to produce.

Two decades later, many believe the weapons systems programs we have today still cost too much and take too long to field. We should ask ourselves a key question: Why?

The existing system, however flawed, has produced the most capable, best-equipped and most effective military in the history of the world. We have met the effectiveness test in the past. Now we have to adapt to a different security environment as well.

Fundamental structural changes in the acquisition system are needed to adapt to this security environment. And an effective system requires stability and continuity that can only be achieved through the integration of all the major processes and elements upon which it depends.

I would say that incremental change to the acquisition process as we know it alone usually assumes that the other key processes are cohesive and stable. In reality, they are disconnected and unstable.

We are convinced that the sheer complexity of the system is a major impediment and contributes to much of the confusion about the acquisition system and processes.

Let me explain. There are three fundamental processes that DOD operates. And if you will allow me, I would like to call these the Big A acquisition system. This includes the requirements process, the planning, programming and budgeting process, and the acquisition process. I will refer to the acquisition process among those three alone as Little A because it is embedded in the Big A system.

Simply focusing on improvements to that Little A acquisition portion instead of the larger acquisition system, the Big A, cannot and will not substantially improve defense acquisition and performance.

The larger acquisition system was designed and optimized to respond to a security environment dominated by a single strategic threat: the former Soviet Union. But today, key functions of the Big A acquisition system—such as the requirements development, systems engineering, operational testing and transitioning of science and technology—are being pursued almost as separate, independent entities, adding to the cost and complexity of the process. As I said, the security environment is very different today. Therefore the processes we need to meet the demands of this environment must have the flexibility and agility to respond in a timely way. Adapting the acquisition system to the realities of this new environment cannot be considered independently of the organizations charged with the conduct and the system to recruit, train and develop and retain its workforce.

Let me characterize this new security environment in maybe a little bit different way than you have heard in the past, and why it is important not to view these recommendations of the report or this whole subject of reform in isolation as a management problem or an organizational issue.

I would submit that the security environment we face today is a real challenge for our decision cycles. Where we spent and I spent much of my career trying to figure out how to turn our decision cycles inside those of our adversary and we have been very successful.

What we see in the processes today, faced with a new security environment with the Global War on Terror, is that we are in danger of having our adversaries turn inside our decision cycle. And that in and of itself is very worrisome.

Finally, the industrial environment has changed in fundamental ways, as well as the security environment. The globalization of industry and the consolidation over the last 15 to 20 years, as well as our outsourcing policies, affect the policies and strategies and techniques that we used to use.

This raises many key questions.

Twenty years ago, we had 25 prime contractors plus a subcontractor base that was very robust. And we were producing thousands of units of weapons systems per year. Today, we have six primes, depending on how you count. We are producing tens of things a year and we are very vertically integrated in our industry.

So things like how we use competition to get the benefit that we expect, how can we accomplish our mission with the globalization of the economy and why don't we have more nontraditional suppliers in our base become key elements of the discussion and worthy of very big national dialogues.

We believe our process for this project was very disciplined. And we sought to validate all these requirements and assessments and recommendations.

Mr. Chairman, I would submit the report of all those recommendations and assessments for your consideration for the record. I won't go through all of them right now, but would be welcome to have some questions about the wide-ranging capabilities that we are suggesting in the process, in the interest of time. But we did propose sweeping changes to dramatically improve the department's ability to stabilize and integrate key elements of the acquisition system.

As I said before, simply focusing on improvements to that Little A, without looking at budget and requirements, workforce issues, organizational issues and so forth, cannot and will not substantially improve the acquisition performance. We have been reforming that Little A for years, and we need to do more. But we have got to look at those systems that interface with that Little A. As I have listened in panel meetings and studied this problem over many months now and lived in this environment for over 25 years, I am convinced that we could do better to face our new security environment.

Our collective challenge, then, will be to overcome the myriad of interests, conflicting policies and incentives and inherent conflicts so that we can exploit technology to support our warfighters and turn inside our adversaries' decision cycles as much as practical. Otherwise, we will have another effort in a few years addressing the same issues that we face today.

However, we must ensure that in our efforts to improve the system we do not somehow degrade our existing capabilities and not provide our warfighters with the systems and technologies we need to continue to dominate the battlefield.

Thank you for listening, Mr. Chairman. And I will end it there. [The prepared statement of General Kadish can be found in the Appendix on page 41.]

Mr. HEFLEY. Thank you, General.

Mr. Hermann.

STATEMENT OF HON. ROBERT J. HERMANN, TASK FORCE CO-CHAIR, DEFENSE SCIENCE BOARD SUMMER STUDY ON TRANSFORMATION

Mr. HERMANN. Yes, good morning. I want to thank you for inviting me to testify on this subject. It is a complex issue, and I welcome the opportunity to convey some of what I think I have learned over the past decades.

You have, I believe, provided a full statement that I would like to have accepted for the record.

Mr. HEFLEY. All full statements will be put in the record, without objection.

Mr. HERMANN. Let me just talk to a few points and leave some time for questioning.

I became formally engaged with this subject in 1993 when Dr. Perry, who was then the deputy secretary of defense, asked me to chair a Defense Science Board on acquisition reform. In the next six years, I chaired many task forces on that subject, and since that time, have worked and studied this problem as an avocation, as it turns out, until now.

I would say that the best articulation of what I believe needs to be done does, in fact, reside in the summer study that we produced on "Transformation: A Progress Report."

In addition to studying it from the point of view of a defense adviser, I am obliged to say there are other things that form what I think about the subject. I spent 16 years, 11 of which as a chief technical officer, for a major public corporation in the manufacturing sector. I served as a manager in a government agency. I have served in the Office of the Secretary of Defense. I was the service acquisition executive for the Air Force before we called it that. And I served 2 years as a special assistant to Commander in Chief European Command (CINCEUR), Supreme Allied Commander Europe (SACEUR) at the time, and so believe I have some familiarity with the command issues. And from that, I have drawn whatever lessons that I would like to convey today. This subject is complicated enough that it is possible to miscommunicate from time to time, because each of us comes with different background and different use of language. And so I think the opportunity to miscommunicate is very, very large.

I am going to try to convert to a communications style which says that I have some propositions that I want to put forward and then they do not end up being the complete description of everything that should be done, but they are the salient propositions that I would offer to you.

First of all, acquisition, as General Kadish has said, is not just about buying things. From my perspective, the role of the Department of Defense is to create, deploy and employ armed forces to defend and support the political interests of the country. The things it must require or put in place are joint, allied and coalition military forces. The end product of the enterprise is effective forces, fielded forces, for today and for the future.

And so, the notion that we just buy things—it turns out we have to figure out what is the value of what we buy. You must relate back to the mission. You must buy things for value. And in order to understand value, you have to understand alternative uses of the money.

There are many observers and commenters on what is wrong with DOD. And each will have their version. My summary is as follows.

The first and most important is the Department does not have a plan for what it is trying to achieve in outcome terms. It makes no attempt to measure how well it is achieving its objective. And it has no system for understanding the true cost of any of its activities. This fragmented decision-making leads to overly optimistic cost and schedule estimates and results in destabilized program execution.

The DOD requirements process is very destructive. I might note that in the private sector and in a large public corporation we never used the word "requirement." There isn't anything that is a requirement.

For a long time I noticed that the Comanche was certainly required. I know there was a requirement for it because the Bible told me so. However, it was canceled, so it must not have been required. So the notion that things are required is in itself destructive. It separates the question of what is needed from the cost of fulfilling that need.

The requirement is usually fixed by a committee of people that have neither mission responsibility or financial accountability. This requirement is passed, in recent years, as unbreakable guidance to a procurement process that has no right or confidence to make trades between performance specified by the requirement and the cost and schedule implications of implementing the requirement.

Requirements should inform the judgment of accountable objectives but should not dictate performance outcomes.

Next, the Combatant Commanders have the ultimate mission responsibilities of the Department. As you stand at the secretary's position and say, "What is my mission?" I accomplish my missions through the Combatant Commanders, but they are not effectively permitted to participate in the makeup of the forces that are needed for the future missions of their command.

Although there are operational plans for tomorrow, there are no guiding plans for evolving the future force for that mission responsibility. The Combatant Commands do not have adequate technical support to manage the very technically rich system that is their force or to contribute to the evolution of that force for the future.

The Department spends a great deal of resources under the name of logistics, but does not have a quality logistics system. Management of this area is fractionated. The costs are huge and the effectiveness of the system is mediocre.

Finally, the way the Department implemented Goldwater-Nichols to move the leadership of the armed services from the armed service Title X organize, equip and train role—this removed an important source of military competence from the process and placed undue dependence on the destructive requirements process.

This was not required by the law, and no legislative action is needed to fix the problem. And I believe the Department is on the way toward fixing this problem.

In putting forth propositions that I would recommend to address these issues, I extracted part of the DSB reports that I have been chair, co-chair or participant in.

And I would say that the most important recommendation is that the DOD should have a business plan. They have a strategy, and they have a budget, but they do not have a business plan.

In the sense of a businessman, it means that I have to describe not only to my shareholders—in this case, me, the citizen—I have to describe to the people who are working in this enterprise what is it we are trying to accomplish and how are we going to get there? With what resources and by what schedule are we going to achieve what capabilities for this department?

Such a plan does not exist. So there are recommendations as to how to go about it.

And since this is a complicated recommendation—I know that from practice—I would start first by noting that it is important that the responsibilities, authorities and accountability within the Department be sorted out correctly.

There is a role for the armed services. And to achieve this objective, no change to Title X is required because the armed services should still be the primary source, along with the Defense agencies, of all the assets necessary to operate the Department.

There is a role for the Combatant Commands because they are the users. They are the place where the forces come into being and only there. We only have forces as a complete system under the command of combatants; the units that are provided by the armed services are not a complete force.

There is a role for the Chairman and the Joint Staff. There is a role for the Secretary and his staff, the Office of the Secretary of Defense. And we have outlined those in the report.

One of the key recommendations is that the secretary should, in his own management process, account for every dollar and resource allocated—should account for them under the mission heading of the Combantant Commander (COCOM) mission. That is, if there is a dollar given of mine, the taxpayer, to the secretary, he should be obliged to explain why it is that that relates to some mission that he has.

And therefore we have put a matrix together in which the program and budget formulation must be allocated or accounted for along the lines of the mission, so to give the Combatant Commander visibility of the resources of the Department that are being used in support of his mission today and in the future and visibility to the problems of the Department.

Because unless that is the case, the combatant commanders will not have any clout in Washington. It is about the money. And it is much more about the money than it is the mission, because the mission is not actually represented at the table very often, either here or in the counsels of the Department.

So anyhow, it is a heavy change in process, but it requires no change in the actual identification of resources, no change in Title X, no change in submission of resources to the Congress, but it actually has to do with the internal discipline associating the resources we put to the Department to the missions that we accept for the Department.

The increase in the ability of the Combatant Commanders derives from that recommendation in our report. And also, in order to support a more complete role, they need technical support.

We also describe a way in which to fix the Goldwater-Nichols change in the departmental process to include in the acquisition process the secretary of the armed service, the chief of staff of the armed service and his staff.

I think all of us have, in one way or another, tried to address the logistics problem. Our particular form of addressing the logistics problem is to say that there should be a Logistics Command. We currently have a Transportation Command and we have a Defense Logistic Agency and we have service logistics commands.

And our recommendation is that we pull those together into a single organized entity in which there is a commander of Logistics Command, which is basically the integration of Transportation Command (TRANSCOM) in with Defense Logistics Agency (DLA), and then dual-hatting the service logistics commands to provide support that is service-peculiar to them, et cetera. And so we have some description as to how that ought to be.

I think there is, perhaps, more than one right way to handle the logistics problem. But our version, I believe, is a very plausible outcome and will add discipline to the game and improve the efficiency of the Department.

Mr. Chairman, there are many other issues that are important to this process. One left that I don't plan to address is how to address the problems of the Department that are truly multi-departmental. That is, most of the serious problems facing this department actually involve the execution of coordinated missions by many of the departments of the executive branch. And we are poorly served by the current process.

Operational concept development is required to lead much of this. The people to mention. Managing the technological industrial base. The role of competition in the process, because that has been discussed in many ways. Balancing fairness, whatever that means, with enterprise results. And then allied and coalition force development.

I thank you for listening to me.

[The prepared statement of Mr. Hermann can be found in the Appendix on page 58.]

Mr. HEFLEY. Thank you, Mr. Hermann.

Mr. Chao.

STATEMENT OF PIERRE A. CHAO, SENIOR FELLOW AND DI-RECTOR OF DEFENSE-INDUSTRIAL INITIATIVES, INTER-NATIONAL SECURITY PROGRAM, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES

Mr. CHAO. Mr. Chairman, thank you for inviting me to testify before this committee.

Mr. Skelton, thank you for giving us J.J. Gertler. He has been a great addition to CSIS. I am hoping your grudges don't extend beyond my opening statement.

Mr. Chairman, first, let me commend you for holding a hearing on this topic. It is extremely important and very complex.

It has been clear that after 15 years of post-Cold War adjustment, reform and transformation that the military side of the Pentagon has made great strides in adapting to the new environment of the 21st century. It fights more jointly. It has altered doctrine, training, and changed its organizational structures.

However, the business processes of the Pentagon have been much, much harder to transform, as you know, and today probably represent, in my opinion, the strategic weak link in the chain.

This is particularly evident in the arena of acquisition reform. And by acquisition, I use General Kadish's definition of Big A acquisition that also encompasses the requirements processes, the Little A acquisition processes and the budget processes of the Pentagon.

There has been certainly no lack of trying—actually, no lack of trying over the last 200 years. What is amazing is when you read the congressional record following the Civil War, the First World War, Second World War, the same questions are being raised. If you were the committee chairman in 1867 looking back at Civil War, you might be talking about cannons and wagons, but you would still be asking the same question.

And there has certainly been no lack of trying in the last year. We have had four major analytical studies—the CSIS study, Defense Science Board DAPA panel and the QDR—which have all looked at the acquisition reform issues.

I was privileged enough to have worked, actually, on all four efforts. And although my comments will focus mostly on Goldwater-Nichols study, I would like to share my thoughts on some of the cross-cutting themes that emerged.

If I may start with the Goldwater-Nichols study, a copy of which I have here and I would like to introduce into the record formally, when you look at the Goldwater-Nichols, one of the key things of our study was to identify any negative unintended consequences of those 1986 reforms and see where the fundamental landscape has changed and that is causing problems today. [The Goldwater-Nichols study is retained in the committee files and can be viewed upon request.]

Clearly, when Goldwater-Nichols was passed, there was certainly a lot of controversy in the acquisition world then, just as there is today. We all still remember the lurid examples of the \$600 toilet seats and the \$427 hammers that filled the press. There was huge pressure to ensure that similar mistakes were not repeated.

And so when a solution was created in 1986, the supreme objective of the reforms process was to fix the mechanical processes of buying things. Some have said it wasn't actually acquisition reform; it was really procurement reform.

Congress reflected this by creating a new position, the Under Secretary for acquisition, which is now the Under Secretary for Acquisition, Technology and Logistics (AT&L). And one of the unintended consequences, however, of this legislation was the devaluing of the previous position of the Director for Defense, Research and Engineering, the DDR&E.

In fact, since the end of the Second World War, the DDR&E was the third most important position in the civilian hierarchy at the Pentagon. It sent the signal that technology was of strategic importance to the Pentagon and to the nation, and it ensured that there was a strong institutional champion.

And the Goldwater-Nichols reforms have changed the role of the Pentagon's number-three person from being focused on what to buy, and instead made them focused on how to buy types of issues. Dr. Hamre has used the phrase, "It shifted the focus from marksmanship to gunsmithing."

Today, the acquisition system inside DOD is a bewildering complex of processes and procedures. Clarity of action in many ways is missing.

Clearly, personalities of the people holding that AT&L position can shift and change. I must point out that the current AT&L person, Ken Krieg, has been trying to focus quite a bit on the whatto-buy issues, but the institutional pressures that drag him back to focus on how-to-buy issues are there on a day-to-day basis.

Another problem identified with the DOD's current acquisition systems: the fractured accountability that was created by the original Goldwater-Nichols reform legislation. It created a fault line inside the Department. It divided the acquisition system into a differentiated process that insulated it from the procedures that established requirements in budget.

Our study has found that this fault line between the acquisition process on the one hand and the requirements and budgetary process on the other is one of the primary contributors to lack of institutional accountability in our system today.

The study concluded in many ways that the primary problems are institutional and that institutional change was required, and it recommended a few key things.

The first one was creating a clear advocacy for supply versus demand. Today, the service vice chiefs, in many ways the representatives of the suppliers inside the Pentagon, comprise the Joint Requirements Oversight Council, the JROC.

CSIS study team believes that this needs to be changed and that the JROC needs to be populated by the demand-oriented institutions inside the Pentagon; in this case, represented by the Combatant Commanders, the users of the system.

It also advocates adding on to the JROC those who represent the longer-term views within the Pentagon, which would include the Under Secretary for AT&L, the Under Secretary for Policy and Program Analysis and Evaluation (PA&E) to provide the analytical engine, as well, behind the JROC.

Second, the study recommended returning the military service chiefs to the chain of command for acquisition. You have heard from the other two major studies; that theme has been echoed. It solves another institutional faultline that was placed. It creates, once again, a central belly button that can be pushed by the taxpayer and by yourselves for accountability in the acquisition systems. The service chiefs need to be held accountable for the whole supply function, and they need the authority to carry this out.

Third, focus the Under Secretary of AT&L on the marksmanship aspects of the job, the strategic element, rather than the gunsmithing, or the day-to-day management of programs.

And the fourth area that we focused on in our study has to do with the rapid acquisition process. Because one lesson that has been learned and relearned by this nation since the Revolutionary War is that the acquisition system is designed and optimized for peace. And each time it hits wartime, the wheels fall off the cart.

What makes this situation even harder is the fact that the Nation is in a dual-mode today. We have half our system focused on being in a wartime mode, where time is critical, technologies must be off the shelf, testing, in many ways, is less relevant because you are doing it in the field today, and agility, innovation and experimentation and risk-taking are absolutely critical.

Meanwhile, the other half of our system is focused on longerterm potential near-peer competitors 20 years out, where the traditional acquisitions system actually works fine. The central focus is cost and performance. We can afford to move more slowly, deliberately, and where efficiency is critical. One size simply does not fit all, and it argues that we may need very distinct and different tracks for the acquirers to work on.

I must commend your efforts, actually, in the fiscal year 2005 budget process and authorization act to create the rapid acquisition tools for the Department. But our study would argue that the current rapid acquisition system should be expanded beyond where you have taken it, establishing preset waivers to particular laws and processes be made more permanent and pots of money being made available. Because it turns out that the budget process in some ways is becoming the choke point in the rapid acquisition system.

So in conclusion, Mr. Chairman and members of the committee, I again applaud you for holding this hearing. Acquisition reform will need some congressional champions if it is to move forward meaningfully. I can only hope that this is the beginning of a long and fruitful dialogue, and I know that I and my colleagues at the Center for Strategic and International Studies (CSIS) are prepared to support you in any way as you tackle this critical issue.

[The prepared statement of Mr. Chao can be found in the Appendix on page 50.] Mr. HEFLEY. Thank you, Mr. Chao. Mr. Little.

STATEMENT OF TERRY R. LITTLE, ACQUISITION ADVISOR TO THE DIRECTOR, MISSILE DEFENSE AGENCY

Mr. LITTLE. Thank you, Mr. Chairman.

I come at this from a bit of a different perspective than these other three gentlemen, in that I have no study that I have done, no formal study.

What I have done is have had 25 years managing major acquisition programs. Most of that has been with the Air Force, but I have had the opportunity as an interested observer to look at large programs in the other services. And I have drawn some conclusions from that that I would like to share with the committee, recognizing that these represent my opinion and not reflective of either the Missile Defense Agency or the Department of Defense.

From inside the process, I would have to say that I believe that Goldwater-Nichols, as it pertains to acquisition, is fundamentally sound. What is not sound is the Department's implementation of it. And I want to be more specific.

Oversight and review, a necessary function, but what has happened is, it has created a massive bureaucracy of highly focused stovepipe people insisting that they get their way with the program. And the end result is something that not only is not helpful to the success of the program, but in a general way tends to undermine program execution by giving the program manager too many masters that he has to satisfy.

There is a lot of talk about the requirements process and who should set requirements. I believe that the current approach is reasonable and that the JROC is reflective of a check and balance in that you have very seasoned people, plus the vice chairman, who represents the Combatant Commanders.

The trouble with the requirements process, though, is not who sets the requirements, it is how they are set and when they were set. We set them too early, before we know enough to really set them. We are too specific. We don't leave trade space. And we create a situation where the program is doomed to fail or at least to disappoint.

And that is troublesome to me because over my 25 years, one of the things I have observed is most requirements are made up. They are made up by users who get inputs from both government people and contractors about things that are possible, and they use those as a basis for setting their requirement as to what they want.

So, to me, it is kind of a very troubling thing, that we are too specific and too early.

A lot of talk about the budget and budget stability. The services do that to themselves, in my estimation, by having more programs than they can afford and by sanctioning, at least implicitly, underestimates to cost and underestimates to what is going to be required to actually execute the program.

And so, what ends up happening is, when an important program runs into cost trouble, the departments look to other programs to solve that. And so to fix one, you break others. But that is a departmental execution problem, in my estimation. So how do you get better results? I have a bit of a prescription which is oversimplified, but I am going to give it anyway.

One is, if you want better results, two things need to happen: set more realistic expectations at the start and get better program managers. I want to talk about each of those.

When a program starts, there are enormous pressures to be optimistic: optimistic about performance, optimistic about cost, optimistic about schedule. We are in a military culture. And when we are in a military culture and we have a problem, we don't call it a problem, we call it a challenge. And a challenge is meant to be overcome.

So when the typical program manager gets pressures to add requirements or understate costs or understate the schedule, the typical answer is, "Yes, sir, we can do that, we can do that," because we want to please.

So if you go back and look at the history of the disappointing programs, you will find that in most cases the seeds for that disappointment were sown very early when the expectation for the program was set.

Now, how do you resist if you are a program manager? The way you resist is you develop a conviction, number one, and, number two, an expectation that you are going to be accountable personally for the outcome. So if I overpromise, I am going to be there to be in front of someone explaining why when the chickens come home to roost.

Most program managers don't have an expectation of continuity. Their expectation is they will be with the program a couple of years, somebody else will replace them. And so, it is easy in that kind of a situation to set expectations because someone else will have to deal with the problem when those expectations turn out to not be realized.

I mentioned better program managers. What do I mean by that? As I look around at the managers of the major acquisition programs across the services, I would say that about 20 percent of them are stars—real stars. About 60 percent are okay, meaning they are unlikely to make huge mistakes, but if the program gets in real trouble, they are probably not going to be able to pull it out. And about 20 percent I would characterize as incompetent.

Now, how does that happen? We don't do a very good job developing, training, picking, mentoring, coaching and keeping program managers. We need to do a much better job.

In my estimation, the program manager should be as well prepared to manage a major acquisition program as a pilot is to fly an aircraft. And that means more training; more selection, not just looking at resumes; and putting people to the test where they have to produce results and outcomes and seeing how they fare.

Defense Systems Management College has done some studies of program managers of successful programs, and they have concluded that the most important factor in a program's success is who the program manager is and, more precisely, his basic approach to the job. Many program managers see the job as one of dealing with technical complexity, making decisions, being an advocate for the money. The successful program managers understand it is not about management; it is about leadership, it is about dealing with change, it is about confronting issues, it is about recognizing that you have to develop alliances, it is about creating confidence on those who are following you as well as those to whom you report. We don't take that approach when we select program managers.

There is another factor that really relates to some of the things that I think were brought up. There is a prevalence in our acquisition workforce of what I want to call a cost-plus mentality. Now, let me explain that.

In the 1980's, we had a bad bout with fixed-price development contracts. And it produced some really bad stories. So we made the transition where virtually all of the development contracts are costreimbursive. And what does that produce? The first thing that it produces, and in fact encourages, is a lack of discipline and, in particular, a lack of discipline in planning.

Just because something is cost-reimbursable, that is not a license to make it up as you go along. But in fact what happens, as a practical matter, is we have lost the art of doing detailed planning and the discipline of executing to a plan. And by "we," I am talking about not just the government program offices but also the contractors to whom we give these cost-reimbursable contracts.

Second, we have tolerated and continue to tolerate inefficiencies. Our government program management teams are way, way, way too large. They generate needless work, in my estimation. And they cause the contractor to hire additional people that really don't contribute to the end product.

And the third thing is, it has encouraged us to undertake highrisk ventures. I believe, as some of the other studies have shown, we need to be looking more precisely at spiral development, moving a step at a time, with low-or moderate-risk activities, with parallel efforts to develop the technology outside the main-line development program and, as the those technologies mature, to be able to fold them in.

So what I have is much more predictability about what performance I can get, what it is going to cost and how long it is going to take.

Finally, I want to say that I think the GAO has done a good thing with setting up the notion of knowledge points. They have not gone far enough, however, in that they have only focused on technology readiness. I think they should be focused, as well, on engineering or on manufacturing readiness.

We have a lot of technologies today that we can get enchanted because of what they promise in the way of performance, but if we can't manufacture those affordably and repeatably, we are going to have a major problem. And I don't think we give near enough credence to that.

So my view is we don't need fundamental structural changes. What we do need is different implementation, different attitude, and overall a different way of buying what we buy that is really reflective of a cultural change as opposed to an institutional change.

Thank you, Mr. Chairman, for the opportunity to give my remarks. [The prepared statement of Mr. Little can be found in the Appendix on page 71.]

Mr. HEFLEY. Thank you very much, all of you.

I am going to defer my questions.

Mr. Skelton.

Mr. SKELTON. Mr. Little, thank you.

And thank each of you gentlemen for your excellent testimony. Mr. Little, it is good to hear your positive comments about getting the Goldwater-Nichols acquisition piece right.

My question of you is: How can we as a committee help the Department of Defense get it on the right path? In other words, if you had a magic wand and this committee would do what your magic wand said, how would we help them get it right?

Mr. LITTLE. I would offer a couple of thoughts.

I said I think the Goldwater-Nichols is fundamentally sound. One thing that is not sound is the Defense Acquisition Workforce Improvement Act. It has too many holes to allow for waivers and deviations. I believe that should be strengthened substantially. That would be one step.

Second step would be to take the AT&L office out of the acquisition program oversight business and put that down at the service level with a limited staff and essentially have that staff be comprised of people who weren't functional experts but who were seasoned program managers who could help the program succeed.

What I don't need are functional experts telling me at the headquarters level how the contract needs to be, how the finances need to be, how the technical needs to be. I get enough of that help at my own level. What I need is someone who has been there and done that who can help me with the balance, with how do I balance all of these things.

We don't have that today. In fact, on the military side, when we have seasoned program managers, people who have actually had some successes, amazingly enough we move them out of that position so that they no longer have access to people like me and others coming up. And I would do something about that. I don't know what that something is.

I mentioned the program manager tenure. In my simple mind, if we want accountability, we need to put a program manager in place with an expectation that he is going to live with the results that he has promised.

And what I would say to that is: Five years, you die, you get fired or you retire. Those are the only ways that you get out. If you get promoted, we will figure out how to deal with that.

You know, the fact that the Joint Strike Fighter (JSF) has had who knows how many program managers in its time, I think, in a significant way is at the root of why that program has had and will continue to have so many issues associated with it.

So that would be my magic wand, sir.

Mr. HEFLEY. Mr. Kline.

Mr. KLINE. Thank you, Mr. Chairman.

Thank you, gentlemen, for being here and for years and years and years of very hard work trying to solve a problem which many of us, looking at it for over these many years, think is unsolvable. I think, Mr. Hermann, you mentioned or someone mentioned Secretary Perry and the study that he had asked for. And you go back to Secretary Perry going back to probably when he was DDR&E, and we were talking about fixing the acquisition system.

All of you have said that it is a system that has been broken for many years. General, you talked about language 20 years ago and you are looking at it again. It is the same language.

And so, I am kind of wringing my hands, and have been, as have undersecretaries of defense for acquisition, year after year after year. We can't seem to fix it.

And I am struck by a couple of things. I think that there is a model out there that many of us have looked at for a long time. If you put things under a cloak, like the skunk works, and you get a project that comes out ahead of time and under budget, I know that you have all looked at that process. And I am wondering if somebody has a comment as to why that worked relatively well, if you are willing to share that with us.

And then, just a couple of more comments on my part, and then I would like to throw a question out for all of you.

We in this committee, in this Congress, gave the Secretary of Defense this rapid acquisition authority, which was supposed to bypass the Federal acquisition regulations and allow the Combatant Commanders to recognize something that they needed to save lives in the theater and allow the secretary to bypass the process and buy what we needed to save those lives.

And yet, I know that we on this committee are frustrated, week after week, when we see that things aren't getting fielded as rapidly as we think we should.

The chairman of this committee has held hearings trying to get at the bottom of why that has happened, because we streamlined the process as well as we think it could possibly be done. We just waived everything and said, "Mr. Secretary, go buy it if you need it."

And yet, we hear, when we talk to folks who are trying to field equipment, "Well, we are verifying the requirement," or "We haven't finished the testing," or "We have only done developmental testing and not operational testing," or something. We seem to get immediately mired back into a system that has been with us not for years but for decades.

Mr. Little, you talked about needing to change the culture. We don't have that wand to change the culture. So we are looking for something. What could we do that would allow that culture to be changed?

So a couple of questions. The rapid acquisition authority, what do you know about it, and why do you think it gets hung up and we can't get the things we need into theater as rapidly as we would like them to get in there?

And then, many of you talked about the requirements process being broken. We have had some suggestions. Again, if you could wave a wand on the requirements process, I would be interested in what you have to say.

Thank you.

General KADISH. I would like to take a crack at answering the question on the requirements. I think it is one of the most important issues that we face.

And one of the things that we could do, and it is recommended in our report in the Defense Acquisition, Performance Assessment (DAPA) commission, is to value time. We call it time-certain development, where schedule counts in the process.

What you find in the requirements development and testing activities is that they are willing to trade time for something better. And unless and until we make time equal to those performance variables, we will get the same behavior you described.

So schedule is important, especially in this security environment. That is why I mentioned earlier about turning inside our adversaries' decision cycles.

So as we talk about how fast it goes, how far it goes, how lethal it is, we should also specify when we want it. And then that generates more evolutionary approaches to testing and development activities.

So I would strongly recommend that we look at time equal to or better than the performance required out of the weapons systems.

Mr. KLINE. Thank you, Mr. Chairman. I apparently preambled too long. I see my time has expired.

I would be interested in any written responses that you may have on those three issues that I covered.

Thank you, Mr. Chairman.

Mr. HEFLEY. Mr. Snyder.

Dr. SNYDER. Thank you, Mr. Chairman.

We appreciate you gentlemen being here.

This is incredibly complex and confusing, I think, for a lot of us and for a lot of Americans. But we know how vital it is.

And what I want to do is I have two specific questions I want to ask you about, maybe as a test of how a good acquisitions system ought to deal with challenges.

Number one is, probably the number-one priority in this committee for the last three years has been armor—personal protection for our troops. And we have been assured multiple times—and the chairman has worked on it and the ranking member has worked on it—about, yes, we are moving in the direction we want to be in terms of personal protection for body armor and protection for vehicles.

I learned yesterday—and the fact that General Schoomaker said that in June of 2005 that we were on track to have the number of enhanced small-arms protective inserts, the small arms protective insert (SAPI) plates; we are on track to do that in fiscal year 2007.

The requirement had been set by the Army to buy 40,000 sets a month. And it is my understanding, in the last couple weeks, the Army has let it be known that they are only going to be 20 sets a month.

And I am not sure why that is but there were suppliers out there of these composite materials, six competitors, that had ramped up in anticipation of 40,000 sets a month.

And you need competitors because this a changing technology. I mean, you don't want a material that will just stop the first bullet;

you want it to be able to stop subsequent bullets after it has been hit and shattered and already had velocity to it.

Now, the situation is, the Army is saying, "We are going to cut back from six suppliers"—that is my understanding—"to three suppliers." And the ones that are going to be retained are the ones that the Army has dealt with, not necessarily the ones that have the best technology for stopping a bullet.

Now, we talk about our business community out there, our suppliers—how should this system work?

I don't expect any of you to have any personal knowledge about enhanced SAPI plates and where that contract is and all that. But here is, then, probably the number-one priority for the Congress, and we have had industry ramp up, and now it is my understanding they are getting some information that, "Oh, you are not going to be making money at this after all because we are going to cut the requirement in half and we don't need but six of you; we are only going to use three of you."

Now, how should this system work?

Mr. CHAO. In some ways, we have also been looking at defense industrial base issues at CSIS. And one of the biggest issues that you come across, particularly when you are trying to get at a nexus of acquisition reform and defense industrial issues, as you know, it gets to be an extremely complex issue, and it is very hard to peel out what is relevant versus what is not.

One of the biggest things that we have done in terms of trying to think through those issues is look at where an industry is or where a technology is in its maturity cycle.

So to your point, in areas where there is lots of changing technology, you have lots of competitors, that you let competition reign as much as possible, the taxpayer gets as much of the benefits as possible. In areas where the technologies are more mature, in some cases the one-size-fits-all solution of competition is probably a bad place to be, and trying to force competition and mature technologies may not be the right area.

Dr. SNYDER. This seems like an area where we benefit from having an increased number of suppliers. And certainly if we are going to cut back, it ought to be cut back on who has the best technology at the time.

Mr. CHAO. And it is always that tradeoff between the cost of having the suppliers initially versus the savings that you get from competition.

General KADISH. May I make a comment about—

Dr. SNYDER. I want to get my second question, if I can, and maybe you can comment on both of them.

My second question is: We have had this horrendous situation in the last few months with our former colleague Mr. Cunningham who pled guilty to felonious conduct that he and everyone in this institution, every American, thinks should never have occurred.

My question is: He was able to, by his own words, accept bribes to get contracts through the Congress that the Pentagon funded that they didn't want. They didn't want this stuff. And the only way it was done is because somebody out there was able to hire a zealous advocate on the behalf of those contracts. Now, where did our system break down? Where in the Big A is there to be something? Where is the oversight that says, "We don't want this stuff. We are firing off a red flag. We don't want this stuff, regardless of what led to it to be inserted in the first place"?

I didn't see much of a role in any of your discussion about congressional oversight, but where do the red flares go off that says, "Just because this comes from Congress doesn't mean it is the right thing to do"?

General KADISH. It is a tough question to answer, but I will just make a mechanical response to you—is that, when you have a program and the appropriations and authorizations that come down and there are specific directions to spend money in certain areas, there is very little opportunity to change that.

And the only tools that I am aware of is reprogramming, or those types of efforts that tend to be not very productive, because you probably don't get the answer you are looking for.

So it is issued as part of the bureaucracy, and the bureaucracy is designed to make sure you comply with the law. So once it is there, it is very hard to say, "No, we are not going to spend the money as directed." And it really is a tough problem for program managers to deal with earmarks and those types of directive activities.

Mr. HERMANN. Can I just say that in the large sense that this question represents, you must get the incentives correct?

Now, the way in which money is spent on defense is Congress appropriates it and the executive branch executes it. So there are a lot of folks in there who have incentives for wanting something to occur. Some of it has to do with constituency, some of it has to do with conviction, some of it has to do with institutional representation, but you got to actually—everybody is operating in some sort of incentive and reward-risk domain.

And there is no question, if you are going to do acquisition reform from the department's point of view, you have to account for the fact that there is an incentive to fund resources across the whole nation in what is loosely called an earmark, or pork, situation, but that is overcomable.

But what is missing in many cases is the mission of the Department of Defense and the mission of the security of the United States. And that mission is not present at the table in many places where bad deals are done. And because the mission is not there, it permits a lot of things to occur, some noble and some ignoble, that are not correct.

Thank you.

Mr. HEFLEY. Ms. Davis.

Ms. DAVIS OF CALIFORNIA. Thank you, Mr. Chairman.

And I am going to actually ask the rest of the panelists to try and follow up on that question, because I think it is an important one. Obviously, it is one of concern to all of us.

And I wonder if you would incorporate within that, is there some—I think to answer it—but then if you have former DOD officials or former military officers who are acting on behalf of contractors, should there be better reporting requirements for them? Is that an area that also is a concern? And if you can address the first part and then the second, that would be great.

But I also just wanted to say, Mr. Chairman, I mean, this has been very dry and difficult, and I think that a lot of members aren't necessarily able to be here. But I think it has been, actually, very interesting and somewhat, I think, shocking and disconcerting at the same time.

And so I appreciate the fact that you have been here to discuss that. And if we have time after the follow up, I am just curious about some other interplay between your responses.

Thank you.

Mr. CHAO. To follow up, Congresswoman, to your question, I think one of the issues in allowing the three systems—the requirements process, the acquisition process and the budget process—to drift apart somewhat in the last 10 or 20 years allows what you have discussed to come about, because in the absence of a strategic vision being driven by the requirements process and by the other processes to tie it together with the acquisition process.

We, in the end, brute-force all these strategic decisions at the last minute through the budget process, which then gives disproportionate power, I think, to what has been going on.

So the more work that is done in advance at the front end of the system, I think the more we end up solving. If you look at almost all the acquisition reform that we have been trying to do and what part of the system we end up fixing, we keep putting more and more oversight on the back end of the system to trap things and to brute-force them back into shape, when if we spent as much energy at the front end in terms of how the requirements are set, the broader strategic issues that are being raised, frankly, the efforts that you are making in doing a parallel Quadrennial Defense Review (QDR)-type effort and the types of broader strategic issues are exactly where the focus ought to be on.

And therefore, when someone comes in with an earmark or something that looks incongruent with that overall strategy, it then becomes easier to put that within context and sit there and say, "Boy, we really don't want this. And, oh, by the way, here is a strategy that we developed and a business plan that it doesn't fit with, which makes it easier to say yes or no to those kinds of things."

Shedding sunlight onto the system in terms of reporting is always a good thing, right, that disclosure always helps and is always useful and, frankly, cannot hurt.

Ms. DAVIS OF CALIFORNIA. Is there a limit in terms of the amount of the contracts that you think is appropriate? There was a bill at one time to do that, at \$10 million, I believe.

Mr. CHAO. I would have to sort of think about it. I would have to get back to you on where you would set that—

Mr. HERMANN. I would argue no. I would argue a firm no, because whoever is going to pass that law or regulation is not smart enough to know what the right answer is and is very likely to create more problems than was intended to help.

I just don't think that setting an arbitrary specific number is likely to be helpful, and it will not actually fix the much larger problems that we have been talking about.

Ms. DAVIS OF CALIFORNIA. Thank you.

Mr. Little, did you want to comment on-

Mr. LITTLE. Well, just a couple of things. You asked about, do we need stronger, I will call them, integrity rules for former government military officer.

The rules that we have right now are very strong, and they are enforced rigidly, not just on the government side, but also on the company side. So I would say, as a result of scandals with Boeing and whatnot, that that is an area where I think we are as good as it gets.

With regard to the earmark, I think it would be helpful if we in the executive side could understand the intent of the earmark. In other words, is it to get a constituent into the process? That would be helpful as a kind of a check and balance, and helpful here in the Congress looking at those earmarks and trying to understand are those legitimate, reasonable things to be doing or what is up with this.

Ms. DAVIS OF CALIFORNIA. Okay, thank you.

Thank you, Mr. Chairman.

And I hope that perhaps some of those multi-faceted managers that you are speaking of that are well-trained could also be helpful in that as well.

Thank you.

Mr. HEFLEY. Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

Gentlemen, thanks for coming. You were supposed to come here and help us out.

And, General Kadish, just as an example, your testimony says that we should enhance the stature of the Under Secretary of Defense for AT&L. Mr. Little has told us that we need to decrease the stature of the Under Secretary of AT&L. And Mr. Chao has told us keep him where he is, keep the position where it is, just add more to it.

It is a complex enough issue for us to deal with, defense acquisition reform, which we need to deal with. And you are all smart folks. And so I am curious, to help me understand where you are all coming from, how you came to very different conclusions on just one aspect of acquisition reform.

General KADISH. Well, Congressman, maybe I heard it different or wasn't paying attention, but I think when you lay those together, they are more similar than they are different in the process.

And we struggle with that in all these types of studies, because in this particular panel, we had six or eight people that sat around the table and we argued about things from a point of view. This is not a scientific effort, and so you will get disconsonant types of recommendations.

However, I think what is important is that there is general consensus—at least what I heard at this table—that AT&L and the structure is useful and important. How to make it more useful you might be able to argue about in the process.

We recommended that the AT&L get the budget authority for a stabilized account, be a part of the Joint Requirements Oversight Council (JROC) approach. I think you heard some of the same things from the other panel members today. But you are always going to have dissenters in the process. And I would just ask you to try to sort through that and look for what is more common than any specific recommendation.

Mr. CHAO. I think if you, sort of, take a look at the recommendation—again, it is interesting because I was on the Defense Science Board summer study and it was interesting to see the arguments evolve over the year.

I think you will find a lot of resonance between what Mr. Little said and our recommendations, to the extent that we, in the "Beyond Goldwater-Nichols" studies, thought that AT&L should be focused at that front end of the strategic dialogue far more so than trying to interfere in his day-to-day actions and trying to bruteforce the solution by hammering him on the head on a daily basis; let's get the requirements and the initial issue upfront.

And so from that perspective, we have said, "Focus on the front end. Focus at that. Return back to the older role in some ways of focusing on what to buy rather than how to buy." And so in some ways, we didn't see it as adding things on, but in some ways taking things away, getting them out of the day-to-day management focus.

Your question, in some ways, highlights a broader issue, which is, it is kind of smelling like the early 1980's these days, in terms of there s a crescendo of activity about acquisition reform. There are articles, there are scandals, there are lots of reports being written.

What hasn't yet happened that occurred with Goldwater-Nichols was it all coming together where somebody actually did create a congressional commission or something that would sit there and say, "Fine, we have had a lot of fine work. Let's figure out which ones of these recommendations we, as an institution, as a body, should take forward and move ahead with so that way we can get into this next generation of reforms."

Mr. LARSEN. Mr. Little.

Mr. LITTLE. If I may make just one comment, I said that I thought the Goldwater-Nichols was fundamentally sound. One of the reasons that I say that is the basic principle that the Packard commission espoused—and it is carried through the Goldwater-Nichols—is for the program manager to have short, clear lines of authority.

And one of the problems that we have today is that is all kind of muddied up by staff and different people want to put their fingers in the process.

And that short, clear, unambiguous line of authority in my estimation is absolutely critical if we want to make headway on improving acquisitions, where I have got a boss I can count on to support me or tell me I have been smoking dope, and he has got a boss, and you have got an accountability chain.

What is frustrating, it seems to me, is when something goes wrong. If I were sitting in your seats and I look around to see, okay, who is going to explain this to me? Who is accountable? Who is responsible? There is nobody there. There is nobody there. And I think we have to fix that.

Mr. CHAO. We would actually quibble a little bit. I think a lot of the people at this table would sit there and really endorse the Packard commission, because it stands the test of time. We would actually argue that it was never really fully implemented, and that is part of the problem. If it was, then we would be right with them.

Mr. HERMANN. I would just say that in my testimony, if you look, there is a chart on accountability and who ought to be doing what.

I think that the current AT&L's position is not badly formed. And I don't have a problem with General Kadish's argument to have a stabilizing fund and so forth, but I don't think it is the center of the problem.

When Goldwater-Nichols cleaned up the line of command and put it straight up through the acquisition chain, it took for granted that the acquisition chain would know what to buy. They do not.

I served in 1964 with McNamara and when Harold Brown was Director, Defense Research & Engineering (DDR&E). I served with Harold Brown when he was Secretary and Perry was and so forth. And in all of those times, the issue was: What is the right thing to put your money on? Foster in the early 1970's. And the way in which, as an example, Brown and Perry did it is they actually forced through their own operational judgment; and, mercifully, it was good.

What we need to strengthen is the side of the department that is accountable for the mission and force there to be a coherence around some planning structure-we call it a business plan-so that the incentives to get the mission right are in the hands of whatever structure you put together.

But I do not think wickering with the structure is going to fix it without actually changing the incentives process.

Mr. LITTLE. May I offer one brief comment? And that is—

Mr. HEFLEY. Go ahead.

Mr. LITTLE [continuing]. There is a lot of focus on changing the lines on the wiring diagrams as a way of fixing things. For example, putting the Chiefs of Staff and the Chief of Naval Operations (CŃO) somewhere in the acquisition chain.

Let me tell you from personal experience: They may not have a line, you know, an organizational chart, but the Air Force chief of staff is personally involved in F-22. I think the CNO is fully involved in DD(X); Army with the Future Combat System.

So I am not discomforted that somebody doesn't have a line running to them and saying that somehow puts them out of the process, because they are not out of the process.

Mr. HEFLEY. Mr. Snyder, do you have a follow-up question?

Dr. SNYDER. I wondered if we were going to go around again, Mr. Heflev.

Mr. HEFLEY. Go ahead if you want to ask a question. We are going to have a vote here in a few moments, so we are going to have to kind of hurry. But go ahead.

Dr. SNYDER. Okay. Maybe you want to put the clock on that?

Mr. Hefley is leaving us at the end of this Congress, so it really

does me no good to suck up to him anymore. [Laughter.] But I will do it anyway. You know, he has been overseeing the military construction on the authorization side for a number of years now and has really insisted that, you know, members want to add on or move up projects in bases in their district or around the country, but he has insisted that the projects be in the military's Future Years Defense Plan (FYDP).

Now, there has been some exception to that, but you have got to make a real strong case why that is an exception to having it on the FYDP. That was a control. That is part of that business plan that I think one of you were talking about.

Going back to the problems with Mr. Cunningham in the Congress, I have written three letters to this committee—January, February and March—asking for what I thought was going to be done anyway, which was: What happened? How was this committee, or was this committee, part of a process that became the subject of felonious conduct?

One of you talked about putting energy at the front end. In my view, Mr. Hefley's approach is putting energy at the front end. You do all your looking at this stuff as part of the FYDP, not then coming back later to see what went wrong. Because it is very hard to figure out what went wrong with something like a project that never should have been funded, that the Pentagon didn't want.

The specific question I want to ask is, today or yesterday, the per capita income numbers came out—I think for the country—but for Arkansas. Arkansas is now 48th. We are only above the two states that were ravished by the hurricanes, Louisiana and Mississippi.

Our per capita income is a little over \$26,000. Connecticut, for example, at the top, is like \$47,000.

And so when my constituents and Arkansans see what seem to be incredibly lucrative deals going on in a wartime environment, they feel ripped off as taxpayers.

Now, again, I appreciate everything you all are doing, because you understand; I don't understand your business. But one of you talked about the difference between peacetime and wartime.

There is clearly fraud, and if not fraud mismanagement, in what is going on with these huge contracts as part of the Iraq war effort. Where does that fit into this Big A acquisition system that you are talking about?

Where are our safeguards for protecting the taxpayers with the \$25,000 and \$30,000 income in Arkansas when people overseas are just seemingly, through abuse of the taxpayers, making big sums of money?

Where do you see that aspect of things fitting into the system, in terms of oversight and being sure that taxpayers are getting the best bang for their buck?

General KADISH. Let me make a distinction between those types of procurements and the types that we have been talking about here to some degree.

Because the operations in wartime have two aspects for it. One is that the system that we are discussing today, the Little A acquisition system, is fundamentally a peacetime, long-term development of major weapons system type of activities. And a lot of dollars are spent on that action. And the processes we use and our discussions tend to be focused on that.

The only time we end up practicing and having processes developed in a wartime environment is when there is a war going on. And two things happen in that environment. One is that our processes are not necessarily adapted to the wartime situation very quickly. We don't train people to do that. And when we actually get into the wartime scenario, time is of the essence, so people tend to make mistakes in the process.

Dr. SNYDER. General Kadish, but you say we should not have to wait until a wartime situation to say we may have a worse situation that requires additional fuel or we may have a wartime situation that requires civilian transport planes that we have to contract with.

I will give you an example, again, from Arkansas. We have got those, I think, maybe now 10,500 manufactured homes that have been talked about as part of the FEMA thing.

I talked with James Lee Witt about it. He would never have used manufactured homes. He would have used small, portable trailers that you can pull up in your driveway and hook up that everybody calls little fishing trailers. And you have bigger sizes for families of four and smaller for a single person.

But they had those contracts ready to go even before there was any hurricane coming. So you don't have to get to the war or the hurricane before you have the contracts.

Now, we were in a situation with this management of the Federal Emergency Management Agency (FEMA) where nothing was done, and we ended up with 10,000 trailers sitting in Hope, Arkansas, that nobody knows what is going to happen with them.

So you can't be saying that we don't prepare for a ramp-up at a time of war. I mean, we have to look ahead, do we not?

General KADISH. No, I misspoke if I led you to that conclusion. There are preparations going on in wartime all the time. But there is an old saying that says that a plan doesn't survive the first shot in a war.

Dr. SNYDER. I understand that.

General KADISH. And as things develop, we don't necessarily have trained contracting officers to deal with the real-time situations as much as we should have in the process.

Dr. SNYDER. Well, my time is up, and we have votes.

And the president is now calling this—the administration is now calling this the long war, which may be an appropriate time. But we cannot somehow say we are going to be in a wartime mentality for 2 or 3 decades or however long this long war is going to be, which means we are going to have inappropriate oversight of many of our taxpayer dollars, because the taxpayers aren't going to stand for it. The Congress isn't going to stand for it.

General KADISH. I couldn't agree with you more.

Let me just make one more distinction. The dollars that we tend to oversight and argue about how to fix are research and development, procurement dollars. The dollars you tend to be talking about in an Iraq wartime situation are operations and maintenance, as well as a little bit of these types of dollars. We have got to start looking at the O&M services type of activities, like we do major weapons systems.

Dr. SNYDER. Thank you, gentlemen. Thank you, Mr. Chairman.

Mr. HEFLEY. Well, gentlemen, I want to thank you for being with us this morning. We could spend a lot more time on this and need to spend a lot more time on this. And I think you have been very helpful.

Several of you mentioned, when you started your statement, that this is a very complex area. And it is a very complex area. But we need to come to grips with it on both aspects: the one that Mr. Sny-der brought up at the last, as well as what we have talked about most of the day. So thank you, and we may be calling on you again. With that, the committee stands adjourned. [Whereupon, at 11:38 a.m., the committee was adjourned.]

APPENDIX

March 29, 2006

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

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March 29, 2006

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OPENING REMARKS OF CHAIRMAN HUNTER

Acquisition Reform Hearing

March 29, 2006

Today the committee meets to continue its oversight of the defense acquisition system. Over the past several years, this committee has made major strides in the area of acquisition reform. Some of our most recent initiatives include rapid acquisition authority to field goods and services needed to prevent combat fatalities; a statutory requirement for the Department of Defense to comply with its own policies, regulations and directives; and the revision of the "Nunn-McCurdy" amendment, one of the most powerful tools in the oversight arsenal. These reforms, however, aren't enough. Year after year, we face the same problems. Rampant cost growth, an unconstrained requirements process which delays fielding of new systems, and assurances from the Department of Defense that these problems will be corrected.

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To the credit of the department, they've commissioned numerous studies to identify the most pressing issues and to identify areas requiring reform. Today, our witnesses will review the results of these studies and share their findings with us. Next Wednesday, the committee will reconvene with senior leaders from the department's acquisition, requirements and financial management communities, to discuss their plans for implementation of the numerous reform recommendations.

But first, we have a unique opportunity to hear from the leading experts in the field of acquisition reform. Their perspectives on these ongoing challenges will be invaluable to the committee as we continue our efforts to overcome these acquisition challenges.

Our first three witnesses served as key members of major acquisition reform studies and will provide a brief synopsis of their findings.

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First, we'll hear from Lieutenant General Ronald T. Kadish, United States Air Force (retired), for an overview of the recently completed Defense Acquisition Performance Assessment Panel, commissioned in June 2005 by Deputy Secretary of Defense Gordon England.

General Kadish will be followed by former Assistant Secretary of the Air Force, **Dr. Robert Hermann**, who recently served as Task Force Co-Chair for a Defense Science Board Summer Study on Transformation.

Our third witness, **Pierre Chao**, recently served as a principal author of the Center for Strategic and International Studies, "Beyond Goldwater-Nichols" report and is Senior Fellow and Director of Defense Industrial Initiatives, International Security Program.

Finally, we are fortunate to have a representative of the "current" acquisition system, and one of the most experienced

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program managers in the entire Department of Defense. **Terry Little**, currently Acquisition Advisor to the Missile Defense Agency, offers a unique perspective as the "voice" of the current defense acquisition system. I should note that Mr. Little is here today, not to discuss his current position, but rather to speak about some of his previous successes in the acquisition system as program manager of the Joint Direct Attack Munition (JDAM) and Small-Diameter Bomb (SDB). His testimony will offer a perspective as to how aggressive program management, testing, and risk-control, are able to keep a program on cost and on schedule, all within the current acquisition system.

Gentlemen, we are pleased you are here today and we look forward to your testimony.

Let me now recognize the committee's ranking Democrat, Mr. Skelton, for any remarks he may wish to make.

[Following Mr. Skelton's remarks]

The entirety of our witnesses' prepared statements will be entered into the record.

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Lieutenant General Kadish, the floor is yours.

The Honorable Ike Skelton House Armed Services Committee Hearing on Acquisition Reform March 29, 2006

Thank you, Mr. Chairman for yielding to me. I commend you for holding today's hearing on acquisition reform, and for planning a further hearing next week on this topic. Acquisition has been an area of focus for both of us over the years, and now is the time for this committee to provide aggressive oversight because our acquisition system has gotten seriously off track. Last fall when we examined this issue I laid out the problems as I saw them. They are unchanged. Our existing weapon systems are aging rapidly and the cost of buying new weapons is growing astronomically. In the past four years the cost of the top five acquisition programs grew 46%. The budget for procurement grew hardly at all. As a result we buy less, and what we have keeps getting older.

I believe a handful of mistakes are driving this negative cycle. First, we are too aggressive in setting our requirements because we have become fixated on

technology over the soldiers, sailors, airmen, and marines who use it. Second, we no longer have the right mix of people in our acquisition system, and we have to invest in these professionals to get better results. Third, we have to repair a process that routinely ignores the time honored policies and practices that have led to success in acquisition. Mr. Chairman, we took many good steps to fix the process in our bill last year, and I know we will continue to focus on this as we put together our FY07 defense authorization bill.

Today's witnesses are uniquely qualified to help us find solutions to these problems. They have studied them in depth, and the sheer number of major studies that have been performed in recent years tells us just how serious a problem we have. I note in particular that we have with us today Pierre Chao from the Center for Strategic and International Studies. Dr. Chao, I want you to know that I hold no grudge for the fact that you stole from me my own acquisition expert, JJ Gertler, to help with your study, Beyond Goldwater-Nichols. I will review your study with complete objectivity, while I scan it for evidence of JJ's work, which usually stands out for its humor.

I look forward to the testimony of all the witnesses.

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TESTIMONY OF

LIEUTENANT GENERAL RONALD T. KADISH, USAF (Ret)

CHAIRMAN

DEFENSE ACQUISITION PERFORMANCE REVIEW PROJECT

BEFORE THE 109th CONGRESS

HOUSE ARMED SERVICES COMMITTEE

29 MARCH 2006

For Official Use Only Until Released By The House Armed Services Committee

The Defense Acquisition Performance Review Project Lieutenant General Ronald T. Kadish, USAF (Ret)

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Chairman Hunter, Representative Skeleton and distinguished members of the Committee:

Thank you for the opportunity to appear before you today as the Chairman of the Defense Acquisition Performance Assessment (DAPA), in accordance with the Federal Advisory Committee Act (FACA) of 1972 (Public Law 92-463), to outline the assessments and findings of the DAPA Panel and to provide an independent perspective on the issues. The Panel's review process was held as open and transparent as possible to engage the public while gathering as much input as practical from all practitioners and stakeholders in DOD's acquisition process. This initiative was established by then Acting Deputy Secretary of Defense Gordon England in a June 7, 2005 Memo. He directed "an integrated acquisition assessment to consider every aspect of acquisition, including requirements, organizational, legal foundations, decision methodology, oversight, checks and balances – every aspect." The Deputy Secretary requested that the results be "a recommended acquisition structure and process with clear alignment of responsibility, authority and accountability." Our findings were reported to the Deputy Secretary in November 2005 and a final report was released in January 2006.

Our conclusions cover a broad scope of recommendations. We determined that problems are deeply imbedded in many DoD management systems – not just acquisition. Also, a new approach to improvements is needed to adapt to new security challenges.

We reviewed over 1,500 documents to establish a baseline of previous recommendations; we held open meetings and maintained a website to solicit comments from the public. We heard from over 107 experts and received over 170 hours of briefings. Over 130 government and industry acquisition professionals, as well as organized labor union executives, were interviewed. From all of this, we developed over a thousand observations. This then binned down to forty-two areas of interest and we concentrated on the six major elements of the Acquisition System. They are Organization, Workforce, Budget, Requirements, Acquisition and Industry.

Historically, numerous studies and reform initiatives have occurred over the years but, it still remains plagued by numerous and highly publicized shortfalls in efficiency. For example, twenty years ago, the President's Blue Ribbon Commission on Defense (most commonly known

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as the Packard Commission) ushered in an era of acquisition reform with its finding that DOD's "weapon systems take too long and cost too much to produce." Two decades later, many believe major weapon systems Programs "still cost too much and take too long to field." This committee and others have asked a key question – why?

The existing system, however flawed, has produced the most capable, best equipped, and most effective military in the history of the world. We have met the effectiveness test in the past, now we must adapt to a different security environment. Fundamental structural changes in the Acquisition System are needed to adapt to our current security environment. An effective system requires stability and continuity that can only be achieved through integration of all of the major process and elements upon which it depends. Incremental change to the acquisition process alone usually assumes that the other key processes are cohesive and stable. In reality they are disconnected and unstable.

I am convinced the sheer complexity of the system is a major impediment and contributes to much confusion about the acquisition processes. Let me explain. There are three fundamental processes the DOD operates. I will refer to these as the big "A" Acquisition System. It includes the requirements process, the planning programming and budget process and

the acquisition process. I will refer to the acquisition process alone as "little a" because it is embedded in the big "A" System.

Simply focusing on improvements to the "little a" acquisition portion, instead of the larger Acquisition System, can not and will not substantially improve Defense Acquisition Performance.

The larger Acquisition System was designed and optimized to respond to a security environment dominated by a single strategic threat, the former Soviet Union. The security environment is very different today --- therefore, the processes need to meet the demands of this environment. We must have the flexibility and agility to respond to more dynamic security environments and rapidly changing needs.

Adapting the Acquisition System to the realities of a new security environment cannot be considered independently of the organizations charged with its conduct and the system used to recruit, train, develop and retain its workforce. The "little a" acquisition workforce has been downsized and reorganized over the past 10 years resulting in significant loss of experience. To make up for this loss it appears we've imposed even more regulatory approaches to oversight and introduced strategies that insert industry to replace government with many unintended consequences. Key functions of the "big A" Acquisition System, such as requirements development, system engineering, operational testing and transitioning of

science and technology, are being pursued as separate almost independent entities adding to the cost and complexity process.

Finally, the industrial environment has changed in fundamental ways. Globalization and industry consolidation over the last 15 years, as well as our "outsourcing" policies affect the processes and strategies and techniques that we use and are required to be used. This raises many key questions. Does competition produce desired outcomes? Can we accommodate globalization? Why don't non-traditional suppliers compete for defense business?

Our process for this project was much disciplined and we sought to validate all of the assessments, improvements, and major findings and finally, identify time-specific implementation plans. I will highlight the some of recommendations to improve stability in the Acquisition system that the Panel has provided to the Deputy Secretary:

Organization

- Realign authority, accountability and responsibility at the appropriate levels.
- Enhance the stature of the Under Secretary of Defense for Acquisition, Technology and Logistics and have the USD/AT&L become a voting member of the Joint Requirements Oversight Committee.

 Establish a Four-Star Acquisition Systems Commands to include oversight of the entire spectrum of the acquisition community -workforce, contracts, requirements, science and technology, budget and program integration.

Workforce

- Rebuild value and stabilize the leadership in the acquisition workforce and establish a consistent definition of this function.
- Seek legislation to establish Senior Acquisition Executives as fiveyear fixed terms renewable for a second five-year term.
- Enhance the training education, certification and qualifications for the entire acquisition workforce.

Budget

- Enhance Planning, Programming, and Budgeting and execution system by programming to high confidence estimates to avoid the "conspiracy of hope."
- Establish a distinct Stable Funding Program Account based on Capital Budgeting at milestone A.

Requirements

• Replace the Joint Capabilities Integration and Development System with a Joint Capabilities Acquisition and Divestment Plan.

- Require Combatant Commanders to prepared extended planning annexes and forecast gaps and excesses.
- Require Time Certain Development as a Key Performance Parameter.
- Require DDR&E to coordinate science and technology plans and

technology push initiatives.

• Seek legislation to create an "Operationally Acceptable." evaluation

testing category.

Acquisition

- Adopt a risk-based source selection process.
- Shift to time-certain development.
- Make schedule a Key Performance Parameter.
- Reposition Milestone B to occur after preliminary design review.

Industry

- Share long range plans with industry.
- Restructure competitions to motivate industry to invest in technology

and performance.

• Evaluate the impact of industrial consolidation and its unintended

effects.

• Address the issue of globalization of the defense industry.

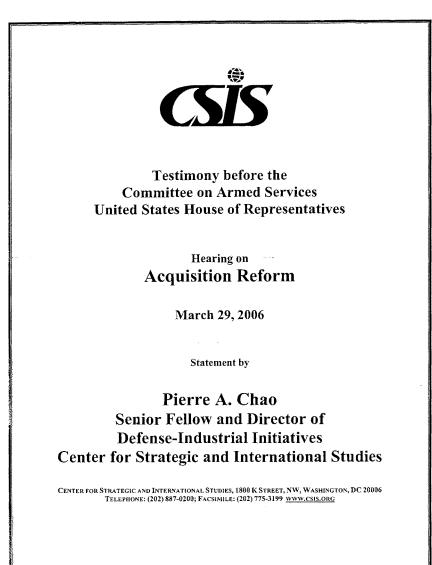
In conclusion, the DAPA Panel has proposed sweeping changes to dramatically improve the Departments ability to stabilize and integrate key elements of the Acquisition System. Simply focusing on improvements to the "little a" acquisition portion of this system, instead of the larger Acquisition process, can not and will not substantially improve Defense Acquisition Performance.

As I have listened in panel meetings and studied this problem over the past few months – and lived in this environment for over 25 years -- I am convinced we can do better.

Our collective challenge will then be to overcome the myriad of interests, conflicting policies and incentives and inherent conflicts so that we can exploit technology to support our war fighters as efficiently as practicable. Otherwise we will have another effort in a few years addressing the same issues we have today.

We must ensure that in our efforts to improve the system, we do not degrade our existing ability to provide our war fighters with the systems and technologies they need to dominate the battlefield.

Thank you for the opportunity to appear before you today.



Opening Statement of Pierre A. Chao Before the House Armed Services Committee

Hearing on Acquisition Reform March 29, 2006

Mr. Chairman, distinguished members of the House Armed Services Committee, my name is Pierre Chao and I am currently a Senior Fellow and Director of Defense-Industrial Initiatives at the Center for Strategic and International Studies. I should note that CSIS as a non-profit, non-partisan, 501(c)3 think tank does not take any positions as an institution, that I am here representing myself and that the comments that I am about to make solely reflect my own views and opinions. Furthermore, in the interest of full disclosure I would note that I have not personally received any federal grants or contracts in the last three years to date, although as an unpaid consultant to the Defense Science Board in 2005 and 2006 certain travel expenses were covered. I would also note that I am also currently a Senior Advisor with the investment bank, Credit Suisse. Finally, I would remark that the CSIS *Beyond Goldwater-Nichols* study, one of the key topics of discussion today, was funded through a combination of foundations and the Congress, via the FY04 and FY05 Defense Appropriation Acts.

Mr. Chairman, first let me commend you for holding this hearing on this complex and strategically important topic. It has become very clear that after 15 years of post-Cold War adjustment, reform and transformation and, more recently, the pressures of war, it has been the military portion of the Pentagon that has made greatest strides in adapting to the new environment of the 21^{st} century – it fights more jointly, has altered doctrine and training, and changed its organizational structures. The business processes of the Pentagon, however, have been much harder to transform and, today, represent the strategic weak link in the chain. This is particularly evident in the arena of acquisition reform - and I use the big "A" definition of acquisition that encompasses the requirements, little "a" acquisition, and budget processes of the Pentagon. There has certainly been no lack of trying and in the last year four major analytical exercises - the Beyond Goldwater-Nichols study's Phase Two, the Defense Science Board 2005 Summer Study's Assessment of Transformation, the Gordon England commissioned Defense Acquisition Performance Assessment Panel, and the Quadrennial Defense Review, all looked at the issue of acquisition reform. I was privileged enough to have worked on all four efforts and although my comments will focus primarily on the Beyond Goldwater-Nichols study, I would like to share my thoughts on some cross-cutting themes that emerge.

If I may begin with the CSIS *Beyond Goldwater-Nichols* study, which was conducted under the strategic guidance of Dr. John Hamre, CSIS CEO, and directly managed by Dr. Clark Murdock, CSIS Senior Fellow. He graciously invited me to be co-chair of the working group that focused on acquisition issues and we spent the better part of twelve months immersed in the topic.

The Context of the 1986 Goldwater Nichols Acquisition Reforms

One of the key goals of our look at the acquisition system in the *Beyond Goldwater-Nichols* project was to identify any negative unintended consequences of the 1986 reforms and to see where the fundamental landscape had changed.

When Goldwater-Nichols was passed there was certainly a lot of controversy in the acquisition world, as there is today. The Department of Defense at the time was being sharply criticized for sloppy acquisition procedures, lurid "examples" of \$600 toilet seats and \$427 hammers filled the press. There was huge pressure to ensure that similar mistakes not be repeated. And so when a solution was created in 1986, the necessity to avoid mistakes was elevated above all other considerations and the supreme objective of the reform process was to fix the mechanical process of buying things. Some have said it was not acquisition reform, it was really procurement reform.

As you know, Congress reflected this by creating a new position, the Under Secretary for Acquisition. The Congress demanded emphasis on the mechanics of buying things. One of the unintended consequences of this legislation, however, was the devaluing of the previous position of the Director of Defense Research and Engineering, the DDR&E. Since the end of the Cold War, the DDR&E (or its predecessor roles) had been the third most important position in the civilian hierarchy of the Pentagon—behind the Secretary and Deputy Secretary and featured such prominent scientist-policy makers as Vannevar Bush, William Webster, Harold Brown, John Foster, and Bill Perry. The position sent the signal that technology was of strategic importance to the Pentagon and it ensured there was a strong institutional champion.

One of the unintended consequences of the Goldwater-Nichols reforms is that it changed the role of the Pentagon's number three person from being focused on "what to buy" and instead elevated the "how to buy" issues. Dr. Hamre has been using the phrase, "it shifted the focus from 'marksmanship' to 'gunsmithing'." The old DDR&E position was the senior marksman of the acquisition process—what should the Department be buying? What technologies should be invested in? After the acquisition reforms of the mid-1980s, the emphasis was shifted to the mechanics of acquisition, gunsmithing—how are we buying things? Today, the acquisition system in the Department of Defense is a bewildering complex of procedures and processes. Clarity of action is now missing.

Lack of Institutional Accountability

Another major problem identified with the DoD's current acquisition system is the fractured accountability that was created by the original Goldwater-Nichols reform legislation. At the time there was a great imperative to create greater professionalism in the acquisition process, a desire to create a more direct chain of demand and a need to simply provide some focus on acquisition. The legislation however created a fault line within the Department. The acquisition system was carved out to be a differentiated process, insulated from the procedures that establish requirements and develop budget priorities. Our study found that this fault line in the Department between the acquisition processes on the one hand and the requirements and budgetary processes on the other, is the primary contributor to the lack of institutional accountability in our system today. Certainly, the acquisition community is accountable for acquisition procedures, but the Department as a whole does not have systematic accountability of action that links requirements with budgets with acquisition.

Solutions Suggested by Beyond Goldwater-Nichols

The CSIS study concluded that the primary problems are institutional, and that institutional change was required. It recommended the following.

Creating a Clear Advocacy for "Supply" and "Demand"

First, remove the institutional fault line created by Goldwater-Nichols.

The original 1986 Goldwater-Nichols made a major change in the structure of the department—it created two distinct power centers with the Department of Defense. The voices of "demand" for better military capabilities were strengthened by elevating the power and prestige of the Chairman of the Joint Chiefs and by strengthening the regional combatant commanders. The service chiefs were made the chief advocates of "supply" of military capability. In essence, Goldwater-Nichols created a healthy balance between supply and demand.

But there are important ambiguities in the current system. One of the major "demand" procedures—determining the joint requirements of future combat forces—is still controlled by the chief "supply" officers. The service vice chiefs comprise the Joint Requirements Oversight Council. The CSIS study team believes that this needs to be changed and that the JROC needs to be populated by "demand" oriented institutions. The study advocates giving representation on the JROC to the combatant commanders, make it a council of "users" rather than "suppliers" by replacing the Service Vices with the COCOM deputies.

The study was also careful to point that in order to balance the views on the JROC, the Under Secretary for AT&L, the Undersecretary for Policy and PA&E should also be statutory members of the JROC.

This theme has certainly been picked up by the other studies, although in less ambitious formats in some. I would note that in current Pentagon practice the combatant commanders are certainly playing a more active role in the JROC, but it is certainly not through formal membership.

Return the Service Chiefs to the Acquisition Chain of Command

Second, the study recommended returning the military service chiefs to the chain of command for acquisition. Goldwater-Nichols made the service chiefs the primary advocates for the "supply" function of military capability. They are responsible for determining the manning levels of their respective services, the priority given to recruiting and training. They manage the long-term shaping of the service by determining requirements for new weapons and personnel. However they are excluded from the acquisition process. This is an institutional fault line that needs to be removed.

So while some may say that the service chiefs do participate in the acquisition process, the study focuses on the fact that is indirectly through budgeting and requirements determination. As such, the current system creates a deep fault line. A central belly-button that can be pushed for accountability in acquisition must be created. Service chiefs need to be held accountable for the whole supply function and need the authority to carry it out.

This is also a theme that was reiterated in the Defense Science Board Summer Study and the DAPA Panel.

Clean up the Responsibilities for Acquisition between OSD and the Military Departments

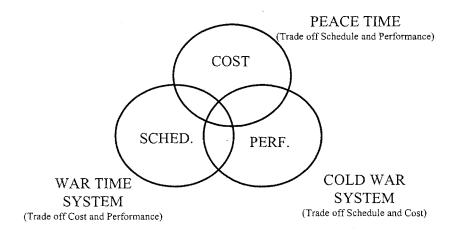
Third, Goldwater-Nichols created two large acquisition bureaucracies in the Department—one at the military department level and one at the OSD level. This needs to be rationalized. The CSIS study argues that OSD should not be running things, but overseeing procedures and decisions. A strategic focus on the part of the Under Secretary for Acquisition, Technology and Logistics, on the "marksmanship" aspects of the job requires a fundamentally smaller staff. It is the "gunsmithing" aspect of the job that requires big headquarter staffs and vice versa, big staffs that look for "gunsmithing" tasks.

Restoring the strategic focus to defense acquisition as the OSD level, and leaving the execution of programs to the Services becomes a critical recommendation.

I would note that there is one area where the CSIS study makes an exception in terms of pushing acquisition execution down to the Services– which is the area of joint command, control and communications (C3). The track record of the Service's ability to deliver joint, integrated C3 remains disappointing. Here the study team recommended created a Joint Task Force with budgetary and acquisition authority for joint C3, and taking it away from the Services.

Strengthen Rapid Acquisition Systems

Fourth, one lesson that has been learned and relearned by the nation since the Revolutionary War is that the acquisition system is designed and optimized for peace time. Each time this system hits war time, the wheels fall off the cart. There are the inevitable scandals, the new learning under the pressure of war and recovery while the nation is at war – this Pentagon is reliving the history of prior Pentagon's and War Departments. Unfortunately, in the past all the lessons are forgotten when peace returns. What makes the current situation even harder is that the nation is in a "dual mode". Half the system is focused on being in a war time mode – where time is critical, technologies must be off the shelf, testing less relevant and agility, innovation, experimentation and risk-taking are critical. Meanwhile, the other half of the system is focused on the longer term, potential near-peer competitors twenty years out – where the traditional acquisition works fine, the central focus is cost and performance, it can move more slowly, deliberately and efficiency is critical. The central dilemma is that scandals and reforms related to one mode makes the other worse.



Current Problem - We are in Two Modes!

One size simply does not fit all and it argues that we may need very distinct and different "tracks" for the acquirors to work on. The Chairman's and this Committee's efforts in establishing rapid acquisition tools for the Department should be commended. The *Beyond Goldwater-Nichols* study simply argues that the current rapid acquisition processes should be expanded, pre-set waivers to particular laws granted and the processes be made more permanent so we don't forget the lessons currently being learned in Iraq and Afghanistan.

Conclusion

Mr. Chairman, distinguished members of Committee, once again I applaud you for holding this hearing. Acquisition reform will need some Congressional champions if it is to progress meaningfully. I can only hope that this is just the beginning of a long and fruitful dialogue. In know that I, and my colleagues at CSIS, are prepared to support you in any way as you tackle this critical issue.

ATTACHMENT: PIERRE CHAO CV

Pierre A. Chao Senior Fellow and Director of Defense Industrial Initiatives Center for Strategic and International Studies International Security Program

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Mr. Chao is currently a Senior Fellow and Director of Defense-Industrial Initiatives at the Center for Strategic and International Studies. There he heads a team of four professionals focused on issues related to the health of the defense-industrial base, government-industrial relations, acquisition reform and globalization.

Before joining CSIS in 2003, Chao was a managing director and senior aerospace/ defense analyst at Credit Suisse First Boston from 1999-2003, where he was responsible for following the U.S. and global aerospace/defense industry. He remains a Credit Suisse independent senior adviser.

Prior to joining CFSB, Chao was the senior aerospace/defense analyst at Morgan Stanley Dean Witter from 1995-1999. He served as the senior aerospace/defense industry analyst at Smith Barney during 1994 and as a director at JSA International, a Boston/Paris-based management-consulting firm that focused on the aerospace/defense industry (1986-88, 1990-93). Chao was also a co-founder of JSA Research, an equity research boutique specializing in the aerospace/defense industry. Before signing on with JSA, he worked in the New York and London offices of Prudential-Bache Capital Funding as a mergers and acquisitions banker focusing on aerospace/defense (1988-90).

Chao garnered numerous awards while working on Wall Street. Institutional Investor ranked Chao's team the number one global aerospace/defense group every year eligible from 2000-02 and he was on the Institutional Investor All-America Research Team every year eligible from 1996-2002. He was ranked the number one aerospace/defense analyst by corporations in the 1998-2000 Reuters Polls, the number one aerospace/defense analyst in the 1995-99 Greenwich Associates polls, and appeared on the Wall Street Journal All-Star list in four of seven eligible years.

In 2000, Chao was appointed to the Presidential Commission on Offsets in International Trade. He is also a guest lecturer at the National Defense University and the Defense Acquisition University. Chao has been sought out as an expert analyst of the defense and aerospace industry by the Senate Armed Services Committee, the House Science Committee, House Small Business Committee, Office of the Secretary of Defense, DoD Defense Science Board, Army Science Board, NASA, NATO and the Aerospace Industries Association Board of Governors.

Chao earned dual Bachelor of Science degrees in Political Science and Management Science from M.I.T.

Elements of Acquisition Reform

Robert J. Hermann DoD Consultant and Member of the Defense Science Board 5 Stonepost, Simsbury, CT 06070

Testimony before the Committee on Armed Services U.S. House of Representatives March 29, 2006

Mr. Chairman and Members of the Committee on Armed Services, thank you for inviting me to testify before you on acquisition reform. It is a complex issue and I welcome the opportunity to convey some of what I think I have learned about the subject over the past few decades.

I became formally engaged with this subject in 1993 as the Chairman of a Defense Science Board (DSB) Task Force on Acquisition Reform. I subsequently chaired, co-chaired or participated on several additional DSB task forces on the same or related subjects. The reports that resulted from these study efforts contain the perspectives and recommendations that I bring to this session. A list of those I believe to be most useful to our discussion are included in Appendix I.

In addition to thirteen years of studying the subject on the DSB, the professional experiences that I credit with providing me some understanding of the Department of Defense acquisition process include:

-Chief Technical Officer for the United Technologies Corporation. (1987-1998)

-Assistant Secretary of the Air Force for Research, Development and Logistics (1979-1981)

-Director, National Reconnaissance Office (1979-1981)

-Principal Deputy Assistant Secretary of Defense for C³I (1977-1979)

-Special Assistant to NATO's Supreme Allied Commander in Europe (1975-1977)

-Head of a Systems Group and Deputy Director for Research and Engineering for the National Security Agency (1968-1975)

From these studies and experiences, I think I have learned something about the sources of problems and things that make sense to do about them.

One of the things I have learned is that this subject is fundamentally very complex on several counts. The Department of Defense is a very large and complex undertaking. Further, the issue of

national security is imbedded in the political and social structure of the nation with all of the diversity of opinions and values that this brings with it. This complexity is multiplied by the fact that whenever and wherever acquisition reform is discussed, those discussing it have very diverse backgrounds with differing concepts of what acquisition means and different terms to describe the issue. As a result, there are many ways to miss-communicate when discussing acquisition reform. For today, I would like to put forward some propositions that represent my attempt to communicate what I believe are the ideas that are most important.

- Acquisition is not just about buying things. From my perspective the role of the Department of Defense is to create, deploy and employ armed forces to defend and support the political interests of the country. The things it must "acquire" or put in place are joint, allied and coalition military forces. The end product of the enterprise is effective fielded forces for today and for the future.
- 2. There are many observers and commentators on what is wrong with the DoD and each will have their own version. My summary follows;

-The Department does not have a plan for what it is trying to achieve in outcome terms; it makes no attempt to measure how well it is achieving its objectives, and it has no system for understanding the true cost of any of its activities. This fragments the decision making, leads to overly optimistic cost and schedule estimates and results in destabilized program execution.

-The DoD Requirements process is very destructive. It separates the question of what is needed from the cost of fulfilling that need. The Requirement is usually fixed by a committee of people that have neither mission responsibility nor financial accountability. This Requirement is passed as unbreakable guidance to a procurement process that has no right or competence to make trades between the performance specified by the requirement and the cost and schedule implications of implementing the requirement. "Requirements" should inform the judgment of accountable executives but should not dictate performance outcomes.

-The Combatant Commanders who have the ultimate mission responsibilities of the Department are not required or permitted to effectively participate in the make up of the forces needed for the future missions of their Command. Although there are operational plans for tomorrow, there are no guiding plans for the evolving future force.

-The Combatant Commands do not have adequate technical support to manage the very technologically rich system that is their force or to contribute to the evolution of that force for the future.

-The Department spends a great deal of its resources under the name of Logistics but does not have a quality logistics system. The management of this area is fractionated, the costs are huge and the effectiveness of the process is mediocre.

-The way that DoD implemented Goldwater-Nichols removed the leadership of the Armed Services from their Title 10 organize, train and equip role. This removed an important source of military competence from the process and placed undue dependence on the destructive Requirements process. This was not required by the law and no legislative action is required to fix the problem.

The following five propositions recommend actions to address these issues.

 The Department of Defense needs a Business Plan. Any enterprise that is trying to achieve a mission with measured resources within some schedule needs a Business Plan. It is needed to codify mission objectives and apply discipline to the allocation of resources to mission.

This is the key recommendation to highlight and is included in several of the listed DSB studies.

An important element in the management concept surrounding the Business Plan is the accountability of DoD officials who are assigned roles and missions within the Department. As such, this concept stresses the judgment of mission accountable executives and places that judgment in a matrix of resources, output mission and schedule.

The most recent and most complete manifestation of this recommendation is provided in the recent DSB Report on "Transformation: A Progress Assessment" issued in January of 2006. Copied below are the relevant sections of that report.

"DoD Business Practices

DoD needs, but does not have, a multi-year business plan capable of relating resources to mission purposes. An effective business plan would give decision makers a clear understanding of the need for--and impact of-- resource decisions. While the Department has a number of complex mechanisms and processes for resource allocation, the need is for a fully interoperable system that would succeed as an executable business plan. In addition, confusion remains over roles in identifying needs, proposing and choosing solutions, executing programs, and overseeing performance. Figure 1 illustrates an effective and efficient allocation of roles within the context of existing laws and directives. There are four groups of players within the DoD: the Secretary of Defense and his staff; the Chairman, Joint Chiefs of Staff (CJCS) and his staff; the Combatant Commander (COCOM) responsible for conducting operations; and the Force Providers, comprised of the Services and Defense Agencies. The figure is intended to convey that while all the groups participate in most of the activities required to provide and operate effective forces, there should be accountable leaders for each role. Much of the following description reiterates current practice. However, the items in italics are areas where roles need to be clarified and enforced. The discussion following the figure addresses those areas.

- The COCOMs integrate force capabilities to conduct the DoD's operational missions. They
 should lead the process of identifying the capability needs that require higher priority, since
 they have the operational responsibility to employ all the Armed Forces as a joint team. These
 commands should also lead the process of assessing the capability needs of the approved
 solution. At present, the lead in these roles defaults to the Force Providers and Joint Staff.
- The Force Providers are responsible for providing and sustaining ready forces with the needed capabilities. They have the expertise and institutional capabilities to propose solutions to identified capability needs (including the systems engineering capability to ensure that solutions are viable) and to execute approved programs. The acquisition authority chain excludes the most knowledgeable Force Provider leadership from the role of acquiring capabilities.

The Force Providers must also take the lead role in ensuring that materiel solutions support, and are supported by, the full range of Doctrine, Organization, Training Materiel, Leadership, Personnel, Facilities (DOTMLPF).

 The Secretary and his staff supported by the CJCS and his staff choose the solutions to capability needs, allocates resources to execute the decisions and oversee program execution. At present, the Force Providers and Joint Staff lead much of this effort. The Secretary also

 Advise SecDef Joint Concepts & Doctrine Oversee operational planning Assess strategies & support 	CJCS Joint Staff	SecDef OSD	Choose solutions* Allocate resources Oversee Program execution Enforce the Business Plan**		
Conduct joint operations Develop operational concepts	Combatant Commands	Force Providers	 Provide and sustain ready forces Propose solutions 		
 Identify needed capabilities* Assess capability of solutions 	Accountability Lead		 Systems engineering* Execute programs*** Integrate DOTMLPF 		
	Defaulted to anothe Not available Goldwater-Nichols i				

Enforce Accountability in the Priority Decision Process

Figure 1. Mechanism for the Priority Decision Process

enforces the Business Plan. At present there is no plan that qualifies as a Business Plan.

• The CJCS, supported by the Joint Staff, advises the Secretary of Defense and the President on a range of defense strategy, mission assignment, Force capability, and operational matters.

Figure 2 illustrates the flow of activity in creating and executing the business plan:

- The Secretary of Defense, supported by the CJCS, will define, assign, and adjust missions
- The CJCS leads the Joint Concepts process with heavy Combatant Command (COCOM) participation
- The COCOMs identify needed capabilities supported by the Joint Staff, and with strong support from the Force Providers
- The Force Providers lead the process of proposing solutions
- The Secretary of Defense, supported by the CJCS and Joint Staff, chooses solutions; the Secretary and his staff also integrate the solutions into the business plan—specifying what is to be done, in what time period, with what resources, and with what output
- The Force Providers are then fully accountable for delivering the capability on time and within allocated resources, while the Secretary of Defense's staff monitors the overall process

Various steps in this process create feedback into earlier steps of a continuous cycle of change within resource constraints. However, the discipline for the system comes from the Business Plan.

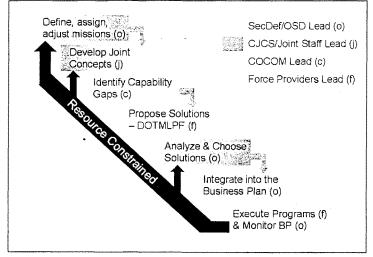


Figure 2. Business Plan Activity Flow

Focusing the mechanisms and processes on mission needs dictates that resources are accounted for by mission as well as by Force Provider. In this case, the mission purposes are described as the missions of the combatant commanders. There are at least two compelling reason for adding accounting by mission purpose. The first is that for combatant commanders' inputs on priority need to be credible, they must pass through the crucible of the hard trade-offs within the mission resources of the combatant commander. The second is that if the purpose of allocating the Department's resources is to support missions then they must be accountable by mission purpose.

Figure 3 illustrates the needed matrix of accounting for resources by mission (identified as the output) and by Force Provider (who uses the resources as inputs to create the needed capabilities). Note that the resources are not allocated to the combatant commands. They are still allocated to those responsible for delivering the needed capabilities – the Force Providers

There is concern that accounting fro resources by mission will be difficult and imperfect, since the concept will be new to the DoD. The Task Force agrees that while the DoD may experience some initial difficulty, this process can be accomplished without excessive effort or the need for perfection. The approach only needs to maintain the basic principles while transitioning from the current approach by Force Provider.

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The governing product needs to be a metric-based, multi-year, resource constrained, output-

Account for resources by mission and by force and support provider Year 2. etc.

	Year 1					
Accounting Allocations	CoCom 1	CoCom 2	CoCom 3	CoCom 4	CoCom 5	CoCom 6, etc.
Services	Needs to be about right to					
Defense Agencies	se	rve the i	ntended	purpose		
- Other Support						
Defense Agencies				-		

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Figure 3. Matrix of Accounting for Resources by Mission

oriented business plan that allocates resources to mission purposes, constrained by expected resources, executed by the Force Providers with progress measured against the plan objectives.

4. The Combatant Commanders who have the ultimate mission responsibility for operating the joint forces should have a greater role in defining the force capabilities needed to perform their mission. To be a part of that process, the Secretary of Defense must require that they play this role. They must also be given visibility of the budget and financial affairs of the department so that they can integrate these factors with their own mission imperatives into their recommendations to the Secretary. Without access to the money issues, the Combatant Commanders will remain beyond participation in the core processes for determining the force development plans of the Department. Money counts in these decisions and they need access to participate.

The Business Plan Matrix outlined in 2. above would provide that visibility and participation This matrix is not a budget document. It is a management tool designed to discipline the capability needs formulation process by forcing the customer – the combatant command – to base priority of need on a value – cost – schedule linkage.

Further, the matrix is only one management tool, albeit a powerful one. In using this tool, there will inevitably be difference is views between Combatant Commanders who are likely to focus on direct mission needs and Services and Defense Agencies that focus on broader issues. Nonetheless, this approach is important in disciplining the choices and forcing the needed dialogue to ensure that the customer's unique understanding, emanating from their immersion in mission issues, has a powerful voice in the choices.

5. The Regional Combatant Commands need systems engineering and systems integration help. The Armed Services have large numbers of systems engineers that deal with the integration issues involved with each Service's platforms and operating units. The Defense Agencies that supply specialized services such as DISA, NSA and the NRO have systems engineers dedicated to their functional mission. However, the Department does not have the institutions or skills to address the complicated systems represented by the joint forces. A modern military force is one of the most complex and technology rich enterprises known to many but those who operated and plan for these forces have almost no systems engineering support. The DSB Report on "Enabling Joint Force Capabilities" deals with this subject and is quoted below.

"Provide operational architectures and systems engineering support to combatant commanders for C2, networks and information integration (C2 & NII) needs

There have been recent changes in the Unified Command Plan (UCP) that should over time move the combatant command towards a greater contribution to operational architectures and joint interface systems. For example, JFCOM has been assigned expanded responsibilities and authorities overseeing and directing joint Battle Management and Command and Control (BM&C2) capabilities for joint integration and interoperability. The purpose is to facilitate the creation and development of doctrine, requirements and integrated architectures for joint BM&C2 interoperability and connectivity. The new Strategic Command has a set of global responsibilities for joint forces capabilities to include global joint command and control services, global information operations, global ballistic missile defense, and an extensive role in global surveillance and reconnaissance. These new assignments will necessitate new relationships with the sources of technical and engineering expertise which will in turn increase both their inclination and capability to contribute to innovative, future thinking not currently characteristic of most combatant commands.

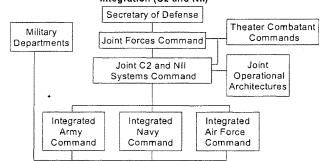
There are four fundamental unfilled needs to be addressed:

- An organization and process for providing systems engineering support to combatant command,
- A stronger process for creating joint operational architectures so that force providers have a framework in which their programs must fit,
- Closer and more formal ties with the Service Organizations responsible for acquiring and fielding the joint systems, and
- A means of harmonizing C2 and NII needs across all of the joint arena from OSD/JCS, Services/defense agencies (including intelligence) and especially the combatant commands.

The architecture and systems engineering approach should be truly "Enterprise" based systemof-system engineering. Fig. 4 illustrates an approach to meeting these needs.

A multi-Service organization would be formed in Joint Forces Command to provide mission operational architectures. This organization would need to include people with experience across the operational world. It would report to a new sub-unified command in JFCOM, which would also be the source of systems engineering expertise to JFCOM and to the theater combatant commands. Because of the specific global missions assigned to STRATCOM in this area, this command would also have to develop a special relationship with STRATCOM. The organization would be small since the logical source of the expertise would be the Services, in the form of dual-hatted Service NII and ISR organizations, characterized in Fig. 4 as Integrated NII Commands.

Fig. 4 Joint Operational Architectures and Systems Engineering Support for Command and Control, Networking and Information Integration (C2 and NII)



The Military Departments C2 and NII commands would be dual-hatted
 Joint Forces Command provides C2 and NII systems engineering

services support to theater combatant commands as needed

Dual-hatting these commands provides at least three benefits.

- It provides the needed level of expertise without duplicating existing capabilities in the Services and defense agencies.
- It helps ensure that joint needs and systems define integrated C2, NII and ISR architectures and standards and that service systems programs conform to these needs and standards.
- It provides the acquisition structure to acquire compatible C2 and NII programs and to fix
 existing C2 and NII interoperability problems. Acquisition programs would continue to be
 assigned to a Service, defense agency or intelligence community acquisition organization.

In order for the Joint C2 and NII Systems Command to have the needed influence, some part of the overall related programs budget would need to be controlled by the command though acquisition programs would continue to be executed by the Services and defense agencies."

6. A new Logistics Command should be formed that encompasses the Transportation Command, the Defense Logistics Agency and provides a dual reporting line for the Service Logistics organizations. The 2005 DSB Summer Study on Transformation addresses this issue and is quoted here.

"Logistics is, by any measure, big business in the Department, employing over 1 million people and carrying an inventory of roughly \$67 billion, with a significant part of that inventory no longer relevant to activities and systems being supported. One measure of responsiveness is distribution of in-stock items in response to user orders. Since 1996, the logistics system has improved its delivery time from 26 to 21 days in comparison to large commercial operations that routinely deliver in 1-3 days.

Transformation of logistics capabilities will be heavily dependent on integrated business systems and educated and motivated people who understand what is expected. In current practice, there is an internal transaction for each segment in the supply chain (e.g., from depot packaging to depot shipping; from depot shipping to package consolidation into truck-size loads; from truck movement to strategic shipping mode; and from strategic transportation to theater receiving, repackaging, movement, etc.). Furthermore, the system optimizes each segment (e.g., filling the trucks or rail cars for efficient use, optimizing the efficiency of the strategic transportation, repackaging for objective of end-to-end movement from source to user. Integrated business processes supported by integrated business systems and system architectures that apply technology to legacy practices rather than best practices.

Over the past several decades, there have been large numbers of studies, recommendations, new processes, very large information systems projects, and new organizations created in search of an effective end-to-end logistics supply chain. In one of the many prior efforts to forge an end-toend supply change, U.S. Transportation Command (USTRANSCOM) was assigned the additional mission of Distribution Process Owner (DPO). While this was an important step, it did not go far enough to meet the objective of an effective supply chain. The necessary step is to assign a joint command the authority and accountability for providing this essential support to global operations.

This Joint Logistics Command would subsume the current USTRANSCOM mission, would absorb the Defense Logistics Agency (DLA), and would be supported by the Service logistics commands in a component command role. The Service logistics commands would continue to perform their Service functions, as is the case with other component commands. Theater commanders would continue to be responsible for harmonizing the logistics flow demand with operations in the theater. System program managers would retain responsibility for the life cycle support plan and for configuration control of the supported system. An integrated logistics information system is also necessary for an effective end-to-end supply chain. Numerous commercial enterprises exist that regularly practice and employ these means. The command should form an external board of advisors comprised of personnel from the commercial sector with the appropriate industry expertise and experience.

The Secretary of Defense should create a Joint Logistics Command:

• Responsible for global end-to-end supply chain,

• That includes the TransCom mission, DLA, Service logistics and transportation commands as components to JLC with:

o Regional Combatant Commanders retaining operational control of the flow of intheater logistics; and

 Program Managers retaining responsibility for lifecycle logistics support plan and configuration control.

An integrated logistics information system will be essential to eliminate the need for multiple systems with multiple transactions across multiple seams.

The USD/AT&L should:

Lead the work to create an integrated logistics information system, and
Appoint an external advisory board of relevant industry experts to assist in guiding this effort.

7. The DoD should restore the role of the leadership of the Armed Services that was removed by its implementation of Goldwater- Nichols. This is covered in the DSB Report on "Transformation: A Progress Assessment" issued in January of 2006.

"The DoD implementation of the acquisition aspects of the Goldwater-Nichols act provided an acquisition chain of authority outside the Force Provider chain of authority as illustrated in Fig. 4 below:



Figure 4. The Acquisition Chain of Authority

The issues -- and an inevitable contribution to poor performance in acquisition -- is that the most senior operational judgment -- the Service chief, material command commander. Service component commander to the combatant command, and hence the combatant commander -- is excluded from the acquisition decision chain. In the absence of this accountable operational judgment, the minimum risk approach for the acquisition chain is slavish dedication to often outdated specification that were approved -- years before by the Joint Requirements Oversight Council (JROC), numerous Defense Acquisition Board actions, and contract arrangements. This inevitably leads to large cost and schedule overruns. To restore accountability to the Force Provider and to leverage experienced operational judgment and inherent authority, the acquisition chain of authority should be modified to include the senior leadership of the Force Providers as shown in Figure 5 below.

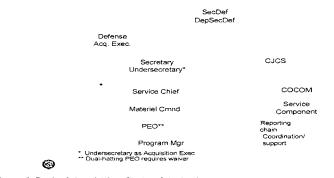


Figure 5. Revised Acquisition Chain of Authority

This change in the chain of authority requires no change to the law. It does require a waiver to DoD directive to dual-hat the PEO. The organization shown in Figure 5 would assign the Service Undersecretary are the Service Acquisition Executive. This would provide the cleanest line of authority. However, this is not essential to the concept of direct access to the Defense Acquisition Authority and accountability by the Force Provider senior leadership.

The Secretary of Defense should restructure the acquisition process to give Force Providers civilian and military leadership clear responsibility and accountability through the Service chain of authority for delivering approved capabilities

These are the points I choose to highlight as highest in priority even though there are many other issues that need to be dealt with to create a quality "Big A" acquisition process for the DoD. They include:

-Muli-agency processes for addressing the major security problems of the nation.

- -Operational concept development.
- -The quality of the technical work force in Government and Industry
- -Managing the supporting technological and industrial base
- -The role of competition in the process
- -Balancing "fairness" with enterprise results
- -Allied and coalition force development

Appendix I: Abbreviated List of DSB Studies

2005 Summer Study - Transformation: A Progress Assessment Vol. I (2006)

Enabling Joint Force Capabilities (2003)

Acquisition Reform Phase IV -on metrics (1999)

Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Integration (1997)

Achieving and Innovative Support for 21st Century Military Superiority (1996)

Defense Acquisition Reform, Phase I 1993

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Statement of

Mr. Terry R. Little

Acquisition Advisor to the Director, Missile Defense Agency

Before the

House Armed Services Committee

Regarding

Department of Defense Acquisition Reform

Wednesday, March 29, 2006

Embargoed Until Released by the Armed Services Committee United States House of Representatives

Mr. Terry R. Little Acquisition Advisor to the Director, Missile Defense Agency Department of Defense Acquisition Reform Before the House Armed Services Committee March 29, 2006

Good morning ladies and gentlemen, my name is Terry Little. I am currently the Acquisition Advisor to the Director of the Missile Defense Agency. I retired from federal service, but re-employed in the Missile Defense Agency in an advisory capacity. The committee invited me to testify today based on my 25 years of defense acquisition experience. My remarks and any answers I may give reflect my opinion and views only and not those of the Department of Defense or the Missile Defense Agency.

I want to thank the Committee for giving me the opportunity to offer my views on the Department of Defense's acquisition system. Although I have not recently participated in any formal studies, I do have some strong views that I have developed over the years from my experiences and observations.

My interaction with the defense acquisition system has been from the bottom up. I have been managing major acquisition programs in the Department of Defense almost continuously from 1981 until 2005. All but one of the programs I managed were Air Force programs and, all but that one, were joint programs with the Navy. Like the committee and fellow panel members, I have also been an interested and reflective observer of major acquisition programs in the Air Force as well as the other Services over the years. My aim was trying to learn as much I could from the experiences of others. I have managed acquisition programs both within the context of the DoDI 5000 series, as well as outside it, including classified programs I have managed enjoyed success to varying degrees. So what has been different with my programs as compared to so many other programs in the Department that have been disappointing?

That is probably a question that I cannot answer directly. I think I know what I have done that produced a modicum of success, but it's speculative for me to comment on what others have or have not done that has yielded not-so-good results. Nonetheless, I will try and to offer some thoughts that might be helpful in charting out a way ahead. I want to begin by commenting on our overall acquisition process within the Department.

Our acquisition process is very cumbersome, frustrating, and bureaucratic. There are enormous areas for improvement.

Can we do better by more closely linking the budget and acquisition processes? Yes. Budget instabilities are the bane of every program manager I have ever known.

However, contrary to popular opinion in the Department of Defense that blames Congress, I believe the instabilities come mostly from what the Services do to themselves by having more programs than they can afford and by breaking lower priority programs to fix higher priority ones.

Could we make major improvements to the requirement process? Absolutely. We call the newest process "capability-based requirements," but my observation is that not much has changed from the old process except for labels. I would offer that the way the Missile Defense Agency handles requirements in collaboration with the user seems right to me.

Can we streamline the oversight process? Yes, particularly by removing a lot of the staff people engaged in that process--people who are little value-added and have no accountability for outcome. A 50-75% cut in headquarters' acquisition oversight staffs might stimulate the kind of streamlined thinking we need. I particularly think the functional staffs in headquarters duplicate field activities and create useless work.

Could we make organizational or institutional changes that might be helpful? Again, I think the answer is probably yes. I would be particularly pleased to see more continuity in our Acquisition Executives. Too, I think we might find better ways to take advantage of our most senior, proven program managers as mentors and advisors for those who are less experienced. It seems wrong-headed that we promote our best military program managers to flag level and then put them where they are outside the acquisition process. I realize that there are many who posit that changing organizational relationships and wiring diagrams will have a marked effect on program outcomes. My view is that those type solutions will be ineffective.

I believe the Goldwater-Nichols legislation is fundamentally sound as it pertains to acquisition. However, I am somewhat chagrined at how the Department has implemented it. In particular, the clear, unambiguous reporting chain the legislation provides for the program manager is, in practice, not that clear or unambiguous. There are simply too many people outside the accountability chain who have a "say so." I also fret that there are too many waivers to the tenure and the personnel qualification requirements the legislation calls for.

This is probably heretical for an ex-program manager to say, but I think that having a somewhat inefficient, frustrating acquisition process may not be a totally bad thing. I don't think we want to get it so streamlined that we rush to mistakes. With so much money involved, it could be good that we are so deliberate and slow to make decisions.

I would now like to draw on some specific inferences from my own experiences.

After I retired in January 2006, I sorted through a large number of plaques, pictures, awards and other mementos from my career. I had a very large number of those as you might imagine. They were cluttering up the garage; my wife insisted I do something with them. When I was finished sorting every single one of them was in the trashcan except for one. That one was a small going away plaque from the program team for very first program I managed. On the plaque was a verbatim quote of something I had told the program team over and over during the years I was the leader. The inscription was "Organizations don't make things happen. People do."

Seeing the plaque again reminded me how my experience has transformed my thinking. I came into my first program manager job very concerned about failing. I had virtually zero training and had never even been in a program office. I started my job thinking I was going to do the traditional management functions: planning, organizing, directing, etc. When I began to understand better the complexity of what I was undertaking, I was stunned by the magnitude of it all. It seemed overwhelming. What began to emerge over the first months was my realization that I had very capable people-both government and contractor-- to help me--people who could understand and deal with the complexity. My job was to create an environment where they could succeed and to lead them through change. That meant developing and communicating a vision, creating a sense of mission, dealing with external interfaces, devising incentives and nurturing the team members. And, when things did not turn out as we might have wanted, to help them over the hump and alter our course. In short, my job was not to manage the program; it was to lead it.

Most program managers I have known have failed to grasp that or, if they have grasped it, have not practiced leadership. Instead, they look for organization, structural or process solutions to problems that are essentially people problems. At its very core, this acquisition business is not about contracts, testing, acquisition strategies, plans, technology, finance, oversight, or any of the other things one can learn about or make rules about. It's about people. It is about peoples' behavior--people who are generally trying to do the right thing, who have personal strengths as well as weaknesses, people who have knowledge and energy to bring to the program and who are looking for someone they can follow. That "someone" is the program manager.

Several years ago, I was a member of a large study team the Secretary of Defense chartered to re-engineer the Department's acquisition oversight and review process. Very early in the team's deliberations we got into a lengthy dialogue about the answer to the question "what factor(s) should determine how much oversight and review a program should get?" We argued for several days sometimes late into the evening. Some thought the total program value should be the determinant. Others believed that the degree should depend upon how critical the program was to the user or to Congress. Still others thought it should be a function of risk or of how well the program appeared to be proceeding. All of us grew tired of talking about it. Finally, after one particularly grueling session, I suggested to the group that I would call the Defense Acquisition Executive and ask him what he thought. The group reluctantly agreed after I assured them that I thought he would talk with me because I knew him. I called him (Dr Paul Kaminski) at home and explained the debate we were having. When I had finished he thought for a minute or two and then replied, "The most important factor in deciding how much oversight and review a program should have is who the program manager is." Absolutely right, he was. No factor outside the program matters more to success than who the program manager is. It's about credibility and the trust that credibility creates. Many program mangers don't get it, in my view.

I think that another influential factor for the results I have produced is how I implemented the concept of a team. To me the "team" is not an abstract concept. It is not simply a gaggle of people working together. A team has to have a clear and distinct goal--a goal that doesn't change over time. What makes a team is that this common goal, more than any other factor, determines the behavior of every team member. Where an individual's behavior is motivated by something other than achieving the team goal, that person and the team will be dysfunctional. Let me illustrate with a simple example.

Suppose the Washington Nationals decide their goal for the upcoming season is to play in the World Series. We can agree that achieving that goal should determine the behavior of every player on that team. However, assume that the Nationals have a pitcher with a personal goal to win 20 games during the season and that he behaves in a way to achieve that goal. Should that person be part of the team? I say no. Why? Because there will come a time when his personal goal will conflict with the team's goal. That pitcher will choose his goal over the team goal. For example, he may pitch when he is tired without telling the coach. A successful team can't allow that.

Now let's get back to acquisition. As the program manager, my goal is program success. Program success is to achieve the expectations for the program. My "team mates" are those who both share the same goal and accept that all others are subordinate insofar as their participation on the team. This means that inside the program office, I don't want people who are specialists--those who are simply advocates for the best technology, the most air-tight contract, the most capable software, the most comprehensive test program, the lowest cost development program, etc. I want everyone's behavior on the program governed by the same overall goal that I have. I want everyone's work and thought processes must reflect a balance of competing interests just like mine. Otherwise, I am just not smart enough to synthesize all the conflicting inputs I get from within. Neither can I empower people to make decisions. When I can't get people to meet these standards, I get rid of them. A team simply can't function when one or more of its members have extraneous goals. The same applies to contractor teammates. I accept that they can have a legitimate goal of making money for

the company, but their overarching goal better be program success or we are going to have a huge problem.

One upshot of this team approach is that my program offices have always been quite small relative to those for similar size programs. This is partly a result of my eschewing large numbers of highly specialized people in favor of a few who are specialized, but who can think and work more broadly. It's also partly a result of my limitations in that I don't know how to form a team that involves a large number of people--it leaves too much room for conflicting goals and poor communication. And finally, it's because I have come to believe that large program offices necessarily lead to work for both the contractor and others that is non-value added work. Frankly, I have a difficult time understanding why even the largest programs in the Department need more than 100-200 people to do what they need to do. Numbers beyond that just blow my mind!

I learned about how critical leadership and a team approach were to program success heuristically--that is through trial and error. I don't think that it has to be that way. We should do a much better job selecting and mentoring program managers than we do now. I would suggest a rigorous screening process that would include attitude and preference testing as well as coming up with solutions to hypothetical and complex questions. There is some research on the attributes of successful program managers that would be useful, including work by Dr. Owen Gadeken at the Defense Systems Management College. I would also recommend that some matching of an individual to the needs of the particular program would be a good idea.

We could also do better training of program managers. We send our best people to senior service schools for a year; I think we could afford to have training of similar duration for the people who are going to manage our largest acquisition programs. The bulk of that training should not be academic or process-oriented. Rather prospective program managers need to hear from seasoned program managers who have "been there and done that." This training would come after we had selected a person for a program manager position.

There has been research suggesting that we get most of what we need to be successful in our jobs not from training, but from emulating others and our experiences. Once we select and train a program manager, I think that manager should work under the mentorship of an experienced, capable coach. Ideally, that would be the Program Executive Officer. However, I have seen many cases, and experienced some, where the Program Executive Officer was not as capable as the program managers he was supposed to be mentoring. This should not be.

Now let me talk about expectations. When we cite programs with bad outcomes, many times we are talking about programs where the expectation for the program's cost,

schedule, or performance was unrealistic to begin with. Thus, the program was doomed to disappoint before it ever got underway! How could this happen?

Throughout my time as a program manager, I have been a fanatic about creating reasonable and realistic expectations. Because I was the first program manager for all my previous programs, I was able to set the initial expectations for cost, schedule, and performance. In every case, I anticipated I would be with the program for a long time. I will have more to say about continuity later, but this prospect shaped my expectation setting. I felt I was going to be personally accountable for achieving what I promised. So, I wanted to set expectations at a level where I thought, with high confidence, the program would succeed. Most program managers don't expect to have long-term continuity with their program and I suspect that shapes expectations they create.

Were the expectations that I set more realistic than those of others because I was smarter or better trained than others? No, I think there were three other factors.

- 1. When a program starts, there are enormous pressures on a program manager to over-promise. These pressures come from users, contractors, technologists, budget people and others. These are all well-intentioned pressures meant to "sell the program" or make it palatable in a very competitive market. I believe that many of the people applying these pressures rationalized doing that because they believed that once a program started, it would likely continue no matter how disappointing the results. Historically, there are ample grounds for that belief. How was I able to resist these pressures when many program managers do not? I am not a people-pleaser. I think that that there is an obvious answer whenever someone who is not my boss wants me to do something differently and I don't. Having a vision that, if I caved in, I would some day be standing in front of someone explaining why I had failed is a powerful motivator. My feeling of accountability, made it easy to be firm and direct in saying to those exerting the pressures "No, that's not how it's going to be." Some might say this demanded courage, but I would say that it simply required conviction and resolve.
- 2. The second factor behind my being able to set realistic expectations was my unwillingness to commit to concrete cost, schedule, and performance before I had enough information to do so. It is natural when there is lots of money involved for people to want to know exactly what they will get for the money and when will they get it. People want to know this before spending the money. The problem is that many times in this business we have little idea what's a reasonable expectation until we spend some money to gain added information. Our acquisition system doesn't tolerate that. It wants precise performance numbers, costs, and schedules early. I have come to realize that resistance is futile within the current DoD system. So, when the process compelled me to make an early judgment about what the development cost, a performance number or schedule

would be, I offered what I believed was a "you-bet-your-job" answer rather than one that I thought might be possible. In my experience, conservative expectation setting is rare. Most program managers I know--both government and contractor-prefer to say that something is "doable", "achievable", "success-oriented", "aggressive," or "tight." I have learned that those type words accompanying an expectation really mean that it isn't going to happen.

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3. The final factor that I think underlies my being able to set more realistic program parameters is an obvious, but critical one: I have had much more experience than my peers. Program management will always be as much art as science. One can learn the science part, but the art part comes from practicing, from learning from mistakes, from being "in the field" instead of a spectator. Most critical program decisions will be judgment decisions where intuition plays as large a role as facts. We would like to think that there are right answers to every issue, but there just aren't.

This leads me to another way that I perceive myself as perhaps different from many other program managers in the Department. Most program managers I know would say, at least privately, that things cost what they cost. You just fally it up, they would say. The inference is that performance is the most important among equals. I don't accept that. I believe that you can manage costs by doing the right things and by having a cost-sensitive perspective. Let me use an anecdote to illustrate my point.

Shortly after I became the manager for the Joint Direct Attack Munition (JDAM) program, I found myself in the Air Force Chief of Staff's office telling him about the program plan. When I had finished he asked me how much these things were going to cost. I had that information because we had just completed a cost estimate. The estimate projected a unit cost of \$62,000 average for 10,000 units. I had very high confidence in that estimate. The technology for the weapon was very mature--essentially off-the-shelf. Also, the bomb kit was relatively simple. However, as I tried to formulate the answer to the Chief, I realized that the estimate had a lot of assumptions and I had not gone over it in detail. So, my answer to the Chief was as follows: "If we buy enough of these we can probably get the unit cost down to about \$40,000." The Chief thought a moment and then he said, "Mr Little, I want the very first unit to cost less than \$40,000. We are going to have to buy a lot of these so they need to be cheap. I want to see you again when you can assure me that you have figured out how to make this happen or when you are ready to tell me what I need to do to allow you to make it happen". Making a long story short, the very first unit was less than \$20,000. How did that happen? Simple. We managed the cost as if it were a technical requirement. The design was not "the design" until we were certain we could satisfy the cost requirement just like the requirement for each bomb to strike accurately. We knew we could make something that would work well, but it took some time, money, ingenuity, concentrated engineering and total team commitment to make something we could afford. By the way, I never asked the Chief to

do anything. What I did many times was threaten to go to the Chief when others wanted me to speed up, add new performance requirements, or cut the development cost. That threat worked great! It's unfortunate that most program managers don't get that kind of top cover.

I should also note that making cost performance or cost schedule trades during development, like I was able to do with all the programs I managed, is a fantasy for most program managers in DoD. The only time this even becomes a possibility is when the program is on the edge of cancellation. It's just too hard to get the requirements community to accept less performance than that to which they think they are entitled--particularly when they think that cost is someone else's problem. To the users, the requirements are the vehicles they have to "hold the developers feet to the fire."

It is also quite possible to manage development costs. The way to do that is to develop what I call a "fixed price mentality" for developments. I will try and explain what that means.

During the 1980s, the Department had a disastrous experience applying fixed price contracts to development programs. The basic concept, I think, was a sound one. The application was miserable. In particular, the Department applied fixed price contracts to very high-risk development programs and, typically, the program selected the low bidder as the winning contractor. These two factors together produced contracts with very unrealistically low prices and predictable bad results as the work unfolded.

The Department, in an over-reaction, totally abandoned fixed price developments. So, today, the Department uses cost reimbursable contracts for virtually all system developments. This is a mistake, I think. A more creative and effective alternative would have been looking for ways to make developments lower risk and to remove the motivation for contractors to buy-in or "low ball." This switch to cost reimbursable contracts has had some very bad consequences that many people do not acknowledge-consequences that contribute substantially to the widespread cost growth and out-ofcontrol development programs we see. I will explain.

 The certain prospect of a cost reimbursable contract encourages contractors and acquirers to undertake developments that are excessively high risk. A new development that relies on essential technologies that are immature, manufacturing processes not yet proven, or beyond the state-of-the-art breakthroughs is surely going to be disappointing. It's going to cost more, take longer, and deliver less than anyone expected when it started. I argue that most everything the Department needs to develop today can proceed in low-risk stages with each stage providing an increment of capability. The expectation for that capability should be consistent with what we know we can provide at low-risk and in a short, predictable development time. Therefore, each increment should also be

compatible with a fixed price contract; if it's truly not, then the risk is probably too high to start. Once the development begins, the high-risk technology work can happen outside the program in parallel and at its own pace. When that technology is mature, then we can fold it into the development program as an added capability. But, one might say, "...this is spiral development which the Department policies encourage." It is, but, in practice, the increments are too risky and too long and have requirements that are inconsistent with what we know we can do. Also, the essential parallel technology work for future spirals tends to be under-funded. Cost reimbursable contracting encourages this troubling situation.

- 2. Many of our major developments lack execution discipline. Somehow, discipline doesn't seem to matter too much when the Government reimburses the contractor for all his costs and programs can almost always get more money after they begin. One of the major "lost disciplines" has been that of proper planning. There is a prevailing attitude that it's acceptable to "make-it-up as you go along" when you have a cost reimbursable development contract vehicle. After all, some would argue, the plans never come to pass anyway. There are too many unknownunknowns that pop up inside the program and too many perturbations from outside. That's all false rationale. While it's true that things we didn't plan for happen, it's also true that the act of planning gives us a sound understanding of the work scope, the interfaces, and the critical tasks. When the detailed planning does not happen we end up learning many things from doing that we should and could have figured out beforehand. I would be the first to admit that doing detailed planning for anything beyond about three years is a pretty fruitless activity. However, if we could get to shorter, lower risk developments as I suggested, such a time horizon would be perfectly acceptable.
- 3. Finally, I believe that cost reimbursable contracts have allowed our major contractors to become very inefficient. Where a contract is cost reimbursable, the contractor has no motivation to reduce costs. What do I mean when I say "inefficient"? I mean employing more people on a program than is necessary for actually doing the work. I mean having more mid-level managers than the work needs. I mean tolerating marginally performing employees. I mean allowing indirect costs to balloon. I mean becoming comfortable with rework and repair. I mean buying new equipment or building additional hardware when it is not cost effective to do so. I mean allowing major subcontractors to "skate through" problems. I mean "inspecting-in" or "testing-in" quality. I mean "fee-stacking" where a prime collects profit on a suppliers profit. I could go on, but the point is that we have created an environment where inefficiency is very acceptable.

Certainly, we don't have to return to fixed price developments to solve the problems I have mentioned. There are other ways. In fact any program manager can solve these issues for his or her program today simply by changing how he or she does business. More broadly, if we could alter how we develop across the Department so that we took lower risk, shorter steps we could increase fixed pricing and begin to change the cultural mentality away from a cost-based mentality to one that was price-based.

Now, I want to return to something I mentioned earlier--program manager continuity. I had a long tenure on every program I managed, an average of five to six years. This prospect not only contributed to my feeling accountable, but also contributed to program stability. I believe that our major programs should have managers who remain with the program until that manager dies, retires, resigns, is removed for cause, or has served five years. Some would say that this means that, therefore, we must have civilian program managers. I don't agree with that. In fact, as a general rule, I think that today military make better program managers than civilians do. There are two reasons. The first is that military members tend to have closer ties to and understanding of the users. That's pretty obvious and a good thing. What's less obvious is that military members, at least theoretically, rise in rank mostly by demonstrating leadership. That's what programs most need. Civilians tend to advance based upon technical competence. Most programs have plenty of that. What they don't have plenty of is leadership. We could alter this over time, but for now, we simply don't have a cadre of civilian managers ready to take on major programs.

I want to use a couple of anecdotes to better communicate my opinions about continuity. I have watched the Joint Strike Fighter program since it began. I have lost count of how many program managers that program has had. I have known some of the past managers, but I want to speak about one whom I did not personally know: Mike Hough. I believe he was the program's manager for about two years. There is no person working with him with whom I have ever talked -- military, civilian, or contractor--that was not highly impressed with his knowledge, his integrity, his openness, his people skills, his candor, or his ability to keep the program on track. He was, in the estimation of everyone with whom I have talked, to the epitome of a great leader. Yet, after a relatively short tenure, the Marines promoted him and he moved off to some staff-type job. I say, "what's up with this?" Why would the Department accept the disruption to its biggest and arguably, most important program? Is it because no one understands the huge trumoil that's inevitable any time a program gets a new manager? Surely not. Why would the Department accept the risk of getting a new manager not up to the task, when they already had a great one there? No sane commercial company would ever allow this to happen. It doesn't pass a "reasonable person" test. I would think some creative people could find a way to solve this sort of problem without having to adopt a misguided tact like denying promotion to people like Mike Hough. This has to be fixed.

Programs take on the personality of their leader. I am convinced of that. Program people adopt the leader's priorities, ways of seeing the program, communication style, trust behavior, openness to new ideas, problem-solving approach, etc. In one particular instance, when I left a program to manage another, the program team began to rapidly

self-destruct. Within three months, it was in total disarray. It's not that my successor was incompetent. He was simply different from me. He wasn't into teams and, unlike me, he was a micro-manager and very, very cautious. It took 18 months for the program to get back on track. I bear some blame, of course. I failed to institutionalize the philosophy I had put in place. My excuse was that I didn't see the need because I never expected to leave that program until I retired. Looking back, I believe the program would have produced a much better result had it not have had to deal with the significant disruption of having a different manager at a critical time.

In summary, I will suggest that no matter the statutes, processes, policies, oversight approach and top-level organization, the rubber will always meet the road where the program manager is. The program manager drives the execution and leads the team toward developing and producing the product the war-fighter needs. He can control program outcome by what he does and how he does it. All the outside factors are environmental; the program manager can deal with them. I believe that we can and must do a lot better in grooming program managers, selecting them, training them, mentoring them, empowering them to act, keeping them in place, and holding them accountable. In my estimation, it's at that level where there is the most progress to be made.

That concludes my testimony. I want to thank the committee again for the opportunity to share my experiences and views. I look forward answering any questions you have.

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