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DEFENSE ACQUISITION PERFORMANCE ASSESSMENT PROJECT

1560 Wilson Blvd, Suite 400,

Arlington, VA

15 July, 2005

Morning Session

ATTENDANCE:

Mr. Jerry Abbott

Mr. Frank Cappuccio

Ms. Eileen Giglio

Mr. Dick Hawley

Mr. Ron Kadish

Mr. Paul Kern

Mr. Don Kozlowski

Mr. John Lesko

Mr. Dave Patterson

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<p>1 PROCEEDINGS</p> <p>2 Mr. Lesko: Welcome ladies and gentleman. You've found</p> <p>3 the public meeting. My name is John Lesko, I'm here to give a</p> <p>4 few administrative announcements. I will be brief and explain a</p> <p>5 couple of the procedures that we're going to use to collect</p> <p>6 questions. First restrooms, if you need them there will be</p> <p>7 hopefully a short break roughly, but not for certain at about</p> <p>8 the 10:40 mark. Those restrooms can be found behind the</p> <p>9 elevators, so you have to go through at least one glass door to</p> <p>10 get there depending upon the route you take. Behind the</p> <p>11 elevators restrooms. Telephones in the common areas. There's a</p> <p>12 bunch of soft seats and mushroom shaped tables over there in the</p> <p>13 common areas. There's some phones that are available for use.</p> <p>14 There's some phones that are available for use behind the</p> <p>15 reception area, dial nine to get out. It would be appreciated</p> <p>16 if you would set your cell phones on vibrate while you're in the</p> <p>17 session here. Badges, if you have a badge that you were issued</p> <p>18 we just ask you return them at the end of the briefing with the</p> <p>19 same staff that issued them out to you. And last but not most</p> <p>20 important, when you signed in you were given not only an agenda,</p> <p>21 but comment cards. Now it is the intention to gather comments</p> <p>22 from the public on these cards. And it is the intention to get</p> <p>23 back to you with an answer of some sort. I understand that many</p> <p>24 of a common nature may be answered in the session later this</p> <p>25 morning. However, the promise has been made and the intention</p>	<p>1 better know as the Skunk Works. This is a union outfit, I can</p> <p>2 tell. Cappuccio has 30 years of comprehensive and diverse</p> <p>3 management in engineering experience, and he is familiar with</p> <p>4 the cradle to grave acquisition as the Program Manager and the</p> <p>5 Director of Proposal Team for the joint strike fighter. Richard</p> <p>6 Hawley, General Richard Hawley independent defense industry</p> <p>7 consultant. He is retired Air Force. General and former</p> <p>8 commander of U.S. Air Force's Europe, and Allied Air Force's</p> <p>9 central Europe. General Paul Kern, Executive Advisor, Engineer</p> <p>10 Counsel with the Towne Group now. General Kern is retired U.S.</p> <p>11 Army general and former Commanding General of the Army Materiel</p> <p>12 Command. Mr. Don Kozlowski, aerospace consultant. Don was</p> <p>13 former President of the Jennair Corporation and Program Manager</p> <p>14 of Managed Business Jet. He was a Senior Vice President for</p> <p>15 military transport aircraft, the Boeing Company. And C-17</p> <p>16 aircraft Program Manager. Gerald Abbott is Professor and</p> <p>17 Director of industry studies at the Industrial College of the</p> <p>18 Armed Forces. And in joined the faculty in June of 1987. And</p> <p>19 did we get everybody?</p> <p>20 Well at this time what I would like to do is to turn the</p> <p>21 session over to the Chairman, Ron Kadish for a few remarks.</p> <p>22 Then I'll join you after his remarks to give you an overview of</p> <p>23 what we're about here this morning.</p> <p>24 Mr. Kadish: Thanks Dave. Good morning everyone. Thank</p> <p>25 you for coming. I'm honored to be a part of this effort and</p>
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<p>1 is there to get back to the public with comments. And there</p> <p>2 will be other people talking about web site access and that sort</p> <p>3 of thing. As far as getting comments and responses back to you,</p> <p>4 I ask that you place those comments cards in a basket which is</p> <p>5 located behind this pillar. This large pillar there's a blue</p> <p>6 basket there, and we actually have extra cards if you have</p> <p>7 additional comments or additional question. I've covered all</p> <p>8 the items on my checklist. Mr. Patterson?</p> <p>9 Mr. Patterson: Thank you very much. Good morning, and</p> <p>10 thank you all for being here. We're really gratified by the</p> <p>11 fact that you took time to come and join us this morning. My</p> <p>12 name is David Patterson. I'm the Project Director for the</p> <p>13 Defense Acquisition Performance Assessment, DAPA as it's called.</p> <p>14 We need to make it an acronym. We couldn't have done it any</p> <p>15 other way. But we've got a lot to do this morning. And so this</p> <p>16 is going to be a pretty fast paced session. And to get right on</p> <p>17 to that I would take this opportunity to introduce the panel</p> <p>18 members. To you -- they are to my left Ron Kadish, who's a</p> <p>19 partner and Vice President Aerospace market, Booz Allen</p> <p>20 Hamilton. And he is the former Director of Missile Defense</p> <p>21 Agency. To his left Frank Cappuccio. I'm sorry we did not line</p> <p>22 this up alphabetically. But, since you're not the immediate</p> <p>23 left when you hear you name would you just raise your hand. And</p> <p>24 that will help people. Frank is Vice President, General Manager</p> <p>25 of Advanced Development Programs, Lockheed Martin Aeronautics,</p>	<p>1 somewhat anxious about it as well. As you might imagine the</p> <p>2 acquisition process has been in existence in the United States</p> <p>3 since the Revolutionary War. And I think you'll find out today</p> <p>4 that we've improved it a lot over the last 100 years and we're</p> <p>5 try to do it again.</p> <p>6 I would like to thank particularly my fellow panel</p> <p>7 members. I can tell you from the deliberations we've had this</p> <p>8 morning and previous interactions, these are folks who are very</p> <p>9 dedicated and very talented and very much up to the task at</p> <p>10 hand. And I look forward to working with each and everyone of</p> <p>11 them. Our intention in this process, and I want to make this</p> <p>12 very clear is to be as open as possible in our approach to this</p> <p>13 problem. And we are soliciting not only industrial input.</p> <p>14 Input from around the people who have been a part of this</p> <p>15 process, but the public at large. People who have been part of</p> <p>16 this process in the past and who may have not had an opportunity</p> <p>17 to participate in previous efforts at all levels. And that all</p> <p>18 attitudes, and would encourage as we go through this people to</p> <p>19 come forward with any comments, suggestions, especially</p> <p>20 suggestions. We have a lot of questions in front of us. And</p> <p>21 probably don't need more, but we would certainly entertain</p> <p>22 questions to clarify the issues. But what we're really after is</p> <p>23 some significant and important input to our deliberations.</p> <p>24 And so you can expect us to be dialoging in this type of a</p> <p>25 forum as we go through this process much more than you would</p>

2 (Pages 2 to 5)

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1 expect. And to every extent practical we will do that. So,  
 2 we've got a difficult task ahead today. You'll learn about the  
 3 acquisition process as we know it today. As we will review it  
 4 we will also look at the history of some of the things that have  
 5 been done, and more importantly probably for some of the people  
 6 who have come today will be looking at the process we're going  
 7 to use, and why we think it's a little bit different and  
 8 effective in the approach we're taking today. Thank you very  
 9 much.

10 Mr. Patterson: I have one slight variation. On the  
 11 comment cards, we would like to get to your comments as quickly  
 12 as possible. As opposed to accumulating them and answering them  
 13 at sometime later. So if you like us to talk about your  
 14 comments or your questions, please as you write them hold them  
 15 up and during the process where we are deliberating on the  
 16 issues of the study we will make every attempt to answer those  
 17 questions today. So that you don't have to wait for an e-mail.  
 18 Well with that I would like to go to the overview briefing. It  
 19 is the Defense Acquisition Performance Assessment Project. It's  
 20 a public session, and I would like to do is just give you a  
 21 brief look at the discussion topics. We're going to look at --  
 22 you will recall that Secretary England said we need a roadmap.  
 23 We've had a number of questions that, that said you've had 30  
 24 days so what are your answers. We're going to talk about that a  
 25 little bit. We also want to talk about mandate principles and

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1 the problem, as the panel has seen it. And that is the what  
 2 part of this effort. The how, we're going to look at our  
 3 organizational relationships, the division of labor within the  
 4 panel, and what's different about this study. And then go into  
 5 the methodology that we're using. The outcome of your study is  
 6 always dependent on the methodology and the credibility of your  
 7 study on how you do things. And then I want to give you a look  
 8 at the time line we have set for ourselves and what will happen  
 9 during the course of that time line. The roadmap defined --  
 10 well to allay any fears that we have any answers today I want  
 11 you to be clear on the point that the road map as we defined it  
 12 to Secretary England is you take a look at where you are, at  
 13 point A. And you look at what you have to do to get to point B  
 14 to make the process better. We went through that process with  
 15 him and he was satisfied that we had met the spirit of what he  
 16 had in mind. Next slide please.

17 [Next slide]

18 Mandate for success. Well the mandate for success is the fact  
 19 that Secretary England has given us this charge. And to kind of  
 20 review with you the kernel or nuggets of what he was talking  
 21 about. He say I'm authorizing an integrated acquisition  
 22 assessment to consider every aspect. He emphasizes every  
 23 aspect. He expects -- this does not move my charts, I'm sorry.  
 24 There we go. The output will be the recommendation of an  
 25 acquisition structure of processes with a clear alignment of

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1 responsibility authority and accountability. Despite the fact  
 2 that I have this chart behind me, he wanted to emphasize the  
 3 essential simplicity with which he expects us to come up with an  
 4 answer. It is important to emphasize that I am authorizing an  
 5 integrated acquisition assessment to consider every aspect of  
 6 acquisition including requirements, organization, legal  
 7 foundations, decisions methodology, oversight checks and  
 8 balances, every aspect. And during our discussions with  
 9 Secretary England he reiterated that expectation.

10 Well every study really needs to have some guiding  
 11 principles. And we established some guiding principles for this  
 12 effort. And to just go briefly through them, but first and  
 13 foremost we are a nation at war. With the global war on terror.  
 14 And we need to fight that war by acquiring equipment systems  
 15 and services in a timely manner to win. We need to understand  
 16 and define the success in terms of outcomes and in the context  
 17 of the process that produces successful results in the customers  
 18 eyes. Build on strategic human capital. That's people, you  
 19 don't anything without people. And those people who are  
 20 currently working in the defense acquisition workforce. Work to  
 21 establish the joint requirements that balance among performance  
 22 scheduling costs, work through the industrial based challenges  
 23 that we face today. Insure that the acquisition process is as  
 24 transparent and objective, and timely and accountable. Build an  
 25 authoritative data/information. Those are the facts. Linked

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1 across functions to drive decisions, not speculation but facts  
 2 to drive decisions at the right level. We want to increase the  
 3 agility to keep pace with the changing and uncertain world.  
 4 Shorten the cycle times. Hedge against surprise. Explicitly  
 5 and honestly balance among risks and priorities to get the best  
 6 value for the taxpayer. And lastly integrity, it must operate  
 7 in an environment of metrics and maintain trust and confidence  
 8 in the people that operate that system. Well now we're going to  
 9 turn to a statement of the problem. And to understand the  
 10 problem, look at the time stake. It is kind of a worried chart,  
 11 but first and foremost what has driven the discussion has been  
 12 what has been perceived as a massively accelerating cost growth.  
 13 As we go through that you will see that cost is simply one  
 14 element in the acquisition and not always the most important.

15 But currently we have over 80 new major weapons systems.  
 16 And essentially enough money to afford 50. GAO has commented  
 17 extensively on system. And in one case has pointed out that  
 18 over the last four years the five major acquisition have grown  
 19 in cost on 281 billion to 521 billion. But there's a systemwide  
 20 improvement that seems to be illusive despite the numerous  
 21 attempts to correct the problems. The trend is not abating in  
 22 the eyes of many. And after more than 20 years, numerous  
 23 attempts it doesn't seem to have experienced much improvement.  
 24 As it is perceived outside the pentagon. Well as a consequence  
 25 of that confidence that's been seriously eroded and the

<p style="text-align: right;">Page 10</p> <p>1 characterizations of the system are wide and varied. But  2 essentially there is a perception that we are buying and not  3 keeping up with a changing world. Buying today the next  4 generation of what we have today. There is a conspiracy of hope  5 in many peoples eyes. On both the part of the government and  6 industry. And it creates an industry must win mentality, and  7 that must win at all cost. Program demagogy resulting from the  8 valuing of sunk costs rather than future processes. The way  9 which I tend to characterize how we have begun to think about  10 this is you have a government that looks out there and says we  11 absolutely need it faster, better, cheaper. And you have an  12 industry that says, oh boy we can make it faster, better,  13 cheaper no matter what the cost or how long it takes. The  14 government on the other hand says sounds good to us.  15 We have an ever escalating set of requirements resulting  16 from the absence of balanced advocacies and adequate  17 constraints. And what that boils down to is a problem that is  18 best characterized as we need to improve the DOD acquisition  19 system to provide capabilities to win the global war on terror.  20 Meet the challenges to national security and regain senior  21 leadership confidence in the system and the people. While I  22 want to also take a quick look at how relationships within this  23 organization [inaudible] and how we're knitted together. And  24 essentially what happened was the Acting Deputy Secretary  25 charged us to go out. He authorized the headquarters there for</p>	<p style="text-align: right;">Page 12</p> <p>1 in to talk about their thoughts on each particular issue. And  2 then conclusions are drawn on what they had said. Or there is a  3 comparative approach. In those kind of approaches you will  4 generally find in the GAO/CBO Congressional Research Service  5 We've decided to take a little bit different point of view on  6 this. We will have a study approach that emphasizes and  7 analytical system with analytical framework that maps underlying  8 structures. That allows us to test our hypotheses, predict  9 outcomes, and is based fundamentally on looking at various  10 behaviors that have given you what you have today. And then  11 with an analysis of those behaviors come up with some  12 conclusions and recommendations.  13 A quick look at our methodology. The qualitative  14 assessment and analysis and review with an action plan will have  15 a literature search. That literature search will be contracted  16 to The Monitor Company. Affiliated with the Harvard Business  17 School we wanted an independent un-bias perspective one that is  18 not been steeped in the traditions of acquisition, but yet  19 extremely competent and competent in the business practices.  20 Goldwater-Nichols is not a baseline but we wanted to look at  21 everything from 1985 forward and provide a summary of past  22 acquisition reform as a factual foundation of what we're going  23 to do in the future.  24 A one on one oral interviews and analysis of those  25 interviews will be a fundamental part of the process as well as</p>
<p style="text-align: right;">Page 11</p> <p>1 us to be the sponsor of this effort and you'll see the  2 University of Tennessee up there. University of Tennessee  3 supports this effort through a contact and all of this comes  4 through me as the Project Director. But it all supports a  5 Federal Advisory Commission at ACT panel, which you see to my  6 left. And with a Chairman and panel of principals, you will  7 also see there that everything surrounds it to support what they  8 come up with and what they do. The output of what we do will be  9 a report and implementation plan. And that report and  10 implementation plan will flow up through the Undersecretary for  11 Acquisition Technology and Logistics, Ken Krieg. And on the  12 chart, I can't emphasize the importance enough that particular  13 node as it goes through Ken and back to the Acting Deputy  14 Secretary of Defense, Secretary England.  15 I just want to give you a quick look at how our study  16 areas are broken down. We've kind of broken them down in  17 subpanels. But I want you to know right up front this is a  18 dynamic process. It is a work in progress. And as we  19 deliberate over the various issues that arise the studied areas  20 may in fact change. I had said that we're doing things somewhat  21 differently. And I want to point out those differences. Prior  22 approaches have taken as you see up there a somewhat --  23 basically it can be categorized in two general areas. The  24 Delphic approach in which you have intuitive and inductive  25 reasoning that comes from a variety of experts that are brought</p>	<p style="text-align: right;">Page 13</p> <p>1 the views of the knowledgeable experts in the field.  2 Culminating in an implementation plan which we think separates  3 this effort from others. When we're done we will have a plan  4 that you can execute to achieve the recommendations that the  5 panel arrives at. Quickly the one on one oral interviews and  6 analysis selected industries, labor unions. We will look to the  7 opinions of the workforce, the people who actually have to do  8 the work on the systems that we have paid for. Trade  9 associations and government acquisition representatives to round  10 out the one on one oral interviews. The views on knowledgeable  11 experts. As I've pointed out as well as implementation plan  12 with and assessment and betting of recommendations again.  13 Identifying practical solutions and describing how the  14 implementation can be accomplished. And by whom and will  15 establish what was referred to as an integrated management plan  16 and schedule with work break down structures. So that what we  17 come up with in this panel you can actually take home and put  18 into action.  19 The review process. It's an extremely important part of  20 this entire process and we will have a series of gold teams, red  21 teams, and black hat teams to come in and look at what we're  22 doing in order to make sure that we haven't done anything that  23 causes us harm in the future. So an extremely important aspect  24 of what is done here is peer reviews. And red and gold teams,  25 teams of people who are experts in the field to look at this</p>

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1 work. And lastly I promised you a time line. It is an  
 2 aggressive admittedly. It has a variety of activities. But  
 3 essentially what you see here are the times at which the panels  
 4 will meet. And the events that go up to make up the conclusions  
 5 and recommendation and how it fits over time. We have a  
 6 requirement in sometime in November to have a report and an  
 7 Action Plan to the Deputy Secretary of Defense. And in late  
 8 November as is the requirement of FACA Commission we will  
 9 provide that report to congress. While lastly we have a  
 10 structured and analytical approach. We believe it is the right  
 11 methodology. It's different than what's happened before. It  
 12 addresses all areas of acquisition. And the study results will  
 13 inform the QDR process, which as you know is happening in  
 14 parallel. We will provide our drafts to the QDR for their use.  
 15 I think we are on track with an aggressive schedule. We're  
 16 meeting that schedule in a reasonably good manner. And we hope  
 17 that in the end these public panel meetings will be a key  
 18 element of effort in establishing a new way of looking at  
 19 acquisition new processes or adjusted processes. And the way  
 20 that acquisition system is operated and that the overall result  
 21 will be significant improvement.  
 22 So with that let me ask Mr. Cochran to jump up here. And  
 23 we will have a review of the current acquisition process as a  
 24 foundation to where we are going.  
 25 Mr. Cochran: Good morning. Chuck Cochran, I'm from the

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1 Defense Acquisition University. I've been around for awhile,  
 2 been involved in a lot of these studies. I think I understand  
 3 the acquisition process. Sometimes I'm not too sure. By the  
 4 way I really appreciate this time in Northern Virginia. Walking  
 5 up from the metro station this morning I thought to myself, you  
 6 know this reminds me a lot of Texas. I'm going back to Texas  
 7 very soon and I really appreciate the opportunity to become  
 8 acclimated to Texas climate here in Northern Virginia. Okay.  
 9 Defense acquisition process, what you see on the screen is the  
 10 center version of this rather complex chart. I saw a lot of you  
 11 wandering around this morning before the presentation started  
 12 looking at what we call the Integrated Defense Acquisition  
 13 Technology and Logics Life Cycle Management Framework.  
 14 And very basically the top part of the chart shows where  
 15 the war fighters requirements come from. Joint capabilities  
 16 integration system, the bottom part of the chart shows where the  
 17 money comes from. Planning, programming, budgeting, and  
 18 execution process. The middle part of the chart shows what is  
 19 the really important things that go on in the acquisition  
 20 process. Which to me is an engineering process. Under contract  
 21 and in industry with oversight review process, overlaid on that  
 22 systems engineering process. And the technical part of the  
 23 chart is probably what we really depend on and end up down here  
 24 at the other end. To produce a system that meets the war  
 25 fighters requirement. I've also go to tell you that all weapons

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1 programs don't do everything on this chart. It's hard to show a  
 2 three dimensional process in a two dimensional schematic. It's  
 3 hard to show that you have to have the money first. The EP  
 4 process is down at the bottom, but actually you have to have the  
 5 money in place before you go to a mile stone review. So keep  
 6 that in mind. If you look at this chart and judge the process.  
 7 The other thing the chart shows is some of the newer policies in  
 8 the Department, like the evolutionary acquisition strategy. A  
 9 lot of you have heard of that, I know. But the bottom line on  
 10 evolutionary acquisition is we try to get an additional  
 11 capability out to the war fighter as rapidly as possible. Once  
 12 it's in the field take action to improve it. Gain up to full  
 13 capability. The chart shows the three decision support systems.  
 14 The Government Program Manager thinks in these terms. What's  
 15 the requirement of satisfying the requirement? What technical  
 16 activities do I need to use to satisfy the requirement? Is the  
 17 contract satisfactory and do I have the money? That's maybe an  
 18 over simplification. But that's basically how it goes. So  
 19 let's focus a little bit on the simplified version of the chart.  
 20 All this really is folks is a department wide policy to insure  
 21 the war fighters needs are met through a series of efforts and  
 22 activities divided by a number of control points, mile stones  
 23 and other decision reviews. These reviews are to insure that  
 24 the milestone decision authority, the acquisition executives,  
 25 the program executive officers have enough information to make

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1 an informed decision. The Government Program Manager can tailor  
 2 this process to the unique needs of each acquisition program.  
 3 Come to an agreement with the war fighter, the acquisition  
 4 executive as to what activities need to take place. How many  
 5 milestones do you really need, and when should we enter the  
 6 process?  
 7 Based on technical maturity, good business practices, risk  
 8 management, and so forth. It would take a long time to teach  
 9 all of this at the Defense Acquisition University. A lot of you  
 10 know what I'm talking about. If you don't we have some programs  
 11 at the university that can fill you in. But it will take some  
 12 of your time. It will take a lot more than 15 minutes I have  
 13 this morning. Trust me. Okay. Let's see if I can get the next  
 14 chart. Yes, this is the policy structure. DOD 5000.1 is only  
 15 eight pages. Even I can read it. 5000.2, the instruction that  
 16 sort of expands on the directive, lays out the procedures -- the  
 17 procedural process to comply with the top level policy is 38  
 18 pages. Then we go into the Defense Acquisition Guidebook, as  
 19 shown at the bottom. That is an online guide book. It is not a  
 20 paper document. So I'm not sure how many pages it is. But it's  
 21 a lot of screens. The regulation was cancelled. The regulation  
 22 was a couple hundred pages, and it's not going to be reissued.  
 23 We did away with a very large regulation. Move on the, what I  
 24 will call the discussionary best practices into a guide book.  
 25 The guide book is online at the university right now. And we're

<p style="text-align: right;">Page 18</p> <p>1 doing a process to web enable the guidebook. So you can go into  2 the Defense Acquisition Life Cycle Management Framework and you  3 can click CPD capability production document. You get all the  4 information you need to know out there in the program office  5 about that document. Where it came from, what's in it, what do  6 I do with it. That will be online probably in a month or so.  7 It's all free, all you have to do is click on it.</p> <p>8 Mr. Anderson: Chuck we should make a point that goes back  9 to a point you make earlier. This is being organized in a way  10 that we have acknowledged that there is no individual who will  11 remember everything. So instead of asking people to remember,  12 we are connecting learning assets to all of these major nodes.  13 So that when an individual is in an area working he can go to  14 that area, click on his computer and pull up the procedures and  15 perform and support documents relevant to that specific arena  16 that they're working in. This construct of learning at the  17 point of need instead of asking people to memorize everything.</p> <p>18 Mr. Cochran: I'm going to wrap up with this chart. I  19 think this is a pretty good summary chart and it sort of leads  20 into the next presentation. We revised the acquisition policy  21 and the requirements generation system a couple of years ago.  22 We didn't have the joint staff sitting in there part of the  23 pentagon and the acquisition sitting in a different part of the  24 pentagon and not talking to each other. It's an integrated  25 effort to make sure the joint capabilities -- capability based</p>	<p style="text-align: right;">Page 20</p> <p>1 Dr. Martin: Well I am Glen Martin, Director of Defense  2 Systems. I work on the staff of the Secretary for Defense for  3 Acquisition and Technology and Logistics, the Honorable Ken  4 Krieg. Chuck Cochran did a real good job of over viewing what  5 is a complicated system. But the system that is put in place  6 after lessons years of lessons learned. To provide a  7 disciplined and orderly way to translate the war fighters  8 requirements into designs systems that include hardware,  9 software, people that are ultimately verified and provided to  10 the war fighters for their use in whatever ways they're  11 intended. And ultimately there efficient life cycle support.  12 I'm going to offer you a slightly different view of acquisition.  13 It's a view of acquisition that is evolving. I tell people I  14 have a puppy at home that is older than some these things that  15 we are embarked on. She brings a lot of joy into my life. But  16 every now and then she gets in a little mischief. She doesn't  17 always get it right. So I ask for patience and understanding  18 about some of these things that we are pursuing to bring a  19 capability perspective to our acquisition. The disciplined  20 acquisition of individual systems is essential. It's critical  21 to building capability. But it's not enough. And I want to  22 talk to you about some of that not enough. Then talk to you a  23 little bit more about how we're integrating across the  24 capabilities, acquisition, resourcing, and personnel processes  25 of the Department. I won't dwell on this chart. I think we all</p>
<p style="text-align: right;">Page 19</p> <p>1 assessment process. The defense acquisition process is tightly  2 integrated. And up at the top you see the strategic guidance.  3 The President, Chairman, Secretary of Defense. All that flows  4 down through some further documentation published by the joint  5 staff in a series of documents that make up the family of joint  6 future concepts to look out in the far term. And we have the  7 concepts of operations, which basically come from the commands,  8 the joint tasks on that same process to look at things in closer  9 terms, say about seven years into the future. Down through the  10 integrated architectures some further analysis to feed into  11 recommendations for both nonmaterial, non-weapons systems type  12 solutions to capability gaps and material solutions. Those are  13 the weapons systems. That is the weapons system I'm talking  14 about, those things that go out to the war fighter. I'm talking  15 about radios, I'm talking about trucks, trailers, and tactical  16 missile systems, launchers, fighter aircraft and tanks. And  17 since I'm field artillery we use to be talking about howitzers.  18 I'm not so sure about that now. These capabilities documents  19 help drive the acquisition process. The bottom line is meet the  20 war fighters requirement as rapidly as possible. The next  21 presentation will be Dr. Glen Martin.</p> <p>22 Mr. Patterson: While Glen is going up there, Frank would  23 you stand up and introduce yourself? Director of Defense  24 Acquisition University.</p> <p>25 Mr. Anderson: I'm Frank Anderson.</p>	<p style="text-align: right;">Page 21</p> <p>1 know there are lots of things we need to do better. When I say  2 we, I mean not only the acquisition community, but the entire  3 Department of Defense and the industry team. The public team  4 that works with us on the requirements side, it is adapting to a  5 changing world. Understanding the war fighters needs, and  6 coming up with the solutions to those needs. Not all of which  7 are material. Overcoming our traditional bias, it's no surprise  8 the services have biases, but we all have biases. We have to  9 move beyond those to objective consideration of how to do  10 business. and we've talked about transformation a lot, but we  11 have to move to transform the military and it's capabilities to  12 meet future needs of the nation. On the acquisition side, there  13 you see on the right I'm going to talk a little bit more about  14 the notion of acquiring systems of systems where no one system  15 brings all the capability that is necessary to meet the war  16 fighters needs. That we need to organize and bring together  17 systems to do that. Making choices about individual systems not  18 in isolation, but in a joint context transitioning technology  19 rapidly to take advantage of what it promises.</p> <p>20 But once we embark on individual programs, make sure we  21 have a good foundation. We understand the complexity we're  22 embarking on and that we have good technical plans to deal with  23 that complexity. Working to strive for or to deliver what we've  24 promised on schedule and within budget. The resource decisions  25 you see they're on the left. The PPBES Planning, Programming,</p>

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<p style="text-align: center;">Page 22</p> <p>1 Budgeting, and Execution System. Laying a good analytical  2 foundation for the choices that we make. And aligning our  3 budgets with the decisions made in the acquisition process.  4 People are part of the system. We've got to take account of  5 that in the design. But also in the future support.  6 Recognizing that the bulk of our costs are problems we spend in  7 life cycle support beyond the delivery of the systems. These  8 systems that we develop today are going to be around for 25, 30  9 -- we've got airplanes that are projected life will exceed 50  10 years. So, how do we respond to these challenges? How might we  11 do better? We think that a capabilities based approach to  12 acquisition is one very useful way to do that. That extends the  13 focus beyond these individual systems and traditional focus of  14 the way we organize and present our budget to congress. And the  15 way congress authorizes and appropriates is on an individual  16 systems basis largely. We think we need to move beyond that  17 focus. Make decisions on those individual systems within a  18 broader context. Engineer from the out set the relationships  19 among those systems. Wire them together in a way that work.  20 Don't rely on cobbling this together when we're out in the  21 field. And we need to harmonize across the major streams that  22 flow through this framework of capabilities, and acquisition,  23 and budgets. In order to integrate the Department's activities.  24 I've got another chart. I think all of these charts will be  25 available in some fashion to you. But what this illustrates is</p>	<p style="text-align: center;">Page 24</p> <p>1 gray space in the middle, and I'll talk about the gray space on  2 the next chart. There's a lead change we use you call it a hand  3 off between the war fighter activities on the left side of the  4 chart. And the provider or acquisition activities on the right  5 side of the chart. And that's not quite the right way to think  6 about it. Because there is an engagement across that continuum  7 by those parties. But there is a lead change. And you see there  8 outlined there on the right that the 5000 guided disciplined  9 acquisition process applies to systems. The little rainbow  10 chart you see on there is something called roadmaps. I'm going  11 to tell you about road mapping and roadmaps. Which capture  12 where we are. It's the way of the future. It's an innovation  13 in our activity over the last few years. You see some  14 milestones across the top. The little red diamonds. Those are  15 called capability area of reviews. Again, that's an innovations  16 in the Department over the last couple of years. I'm going to  17 talk to you about capability area of reviews and how we think  18 that brings a useful perspective to the decision maker. Now  19 that same chart is captured across the top. But what I've  20 illustrated here is the engagement of the acquisition community  21 across that spectrum of activities. An engagement that we  22 characterize on the left had side as systems and mission  23 integration. Those are steps to work with the war fighter. The  24 where, when, how, and what circumstances it's intended to  25 extract from that dialog. Answers to questions what systems</p>
<p style="text-align: center;">Page 23</p> <p>1 looking at the top left. In yellow you see strategic planning  2 guidance, defense planning scenarios, family of concepts,  3 transformation. The former requirements process has been  4 described as stove piped. Services generate individual  5 requirements. The sell them to the joint community. And go off  6 and pursue the acquisition of systems to meet those  7 requirements. New requirements or capabilities process derives  8 needs from broader strategic objectives. The National Security  9 Strategy, the Homeland Defense Strategy. If the strategic  10 planning guidance and the policy guidance from the Department  11 that launches this capability process that Mr. Cochran outlined  12 for you earlier. Capabilities based assessment, that purple  13 area. Where the war fighter in disciplined fashion comes to  14 understand their needs. But also to identify gaps and short  15 falls, excesses in capability, and then finally embarks on a  16 solution analysis and says okay, how might we solve these  17 problems. Some of you heard the term MLPBS. Training,  18 leadership, personnel, facilities, the solutions are not just  19 material. You can organize your people differently, you can  20 provide training, you can provide facilities so the solutions,  21 that capability solution set has to include a broad spectrum of  22 responses. What we acquisition are most interested in those  23 things that become material or facilities or support  24 requirements. Those are the ones we're most interested in  25 organizing our activities to fulfil. As you move through the</p>	<p style="text-align: center;">Page 25</p> <p>1 would you bring together, how would you organize them to deliver  2 that capability? It's about defining relationships with other  3 systems and emerging, I hate to use this term, architectures  4 because not everybody uses the term the same way. But things  5 like the global information grid. The way we aim to exchange  6 information in the future. Starting the process to translate  7 those board views, abstract views that the war fighter needs.  8 The technical details that someone can go off and engineer and  9 develop a system. The right hand side you'll see the systems  10 acquisition activities. Again, we've talked about those already  11 today. A fairly orderly process that if you can -- for those of  12 you that can read the rising right hand side of that V, you will  13 see the term integrate systems, up systems, assess portfolio  14 performance. That's the notion that to apply a capabilities  15 based process we've got to look across individual systems to see  16 what they bring when the operate together. So they're  17 engineered and operated well together. Underlying it all, you  18 see across the bottom again Chuck Cochran did a good job of  19 laying the foundation. He said it is an engineering process so  20 systems engineering is critical to our future success. And I'm  21 pleased to say that under the leadership of Michael Lynn, the  22 former Under Secretary, and Ken Krieg the current Under  23 Secretary for Acquisition Technology and Logistics were working  24 to revitalize the systems engineering in the Department. So  25 when you talk about acquisition it doesn't necessarily lead you</p>

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1 to think about systems engineering. But part of the reason, I'm  
 2 absolutely persuaded part of the reason that we have not always  
 3 delivered what we've promised on time, within budget is because  
 4 we've lost sight of how to apply good systems engineering  
 5 practice to the way that we do business. And I would love to  
 6 talk to anybody at length about the importance of systems  
 7 engineering to what we're doing to revitalize it.  
 8 The capability area of reviews, let me tell you I'll start  
 9 by saying how do I think of this answer to the activity. In  
 10 simple terms it's like you go up to 20,000 feet and take a look  
 11 across the battle space. When you do you see more than you see  
 12 at ground level. You do see the individual systems, but you see  
 13 the relationships among those systems. You see capabilities  
 14 that don't exist in any one system. No one system can deliver a  
 15 shared picture. Each one of the systems that participates has  
 16 to contribute some portion. That has to be again then brought  
 17 together to create that picture. You see gaps, you see  
 18 overlaps, you see the need for different management constructs  
 19 to coordinate behavior across that capability area or among  
 20 those systems. You see the need for engineering. The  
 21 relationship among those systems. You see new challenges for  
 22 testing across those systems. So, recognizing this, the Under  
 23 Secretary, with the participation of the Defense Acquisition  
 24 Board has met periodically over the last two years to look at  
 25 capability areas. To take a different perspective looking

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1 through an acquisition, but a different perspective not looking  
 2 a individual systems, but looking at portfolios or collections  
 3 or assemblages of systems. And in so doing to identify needs,  
 4 short comings, opportunities, and as a result we've gotten  
 5 guidance, we've gotten direction, we've gotten some useful  
 6 activity to flow out of those things. My note at the bottom,  
 7 wide participation is essential, it is -- this is not something  
 8 that any one organization can do, so among our challenges is  
 9 bringing together the services, the commanders, the joint staff,  
 10 the Department of defense staff to come to grips with these new  
 11 approaches.  
 12 Another tool that we're using increasingly is roadmaps.  
 13 Roadmaps provide a framework for decisions. And what I mean  
 14 around that, is that something that you write down in English  
 15 words, complete sentences with punctuation. A referencable  
 16 collection of information, we're not as online yet as the  
 17 Defense Acquisition University. Our pioneers are. But we are  
 18 working in that direction, so that it's not what we call  
 19 shelfware, it is a useful reference. But something to prompt  
 20 decisions to reveal the need to actually confront issues and  
 21 make decisions. As a body of information, to inform those  
 22 decisions and then as the decisions are made within the  
 23 individual processes, whether it's the capabilities process, the  
 24 acquisition, or budget processes, to capture those decisions  
 25 that are made. It does lay out in essence a strategic plan, or

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1 capability area across that MLPF space. It's not just material,  
 2 it's lots of other things too.  
 3 And we accept the nature of the roadmaps. Our topics, we  
 4 have a roadmap for electronic warfare, joint battlefield  
 5 management, all sound things. But we also have one for unmanned  
 6 air vehicles. So we've got a number of different types of  
 7 roadmaps. We're working on, as I said earlier to start in sort  
 8 of the version zeros, where it first past through, where are we,  
 9 where do we think we are, what's in the pipeline, what are we  
 10 doing? And then over time through analysis and good thinking,  
 11 come up with a notion of where do we want to go to meet our most  
 12 critical needs.  
 13 The note at the bottom is important. The decision making  
 14 process across the Department is very difficult. Because no one  
 15 roadmap stands paramount over all other capability areas or  
 16 interests. So even the decision that you make in one, have to  
 17 be balanced. And so we recognized that going in. I talked  
 18 about making choices about individual systems, in broader  
 19 context. This is a chart, it's a version of the chart that was  
 20 used at a defense acquisition board review here recently on the  
 21 armed reconnaissance helicopter. I've had to simplify it in  
 22 order to share it with you today. But what you see there, just  
 23 a very simple graphic illustration in the center is that armed  
 24 reconnaissance helicopter. In the past we would probably look  
 25 to make choices about the structure of that program. What

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1 expectations we assigned to it. When we wanted it to be  
 2 delivered, how would we go about testing it, what its cost might  
 3 be, and what the return on investment would look like.  
 4 Without thinking about all of the others systems and  
 5 programs with which it must interact. If you step back and get  
 6 up to a little higher altitude and look at armed reconnaissance  
 7 helicopter. You see a raid around the edges around of that  
 8 chart, the many systems with which that armed reconnaissance  
 9 helicopter must interact over time in order to be successful.  
 10 Those arrows illustrate whether that program, or that system  
 11 gets something from others, or if the arrow points out, whether  
 12 something developed in that program is made available for use by  
 13 others. And what I washed out of this chart unfortunately I had  
 14 to, is the array in those open boxes, cost, schedule,  
 15 performance, status information.  
 16 So you can see if everything is green, and there's a  
 17 critical dependency you know you're on the right track. If  
 18 everything is red and then there's a critical dependency and you  
 19 know management has got to take some action to respond. So this  
 20 is something that we use at every Defense acquisition board of  
 21 review, everytime we look at an individual system, we are  
 22 stepping back and taking a broader look to understand those  
 23 relationships. We think that will lead to better decisions.  
 24 Another one of our innovations is thinking in terms of  
 25 systems of subsystems. And that occurs in areas like adult



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1 management, surveillance, and reconnaissance, it could be as  
 2 simple as combat search and rescue, or close air support, if  
 3 it's on the ground lots of times, I think in terms of bringing  
 4 systems together and how do you organize them to deliver  
 5 capability. There are a number of functions that must be done  
 6 well in order to bring those systems to fruition. And it starts  
 7 with aligning the expectations. What do you ask of each of the  
 8 individual systems. Synchronizing the activities and programs  
 9 so that over time the schedules are lined up in ways that things  
 10 come together when they should.

11 That's never easy. It's difficult when you try to do that  
 12 with an individual service. But when you have systems of  
 13 systems that are made up of systems that cut across service  
 14 lines, Army, Navy, Air Force, Marine Corps. Or perhaps things  
 15 developed by other agencies, that gets very difficult. So this  
 16 notion of synchronizing of programs, again we talked about an  
 17 acquisition program, focused on individual systems with a  
 18 Program Manager for that system.

19 Now I've got a number of Program Managers, each managing  
 20 their own program, and how do you synchronize, how do you align  
 21 how do you harmonize across those programs. Similarly systems  
 22 engineering, if you have to make sure that you put the pieces  
 23 together in a way that works, then you have to think about  
 24 engineering again across those system platform lines. Testing,  
 25 you can't always afford to stage an amphibious landing everytime

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1 you want to test a V-22 or expeditionary fighting vehicle, or  
 2 launch a global strike task force in order to test the F-22  
 3 communications.

4 You have to learn how to test across those lines, allocate  
 5 resources in a wise fashion. Fielding capability. Some one has  
 6 got to think about what capability you put in the field, so  
 7 hardware, software, the people all arrive in theater are  
 8 properly trained. The doctrine in hand is properly trained to  
 9 do their job. And ultimately you have to organize to sustain  
 10 that capability over time.

11 The next chart merely illustrates one of those systems of  
 12 systems the Department is confronting, and that is integrated  
 13 air missile defense, and you can just look at the complexity of  
 14 the graphics to see what it means to the Air Forces, Naval  
 15 Forces, Marine Corps and Army Forces operating together to  
 16 control the battlefield, the battle space.

17 This chart is an extract from one of our red maps, and  
 18 it's busy, because there are dozens of systems that contribute  
 19 to integrate air missile defense. What you see on the left is a  
 20 listing of those systems, little taco chips, we call them little  
 21 milestones. Milestones to illustrate the schedules that we want  
 22 to synchronize in the line over timing, because this is a  
 23 notional illustration. I can't give you the specifics, but  
 24 across the we can illustrate what our capability is to detect  
 25 critical assets for small areas. Or wide theater areas, and we

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1 can show over time, people - how we will actually build and  
 2 improve our capability by the work that we do with individual  
 3 systems, and the way we integrate across those systems.

4 My last chart, there are current challenges, Mr. Patterson  
 5 talked to you about the budget contract environment and the fact  
 6 that that will bound us in many ways. The complexity of  
 7 individual systems is increasing and that is compounded when we  
 8 think of them as systems, or systems of systems. The war  
 9 fighters appetites can be unconstrained. But they are  
 10 constrained by cost and schedule. This notion of network  
 11 centric, that's a discussion for another time, how we will  
 12 exchange information in the future. It puts new demands on us  
 13 as to how we bring these systems together. I talked about the  
 14 challenges of management structure. How do you manage a cross  
 15 systems platform program service lines. The importance of  
 16 system engineering is fundamental to success how do we see to  
 17 it. Share your best practices, and apply them. And then my  
 18 bottom line, is this is about people. It's about good people  
 19 working hard and doing a good job, so we need to make sure that  
 20 our acquisition workforce has the skills that they need to be  
 21 successful. That's the job of Frank Anderson the President of  
 22 the Defense Acquisition University, but it's also the job of all  
 23 our supervisors and managers across the Department. General  
 24 Kadish, Panel, I look forward to any followup activity.  
 25 Anything I can do to help you, I'd be happy to.

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1 Mr. Kadish: Thank you Glenn. We're going to make a real  
 2 time adjustment for the purposes of the panel members. Don't  
 3 leave yet. Instead of waiting until all the briefings are over  
 4 today, I would like to ask you two questions. Speakers, real  
 5 time now. And that way we won't miss anything by waiting today.  
 6 So if you don't mind.

7 Mr. LaMartin: Sir, I'm at your disposal.

8 Mr. Kadish: Does anybody have anything they would like to  
 9 ask of Glenn or Chuck? One of the interesting things I found in  
 10 your briefing that you emphasized was the value and the fact  
 11 that systems engineering process in government is fundamental to  
 12 the process. Quite frankly I've not seen that emphasis prior to  
 13 your briefing today in terms of the way we actually operate in  
 14 the Department. This seems to me to be a new area of emphasis,  
 15 and I would be interested in your comments about the ability of  
 16 the government, given the nature of this task today and the  
 17 downsizing over the years to actually do that systems  
 18 engineering.

19 Mr. LaMartin: I really appreciate your asking that  
 20 question.

21 Mr. Kadish: I bet you do.

22 Mr. LaMartin: I really do, because I said I would love to  
 23 talk some more about it. I've been in my job just over three  
 24 years. When I took my job I was given the challenge of helping  
 25 to revitalize systems engineering across the Department of

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1 Defense. To that end we established an organization for systems  
 2 engineering. One of the deputies in that office, Bob Samlamaras  
 3 is my Deputy Director for Enterprise Development. Which is the  
 4 development of the enterprises systems engineering across the  
 5 Department. We've issued some policy, it's very thin policy,  
 6 but we think very effective, you say each program shall have a  
 7 systems engineering plan, again, write it down.  
 8 English words, complete sentences, with punctuation, how  
 9 are you going to carry out the technical activities in your  
 10 department, your program, to integrate the technical and  
 11 programmatic activities. That plan will be approved by the  
 12 milestone decision authority. We've said that your technical  
 13 reviews shall be event based, not schedule driven. So that  
 14 you'll only make those technical decisions when you're ready.  
 15 We've said you'll call outside advisors to lead or  
 16 participate in the those technical reviews to make sure you  
 17 don't drink your own bath water. And so we've embarked on  
 18 implementing this policy in the last two years.  
 19 We've got some almost three dozen systems engineering  
 20 plans, that are either approved, or in the process of review.  
 21 We are engaging with individual programs, we're organizing teams  
 22 to sit down program Managers in a constructive way, and help  
 23 share best practices to look at their plans and give them advice  
 24 and feedback. We're learning. I mentioned I've got puppy at  
 25 home, she's just a little older and I trust, and we think we're

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1 starting to make a difference. I don't think we know who to  
 2 look at systems engineering. We have failed to emphasize it,  
 3 and you've heard the expression what gets watched, gets done.  
 4 And if the Department doesn't emphasize it, in either its  
 5 assessment of who's best qualified to do the job, or if the  
 6 Program Manager doesn't emphasize it looking at an individual  
 7 program and improving its structure, or guiding its  
 8 contractors, then they may too quickly trade that off for other  
 9 things as a function of expediency or efficiency.  
 10 Mr. Kadish: That is one of the areas I was going to press  
 11 on. In the sense that I understand what you're doing in terms  
 12 of process. And the emphasis that you're putting on it. But  
 13 personally I have a lot of anecdotal evidence that says that  
 14 says that's the first task in cutting the budget, buy program  
 15 offices. And even aided and abetted by the Congress in it's  
 16 oversight of the programs. Do you see that as a significant  
 17 problem in the way this process adjustment will be corrected?  
 18 Or is there a very significant attention to the funding?  
 19 Mr. Lamartin: I think we can trace many of our problems  
 20 that have resulted in cost growth and schedule delay to failures  
 21 of systems engineering and its application. So I know that from  
 22 the Office of Secretary of Defense perspective we are going to  
 23 stress it, we're going to insist on these plans as a condition  
 24 for going forward in the program. We're going to review  
 25 programs, and offer our best advice. But we're going to be

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1 looking at how Program Managers have organized to deliver,  
 2 including whether it's IPT structures, who's been assigned, how  
 3 much money they're going to spend, we will continue to stress  
 4 it. And it's a thrust for education. You did ask originally, we  
 5 have to look at our customer in this regard, and I think we need  
 6 to do better.  
 7 So with the Defense Acquisition University will look at  
 8 the curriculum, their technical courses versus engineering,  
 9 we'll make sure that curriculum is good, and there are also  
 10 courses in financial management and contracting, general program  
 11 management, test and evaluation to make sure that the treatment  
 12 of systems engineering in those other courses is good.  
 13 Outreaching with industry, other professional academics,  
 14 institutions, the Air Force has technology - engineering  
 15 outright.  
 16 Mr. Patterson: There's a wide spectrum of engineering.  
 17 Mr. Kadish: Anybody else?  
 18 Mr. Kozlowski: How do you implement that as a requirement  
 19 on programs?  
 20 Mr. LaMartin: Well policy says you shall have a plan.  
 21 There's a policy memorandum from the Under Secretary mandating  
 22 that, and it will be embedded, folded into the DOT 5000 update  
 23 when it occurs. What that means is the Secretary will take the  
 24 most high visible programs. The Under Secretary personally will  
 25 approve that plan, and similarly the lower acquisition category

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1 programs, those milestone decisions we think that will help.  
 2 Mr. Kozlowski: One comment on Chuck's presentation. On  
 3 the first chart, when he sort of describes requirements,  
 4 budgeting, process requirements, money, and then and then go out  
 5 and buy acquisition. Whereas my view is many people look upon  
 6 that entire bucket of requirements, dollars, buying, fielding,  
 7 and supporting, that's all part of the acquisition process.  
 8 It's - I don't have an answer. It's just a comment that the  
 9 term acquisition, at least for the purposes of this panel is  
 10 very broad, it's the whole picture.  
 11 And sometimes you see people using the terms  
 12 interchangeably.  
 13 Mr. Cappuccio: Three questions. Number one, 25 years ago  
 14 we had systems engineering plans called SIPS, I would like your  
 15 comment on how those things differ today, and what we did 20  
 16 years ago.  
 17 Mr. LaMartin: Many programs still have systems  
 18 information management plans. Many plans call for those. Those  
 19 generally describe the contractors plan for integrating  
 20 activity. We think the systems engineering plan gets up to a  
 21 higher level, to the Program Manager.  
 22 So it's not only the contractors activity, but it's the  
 23 government's technical activity as well and how they will cut  
 24 across both the technical and the programmatic activities master  
 25 plans, master schedules, configuration, control, test and

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1 evaluation, risk management. The decision uses the technical  
 2 plans, the reviews and so on and so forth. We think we're  
 3 adding value by getting up to the Program Manager's approach.  
 4 Mr. Cappuccio: A second question. My experience, and  
 5 this has been systems engineering is a process. System  
 6 engineering is taking the execution of the program, and the  
 7 people that think of the systems level is entirely different.  
 8 And experience today with IPTs would suggest as IPTs on both  
 9 industry and government stovepipe the systems engineer, the old  
 10 fashioned chief engineering in his head, that was able to tell  
 11 the landing gear IPT you don't get it. That's not where you're  
 12 going to take an extra 10 pounds of weight.  
 13 What are we doing in the government to get back to that  
 14 "systems thinking" or Chief Engineer mentality, as opposed to  
 15 getting hung up with the process of systems engineering. The  
 16 process meaning flow down requirements can I trace.  
 17 Well tracing a requirement in engineering process is one  
 18 thing, and engineering it to do the trade studies as the  
 19 dynamics is something that both industry and government has had  
 20 a very hard time with. Particularly as the systems get complex.  
 21 Do you see that as the next evolution in the university to  
 22 start identifying those groups of individuals who are  
 23 personality traits that really think at a system level.  
 24 Mr. LaMartin: You've got your thumb on a real challenge.  
 25 And that's why I've given Bob Scalamaras the job of Enterprise

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1 Development. Because there's no one single thing to be done to  
 2 make all of that right. We just looked at it last year, at one  
 3 of our biggest programs in the Department, and we found they had  
 4 a Chief Engineer, but he was not empowered in a way to be  
 5 effective across those stovepipe IPTs, to dialogue with the  
 6 contractor. They came to recognize and appreciate that. But in  
 7 a skilled individual who could apply that perspective, position  
 8 them in a way that they could be more effective.  
 9 Mr. Cappuccio: The last question you said something  
 10 interesting, I'm not sure you meant it, but it came out this  
 11 way. You were using systems engineering, and the quote was,  
 12 event driven versus schedule.  
 13 Mr. LaMartin: Technical reviews.  
 14 Mr. Cappuccio: How do you stop the contractor from  
 15 becoming so event driven that schedule is irrelevant, i.e. cost,  
 16 i.e., overrun. If the systems engineering process endorses the  
 17 overrun. You're not meeting events. I know it's an unfair  
 18 question. But it is an interesting process. In industry the  
 19 emphasis can be so much on event, that schedule slips out.  
 20 Without worrying about cost, particularly not at the high  
 21 levels, but at the lower ones, again the IPT level.  
 22 Mr. LaMartin: Sir, you're revealing your insight into the  
 23 process. You've got those challenges.  
 24 Mr. Kern: One quick question I've heard no mention  
 25 throughout this of continuous improvement processes. GE focuses

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1 on a six sigma process. Toyota, production a lean process.  
 2 Everyone who's looking at things is not satisfied with the  
 3 status quo. Yet we seem to continually, to march to right it  
 4 down in the regulation and policy and it's good. As opposed to  
 5 continuously trying to improve it based upon requirements  
 6 technology.  
 7 Mr. LaMartin: Sir, thank you for that comment. It  
 8 reminds me to mention two other things. Number one, we've  
 9 established a systems engineering forum that we lead and it's  
 10 got representatives from each of the services across the  
 11 Department of Defense, but it also - we've reached other  
 12 agencies outside of DoE, or DoD, to include the Department of  
 13 Energy, NASA and others. And that forum meets monthly to do  
 14 what you suggest and that's to think about how are we doing  
 15 business. What works, what doesn't work? How do we get better?  
 16 We had a town hall meeting, where we brought in the  
 17 Program Managers, engineers from across the Department. Had  
 18 over 200 people, two days, and said all right, here is our  
 19 policy. It's new, it's fresh, how's it working? How can we  
 20 make that better. So we're not just writing down the policy and  
 21 handing it over, we're striving to improve what it is we're  
 22 asking and how we're engaging. But I think the missing thing is  
 23 there's nothing in the policy that stresses the continuation  
 24 process.  
 25 Mr. LaMartin: There's nothing in the policy that stresses

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1 continuing process improvement.  
 2 Mr. Anderson: In the systems engineering policy, but  
 3 there are initiatives ongoing that are focused on, and addresses  
 4 the issue of improving how we do business.  
 5 Mr. Kern: Program, by program?  
 6 Mr. Anderson: And as a group, right. There are some  
 7 corporate things that have been worked on, but a group if you  
 8 focus on any single part of the system as being the answer we  
 9 miss, because we have to think holistically about the whole  
 10 process. And the initiatives need to be focused on that point.  
 11 And there's also a cultural aspect of how we do business.  
 12 Mr. Kern: If I could just add one quick one. We're  
 13 eliminating things that don't add value. We don't eliminate  
 14 things, we just add things.  
 15 Mr. Abbott: It seems to me, this morning we talked about  
 16 - described what some might call legacy system, acquisition  
 17 systems, by legacy programs how is this system we've describe  
 18 be agile enough to support the war fighters, not only engaged in  
 19 the war that does not look anything like what those legacy  
 20 systems were designed to buy, or the legacy system was actually  
 21 designed to provide.  
 22 Mr. Cochran: Let me try that. First of all policy is  
 23 policy. It's an engineering process. You can't just dictate  
 24 we're going to answer the war fighters requirement for a new  
 25 advanced technology fighter aircraft within a year. It isn't

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1 going to happen. What we've done with this process and this is  
 2 not the same process, we've recognized that you ought to move  
 3 things out of the science and technology area faster. For  
 4 example, Predator unmanned air vehicles. The CIA and Air Force  
 5 have had great success with, that started over here, very close  
 6 to production. Moving it out of the science and technology  
 7 area, into the acquisition process.  
 8 Years ago we would started that way back here and put it  
 9 through all the wickets, and all the oversight and all of the  
 10 requirements, and all of the reviews of standard DoD 5000  
 11 process. The intent, and don't forget the intent of policy is  
 12 not always the way the policy is executed. The uninformed may  
 13 look at a chart like this, hey when do we go to concept  
 14 decision. Whether it's needed or not. Instead of having a  
 15 bigger understanding, and I think you're right, this is the big  
 16 A process. This is not just the acquisition process. We're  
 17 going to consider it as a much larger picture. A little  
 18 thinking about where we are from a technology standpoint, and if  
 19 we're ready to move things into the process rapidly. Move them  
 20 in rapidly. If there's something already in the pipeline, get  
 21 on with it. Get it procured, get it fielded. You don't have to  
 22 go through the process at all.  
 23 Mr. Kadish: Okay. I think we need to move on at this  
 24 point. I would like to thank Chuck and Glen for coming in  
 25 today. I think given where we are right now, we're about 20

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1 minutes into our deliberations. So why don't we just take our  
 2 scheduled break?  
 3 Mr. Patterson: What I would to do is to - we were  
 4 supposed to have one more briefing. Let's take a break and come  
 5 back with the briefing.  
 6 Mr. Kadish: We will reconvene at five past.  
 7 (Break)  
 8 (Audio problems)  
 9 Mr. Patterson: Thank you all for returning. For those of  
 10 you who have been inspired by this effort, you can look for a  
 11 DAPA website next week, that will allow you to have public  
 12 comment and to put in your best designs, your crayon drawings  
 13 whatever you choose to put in, it will be able to accommodate  
 14 it, and because we are serious about looking for ideas and  
 15 comments from the public, otherwise we would not be going  
 16 through this exercise. So with that - and yes, the briefings  
 17 will be available, and please we're not going to print a whole  
 18 bunch of them, but if you want copies of these briefings please  
 19 if you'll make those desires known to us, and they will be on  
 20 the website.  
 21 Mr. Giglio: And LSD Public Affairs will have too, next  
 22 week.  
 23 Mr. Patterson: Thank you, our next briefer is from the  
 24 Monitor Company. We're going to talk about the literature  
 25 search, the methodology and how we went about that. Please.

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1 Mr. Griffin: My name is Leo Griffin, I'm a partner at  
 2 Monitor Group, which is a global advisory firm, consulting firm.  
 3 Which works with the most senior leadership of industry and  
 4 government around the world. Helping them to make decisions,  
 5 supporting them in decision making around their most intractable  
 6 problems. So it's a great pleasure to be here today to talk to  
 7 you. I'm delighted and privileged to have the opportunity.  
 8 My goal today is to talk to you a little bit about the  
 9 literature around acquisition reform. There is an enormous  
 10 amount of this. I spent much of the last month helping together  
 11 with our team to read about 750 academic papers on the subject.  
 12 So I'm hoping in the next 30 to 40 minutes to transfer all of  
 13 the knowledge from that into your heads.  
 14 Just one quick point before I get started. You will  
 15 notice on the bottom right hand corner of our charts that is  
 16 says that the information contained here is proprietary to  
 17 Monitor. For the purposes of this oral briefing, none of the  
 18 material that I'm going to cover we consider proprietary.  
 19 This is a repeat of a slide that David Patterson has  
 20 already shown, but I think it is worthwhile repeating. As David  
 21 mentioned there are currently over 80 new major weapon system  
 22 programs under development. And the best calculation is that we  
 23 can afford about 60 of them. They've got a combined cost growth  
 24 of about \$300 billion. The GAO asserts that the top five  
 25 programs have increased in cost over the past four years by

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1 almost 100 percent from \$281 billion to \$521 billion.  
 2 This to me really speaks about why should we thinking  
 3 about acquisition reform, why is this important? And this trend  
 4 isn't abating as we've discussed those five programs in the last  
 5 year, grew in cost by just over 14 percent, and schedule overrun  
 6 by about five percent. And that is just in one year.  
 7 And people have been looking at this problem for many many  
 8 years. We just looked at the last 20 years. But as I will show  
 9 you there have been attempts to think about acquisition reform  
 10 for a much longer period of time. And this to me really speaks  
 11 to the question of why should one take a different approach to  
 12 acquisition reform. Simply put, it's because we've been trying  
 13 for a very long time to do this, and while many improvements to  
 14 the system have been made, many of the problems that we've been  
 15 grappling with for a long time, remain. So here's a little more  
 16 historical context, and I think this is a little overstated.  
 17 But it does demonstrate that there's a long standing issue since  
 18 the revolutionary work. Critics have referred to Defense  
 19 acquisition as primitive practices, hobbled by complex rules,  
 20 conducted by untrained personnel resulting in defense industry  
 21 profiteering, poor supplies and equipment, and cost and schedule  
 22 overruns.  
 23 What I would say there is that in fact does illustrate  
 24 we've made some improvements, because while I think that people  
 25 would not argue that some of the rules remain complex, and we do

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1 continue to face cost and schedule overruns, I would dare not  
 2 say that the Defense acquisitional personnel are untrained,  
 3 particularly as I stand before the President of the Defense  
 4 acquisition university. In response over the next 200 years,  
 5 Congress passed more than 4,000 acquisition related statutes.  
 6 The GAO has issued more than 900 reports, and since World War  
 7 II, 12 major commissions have made acquisition reform  
 8 recommendations. This is a quote from a 1996 paper" The ghost  
 9 of acquisition reform, past, present and future and in fact over  
 10 the last nine years, there have been continued attempts at  
 11 reform.  
 12 So you can increase all of those numbers. So just a  
 13 little bit of background for our support to the DAPA project.  
 14 The belief is, that in order to understand the current  
 15 acquisition system, and the reform choices that we need to make.  
 16 It's important to understand the evolution that the system, and  
 17 how we got to where are today. And so this is the role that  
 18 Monitor was asked to perform, and we have done over the last  
 19 couple of years, a significant amount of work for the LSD and  
 20 for the U.S. Air Force leadership. And so I've got a good  
 21 background in this topic. And I've been delighted to be  
 22 involved.  
 23 This briefing summarizes our approach and it gives you  
 24 some flavor of where we have been going with this. It's pretty  
 25 much a work in progress. There remains - there are significant

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1 amounts of literature that we are still working through, and we  
 2 are looking forward to continuing to work on them. This slide,  
 3 gives you an overview of what it is we've undertaken over the  
 4 last month or so. First to identify and catalogue relevant  
 5 literature on the acquisition system, and other pertinent  
 6 enterprise system since Goldwater-Nichols. So we've gone back  
 7 20 years. We have reviewed, synopsised and prioritized the  
 8 documents for relevance to this particular project. And as I  
 9 will discuss in a little bit more detail, we've looked at 100s  
 10 of documents in the process.  
 11 Number 2, we have been looking at the significant  
 12 acquisition initiatives over that period of time, so we've  
 13 looked at the actions that have been taken and have worked to  
 14 assess the effectiveness of each of those initiatives towards  
 15 achieving the outcomes that were desired. And we have created a  
 16 comparative analysis of all of the different acquisition reforms  
 17 over the last 20 years.  
 18 And finally we're working to develop an integrated  
 19 historical point of view on acquisition reform and its success  
 20 subsequent to Goldwater-Nichols. So looking at what have the  
 21 critical gaps been in past initiatives, and developing a point  
 22 of view on what would need to be done in the future in order to  
 23 successfully reform the existing acquisition system. So what's  
 24 worked, what's missing, and therefore how should we be thinking  
 25 about it, us going forward.

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1 Just some principles for the approach we have been using.  
 2 First of all, obviously since we've been looking at the  
 3 literature over the last 20 years or so, and the reforms over  
 4 the last 20 years, we're very focused on learning the lessons of  
 5 history. As I've said, an enormous amount has been written  
 6 about this, there have been very many great minds that have been  
 7 applied to this problem. It's been looked at from an enormous  
 8 number of angles. And so I think on understanding of everything  
 9 that has been said about this, all of the ideas that have been  
 10 suggested whether or not they have been implemented is  
 11 essential. And so we have been able to provide the panel with  
 12 all of that insight.  
 13 We're using a systems thinking approach. And there have  
 14 been a number of conversations this morning about systems  
 15 engineering, and I want to make a little bit of a distinction  
 16 between systems engineering and the systems thinking approach  
 17 that we have been using. We're beginning to use a term what we  
 18 call systems dynamics.  
 19 Essentially what we're trying to do is to understand the  
 20 performance and the direction of the Defense system by looking  
 21 at all of the different players that are involved in the system,  
 22 whether it be the war fighter in the services, the primes and  
 23 the sub contractors, Congress, and the various budgeting  
 24 offices, to understand how all of those players act and interact  
 25 together. And how the actions of one might impact the decisions

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1 and actions of another. To understand the performance of that  
 2 total system. So we're looking at all of the players in the  
 3 Defense acquisition system and we're looking at their  
 4 interactions. And we're examining the constraints within the  
 5 system, and the things that DoD can change or influence from a  
 6 policy level to think about how all of this interaction works,  
 7 to produce the results that we see.  
 8 We've also been looking at the drivers of these different  
 9 behaviors, so what are behaviors that we see and observe. And  
 10 what's going on underneath the surface to drive those, to  
 11 influence those behaviors, and we're looking at the crucially  
 12 not just the processes that DoD uses in order acquire weapon  
 13 systems but also the underlying structures that exist. And the  
 14 governance that exists in the system because all of those things  
 15 have, we believe a significant impact on the outcomes.  
 16 Out of all of this we're working towards developing some  
 17 recommendations for the panel and principles of how they might  
 18 begin to think about redesign.  
 19 So I want to talk a little bit - I've structure this  
 20 discussion along those three main elements of our approach, so  
 21 first of all I'm going to talk a little bit about the relevant  
 22 literature. I mentioned that we looked about 750 acquisition  
 23 reform publications. In fact did do a search on Google, and to  
 24 constrain search to just looking at the .mil area of the  
 25 worldwide web, and you just look at PDF documents, so papers.

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1 And you say I want to look at acquisition reform, give me  
 2 anything that talks about acquisition reform. There's about  
 3 5,600 weapon systems come up. Five thousand, six hundred  
 4 documents that are out there that discuss acquisition reform so  
 5 we used a process to filter those down to about 750 publications  
 6 that's as of a couple of days ago. And so the first cut was to  
 7 1,500 then we got to 750 and screened through those to narrow it  
 8 down to about 255 highly relevant publications.  
 9 And the way that we did this was by reading them. So I've  
 10 had a lot of bedtime reading, and we've made all of those 255  
 11 documents available to the panel, on our website for them, so  
 12 they are able to consult them as well, and we have provided  
 13 summaries and synapses on varying levels of depths of the most  
 14 relevant papers we've produced quite detailed synapses of those  
 15 papers.  
 16 And then we weighted all of those papers by relevance on a  
 17 1 to 5 scale, and the most relevant which I think was 134  
 18 documents we used to produce what I would describe as a metro  
 19 analysis of the literature. So about 1,500 documents published  
 20 since 1986 government, academic, and third party sources were  
 21 examined in some detail. 750 of them found to be relevant to  
 22 this particular area of acquisition reform, 255 identified as  
 23 relevant to this study, and the key sources that we used  
 24 obviously DoD, well respected commentators such as Rand, the  
 25 papers from Defense Acquisition University, the GAO, Congress,

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1 so on and so forth.  
 2 And so some comments on that literature. Really since  
 3 Goldwater-Nichols, the literature has moved through three phases  
 4 of emphasis. And I'll show you a map a little bit later that  
 5 illustrates this. But essentially in the 1980s a lot of the  
 6 focus of the literature was on fraud, waste, and abuse in  
 7 response to the concerns that were dominant at the time. You  
 8 then see in the 1990s a move to increase efficiency, better,  
 9 faster, and cheaper. A lot of the move towards adopting  
 10 commercial practices.  
 11 The softening of the requirement of mil specs, so on and  
 12 so forth, and then beginning into the mid 1990s we see studies  
 13 that are focused on flexible response of acquisition for  
 14 systems. So we need to make this process more adaptive to the  
 15 many different kinds of weapons systems that we see, the rapidly  
 16 changing environment for the war fighter. And so you see the  
 17 adoption of things such as IPTs, and discussion of innovations.  
 18 In recent past we've seen less and less new ideas appearing in  
 19 the literature, and I'll say your chart illustrates this quite  
 20 well, and the offers of this literature seems to have shifted  
 21 from creating ideas, and suggesting ideas for what might be done  
 22 to reform the system, towards why aren't the reforms that are  
 23 being suggested working. And the focus is largely around  
 24 failures of implementation.  
 25 Taken as a whole what we see is that while there is

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1 general consensus on the problems, overall there's been little  
 2 done in the implementing successful solutions. So I talked a  
 3 little bit about the three areas of the literature. This  
 4 provides a little bit more detail, in the mid 1980s fraud, waste  
 5 and abuse was dominant. It focused on non-competitive pricing  
 6 and contractor waste. There has been some resurgence around  
 7 2000 on this topic due to some concerns about contractor  
 8 integrity violations. From about 1993 the better, faster,  
 9 cheaper being a theme emerges as dominant in the literature.  
 10 There's a focus on fundamental changes in the acquisition  
 11 process. So streamlining. Adopting commercial practices, and  
 12 buying commercial off the shelf technologies and components.  
 13 And from about 1997 to today, you see the literature focusing on  
 14 cycle specific recommendations around being responsive. So you  
 15 use of IPTs increasing use of simulation and CAIV costs and an  
 16 independent variable focus on understanding the cost of a  
 17 program through its entire operating life. So rather than just  
 18 focusing on production of acquisition costs, of those reduction  
 19 we're also focused on the consequent L&M cost for operating the  
 20 system.  
 21 This is just one of many charts you've seen today that are  
 22 essentially illegible. I didn't want to come up here without  
 23 offering at least one of my own. And in fact this is a zoom in  
 24 of a chart that is about four times larger than this, what you  
 25 see on the top axis is the years from 1985 through to 2005. And

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1 then along the vertical axis you see a list of here, I think  
 2 about 50 different reform themes. And the main body of the  
 3 chart shows the number of papers in each year that refer to each  
 4 theme.  
 5 And then you can then see, we circled particular areas, of  
 6 the chart which represent periods of time and themes of the  
 7 literature. And so this basically shows you a zoom in of one  
 8 part of the thematic analysis, and you can see here that in 1985  
 9 and 1986 there was a focus on centralizing acquisition. And in  
 10 the mid 90s we see an emphasis on streamlining acquisition  
 11 processes. So this basically allows us to map the thematic  
 12 analysis back to individual papers.  
 13 Another element of the meta-analysis that informed these  
 14 papers is to look at the incidences of ideas and whether they  
 15 have - whether they are new to the literature, or whether they  
 16 have appeared in previous papers. And so what you see in this  
 17 chart, is we've taken the last 25 years, in five year periods,  
 18 and the red bars represent new acquisition reform concepts and  
 19 the grey bars represent old acquisition reform concepts. What  
 20 you can see is that the papers of today, seem to be cribbing a  
 21 great deal from other papers, which I'm a little disappointed  
 22 in, essentially the body of new ideas has reduced greatly and I  
 23 think this is because, really there is perhaps a limited  
 24 universe of suggestions that one can make about how reform,  
 25 acquisition reform might be achieved. And so what we see is

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1 essentially, some recycling. And I think we're reaching the  
 2 outer limits at least under the current approach thinking about  
 3 acquisition reform of those ideas.  
 4 So this I think leads to a couple of things. The emphasis  
 5 that we see on implementation, the academic literature now says  
 6 well we had the right idea all along, it's just that it hasn't  
 7 been done properly. And that I think is a very plausible  
 8 argument. Another argument which I think one might make is that  
 9 when one looks at the literature, by and large I would say in  
 10 fact in 99.99 percent of the papers, that I've looked at,  
 11 they're looking at point solutions. And at - there's a  
 12 particular emphasis for example on the elements of DoD that the  
 13 - the elements that DoD has control over.  
 14 The areas where executive decision can make a difference,  
 15 and there's a particular emphasis I think on policy and process.  
 16 Perhaps the answer is that we think more widely than that. One  
 17 other piece of meta-analysis when we look here at again over the  
 18 last 25 years, this is the emphasis of the literature, on  
 19 governance, process and structure. And what you see is that  
 20 articles on process outweigh articles on either governance, or  
 21 in both governance and structure pretty consistently by a ratio  
 22 of about 2 to 1.  
 23 So everyone is concerned with understanding the  
 24 acquisition process and how that might be improved. Step 2, we  
 25 identified and described significant acquisition initiatives

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1 undertaken since Goldwater-Nichols. This is a review of the  
 2 major commission and their findings since 1949. And you can see  
 3 that there have been many, and I think the right hand column  
 4 speaks for itself. Centralized DoD acquisitions, centralize,  
 5 centralize, centralize. Decentralize. Centralize, centralize,  
 6 decentralize, centralize, streamline, centralize.  
 7 What we do know about these is that they are revisiting  
 8 the program executive office structures, so I think it is very  
 9 possible we will see a very different kind of recommendation  
 10 coming out of the CSIS study.  
 11 We did a thematic analysis of the different initiatives,  
 12 I'm just going to show you an example of the goal here, was  
 13 really to understand the concept of each of these initiatives,  
 14 and so what they were trying to achieve, the particular  
 15 initiatives that formed a part of that movement. The enabling  
 16 conditions for success, what it would take in order for in our  
 17 opinion and in the opinion of the literature for these reformed  
 18 to be successful. And then the tradeoffs that are implicit in  
 19 these initiatives.  
 20 So fixing one thing, what one tends to see in the system  
 21 is fixing one thing will sometimes have repercussions on other  
 22 parts of the system. And so we're beginning to try and  
 23 understand what those tradeoffs are, as you change one area of  
 24 the system what are the impacts in other areas?  
 25 Another I chart, this is a comparison, of the selected

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1 reform initiatives. In this case from 1995 and we performed  
 2 this, while in the process of performing this from 1985 and so  
 3 you see on the horizontal axis, time. And the particular  
 4 initiatives - the key initiatives that have been undertaken, and  
 5 then on the vertical axis, you see the study areas that the NAPA  
 6 panel has determined they're going to use to organize their  
 7 work.  
 8 So what we've done here, is we looked at first about 100  
 9 initiatives over the last 20 years, for reform we took 28 that  
 10 we believed were the most significant, based on a panel review.  
 11 We then mapped those in terms of how they impacted the different  
 12 study areas. The DAPA panel has devised and in particular we  
 13 looked at to what extent were they implemented and to what  
 14 extent were they successful in meeting their goals. So that's  
 15 what this chart does. The third element of our approach was to  
 16 develop an integrated historical point of view on acquisition  
 17 reform. Success since Goldwater Nichols to identify critical  
 18 gaps in past initiatives and to begin to look at the point of  
 19 view on what the panel, to help the panel think a little,  
 20 structure some of their thoughts and make some suggestions on  
 21 some of the areas of reform.  
 22 And as I mentioned, we've been using a methodology we call  
 23 system dynamics to do this. This pyramid on the left hand side  
 24 I like to think of as the iceberg of events. That is to day the  
 25 top of the pyramid, the red portion is the portion of the

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1 iceberg that you see above the water.  
 2 You see variables, you see events, you see symptoms of  
 3 things going on. So let me give you an example. You may  
 4 observe a reduction in a company's revenues. And there's a  
 5 question about what happens, you may see that irrelevant  
 6 programs continue to be funded long after they should be  
 7 terminated, and main programs exceed initial cost baselines by  
 8 about 50 percent. So the question is, why is that going on.  
 9 You need to look underneath the surface of the iceberg to begin  
 10 to understand what is causing the system to produce those  
 11 outcomes. So underneath that you see patterns of behavior  
 12 Patterns of behavior are essentially, variables. How variables  
 13 change over time. So for example, prices may continually  
 14 increase, time lines may continually lengthen in the case of  
 15 acquisition - weapons acquisition, advocacies may cancel any  
 16 program difficulty and they may increase the costs of the  
 17 programs over time. And industry's must win mentality drives  
 18 excessive optimism throughout the system.  
 19 Typically, those patterns of behavior are driven by  
 20 structural elements of the system. And the underlying  
 21 structures influence and create incentives for people to behave,  
 22 and organizations to behave in particular ways. And the  
 23 behaviors in those particular organizations, and interactions  
 24 between them cause symptoms said to observe about the water on  
 25 the top of the iceberg.

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1 And some of those structures for example might be  
 2 competing, and inconsistent priorities for funding amongst  
 3 participants, and the lack disincentives, or incentives for  
 4 decision making towards common goals. So it might be that the  
 5 incentive systems that exist across this system are not driving  
 6 everybody towards the desired outcome.  
 7 So the goal of understanding and studying those, is to  
 8 make explicit those structures, and to understand their overall  
 9 impact on the system. And so I'm going to close with an  
 10 illustration. In the context of acquisition on the top in the  
 11 blue box as you see structures are behaviors, patterns are  
 12 behaviors, and symptoms. In the context of acquisition,  
 13 structures, and behaviors are the acquisition structure of the  
 14 processes and it's governance and the patterns of behavior are  
 15 the behavior of the key system participants. And the events and  
 16 systems are the outcomes. The performance of the programs,  
 17 their success if meeting the war fighters needs. The timeliness  
 18 with which they're delivered. And the cost of those programs.  
 19 And along the bottom, I've taken an example of the C-17 and this  
 20 is purely meant to be illustrative and I know that one of our  
 21 panel members has great experience with this program, so I will  
 22 welcome any commentary or corrections to the this you may have.  
 23 But I wanted to select an example that would be familiar.  
 24 Let's start over on the right hand side, with what we observed.  
 25 The C-17 program plans were significantly over budget. The

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1 program cost of the first 40 aircraft was really estimated to be  
 2 in excess of \$500 million dollars each. And the program took a  
 3 lot longer to deliver than had originally been planned. I  
 4 should say that a concerted drive by DoD was successful in  
 5 making the flyway costs of incremental aircraft, about \$172  
 6 million I believe, so they were successful in remedying some of  
 7 the problems here. But I think it is still a good and  
 8 instructive example.  
 9 So the patterns of behavior we saw, the prime time factor  
 10 of McDonnell Douglas was consistently behind schedule and over  
 11 budget. And Congress significantly cut production volume which  
 12 drove a significant wedge between the contractor and DoD. So  
 13 the relationship at times, as I understand on the program was  
 14 difficult.  
 15 The structures of behavior, the competitive dynamics and  
 16 DoD advocacies, resulted in an inflexible fixed price  
 17 development contract with McDonnell Douglas, and Congressional  
 18 interest stretched out the funding, which created a four year  
 19 cap between program award and the optimum funding rate and the  
 20 cancellation of the A-12 program caused significant difficulties  
 21 for McDonnell Douglas, from a financial point of view, putting  
 22 strain on other areas of the company, and on this program. Now,  
 23 I think that I'm hoping that you can see the link between  
 24 structure, pattern and events and symptoms. I'm obviously  
 25 implying there's a strong link there, and a number of things you

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1 see on the left hand side led to the symptoms you see on the  
 2 right hand side. I think what begins to get particularly  
 3 interesting when you think about this, is that there are feed  
 4 back effects in here and so the impact of the cancellation of  
 5 the A-12 program effected the C-17 program. What would have  
 6 happened, if as a result of this the C-17 program was cut, what  
 7 would the impact on the system have been? What would have  
 8 happened to other programs. Because of the - in part because of  
 9 those cost overruns, there were significant cuts in volume and  
 10 that had impact on the system and on the outcomes. And so what  
 11 we need to think about is not just the stove pipes of an  
 12 individual program, or individual members of the system. But  
 13 what is happening across the entire system, across programs and  
 14 across all of the participants.  
 15 Mr. Patterson: I have just one comment. I'm sorry, I  
 16 have one comment into the microphone. There is clearly a  
 17 thematic connection. But something that is missing here and  
 18 that ties it all together even more concretely, is the element  
 19 of time. This program was the CX program in 1981, 1982 it  
 20 became the C-17 program. It met with Congressional excitement  
 21 In the spring of 1982 and for reasons not always clear, was put  
 22 into a low level of research and development which called all of  
 23 the standing army that was accumulated to do the C-17 program to  
 24 be dispersed and put into other programs. And then in 1985 when  
 25 you got a rejuvenation of the program and started to cut metal,

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1 then you went back to try to bring all of these people back.  
 2 They were in Douglas doing commercial work, because then you had  
 3 this spike in the commercial industry as soon as this spike came  
 4 down, in 1987 to 1990, all of those people in Douglas which had  
 5 seniority, moved into the C-17 program, and you were at the  
 6 bottom of the learning curve, and starting all over again.  
 7 So that when you had T-1 coming out in 1991, it was I - I  
 8 guess it would be fair to say, if you're a biology major it was  
 9 clouged together. If you're in engineering, I guess it was a  
 10 lot of out of position work. It is important to run the time  
 11 line so that you see what happened at each case. And there were  
 12 things that happened, like taking \$300 million dollars out of  
 13 the CAD-CAM program, so that now you no longer can put rather  
 14 sophisticated at the time IT into this, and you have a paper  
 15 process to do design. I just offer that as an addition.  
 16 Mr. Kozlowski: I gathered Dave has an interest in this  
 17 program too. I had in an interest in the A-12 program as well  
 18 as the C-17. This really did not have a material impact on the  
 19 C-17. I don't want to get into the specific case, but the point  
 20 is, if you want to take a case and show the complexities of  
 21 government industrial relations and program evolution, and all  
 22 those other things, I'd be glad to do that. Because there are  
 23 public perceptions that don't apply, there are some that do  
 24 apply. And there are some behind the scene things. But I would  
 25 be glad to discuss it. If you're willing to.



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<p>1 Mr. Griffin: I appreciate that. And I certainly am glad 2 that you're willing to see the water point, and not just the 3 arrows in the analysis.</p> <p>4 Mr. Kadish: I would like to open it up to questions at 5 this point. While I'm waiting for others - I'm sorry go ahead.</p> <p>6 Mr. Kern: On the literature search you did, and the 7 numbers I assume that you weighted them all equally, so that one 8 reform versus another, had the same impact, is that fair?</p> <p>9 Mr. Griffin: Yes it is. In one part of the analysis 10 which was the analysis of the new versus, old topics. We did 11 weight papers differently according to the amount of - the 12 recommendations they had in different areas. But otherwise 13 you're correct.</p> <p>14 Mr. Kern: The second question I have. I know of very few 15 books that have actually been written on defense management. 16 Very few historical studies that have said okay, you have all 17 these reforms, but management decisions were made or not made 18 what happened to them? I don't know of any, did you find any?</p> <p>19 Mr. Griffin: There are a few books and I would be happy 20 to share some titles that we found with you.</p> <p>21 Mr. Kern: I guess one of the points I would make though 22 is if you found more we would like to know. But it seems to me 23 there's been an paucity written about how to manage defense, 24 versus how to manage other business. And there's hundreds and 25 hundreds of fascinating books that make top best seller lists,</p>	<p>1 on reform given the structure. So maybe we could talk about 2 that, do you have any thoughts on that in terms of the 3 literature search, in connection with the structure for 4 acquisition reform?</p> <p>5 Mr. Griffin: Well other than to say that I think it is an 6 excellent observation and that clearly the structure of the 7 industry and to some extent industrial policy have a significant 8 outcome you would expect them to have a very significant outcome 9 on the results of the system. And that clearly the themes you 10 see in the literature and the emphasis of various commissions, 11 the topics we're dealing with are going to be somewhat 12 influenced by the providing the structure of the industry at the 13 time. So I think it would be a very interesting study to do.</p> <p>14 Mr. Kadish: On just the issue of being familiar with some 15 of those commission recommendations, and the idea of competition 16 and demand for competition and benefits. It seems to me that 17 the structural changes in industry and the competition wouldn't 18 necessarily be a new idea. It could be an old idea, but it 19 would certainly be very different today, from many years ago.</p> <p>20 Mr. Griffin: Yes. And I think the ability to promote 21 competition within the system is obviously becoming, I would 22 suggest, more constrained as the industry becomes more 23 concentrated, and clearly we need to understand the impact that 24 the much more concentrated industrial base has on our ability to 25 promote competition. And on other key variables.</p>
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<p>1 and none made for Defense. I would also like to know if your 2 literature search - did anybody do any thesis studies or MBAs or 3 Ph.Ds, at Harvard, Wharton, Stanford?</p> <p>4 Mr. Griffin: We certainly found thesis studies, but I'm 5 not aware that we found any from any of the leading business 6 schools. I think that is an excellent point. So we didn't find 7 any from the leading business schools in our search. But I 8 think that is something that would be worthwhile going and 9 taking a closer look at, so I'll make a note and we'll see if we 10 can find anything in that area.</p> <p>11 On the search for best sellers, I didn't find anything 12 that was at the top of the New York Times list. But there were 13 some books that we did find and as I say, I would be happy to 14 share the list with you, and make that available to the public 15 as well.</p> <p>16 Mr. Kadish: I was struck by the chart on the previous 17 commissions and the rendition you gave of the advice. I would 18 suggest maybe we can talk about this later. I think it would be 19 helpful to us to have aligned with that part as well as the rest 20 of your study a look at the structure of the defense industry 21 during those time periods. As an example the Packard Commission 22 if I recall certainly assessed 30-40, 50 major defense companies 23 in business at that time. And today for instance you have a lot 24 less than that, certainly primes. And see if there's any 25 analytical connection based upon your literature search to ideas</p>	<p>1 Mr. Kozlowski: Let me comment, relative to the issue of 2 competition. I think a lot of us worry about the consolidation 3 within industry. However there are many ways to put the 4 competition in the marketplace on industry. Competitive 5 pressure, not just ahead to head runoff, but the normal kind of 6 thing, there are a lot of things where an industry focuses, so 7 you can get their attention in a number of ways. And we will 8 probably elaborate on that as we go along in these 9 deliberations.</p> <p>10 The other thing in your chart, where you go back and sort 11 of summarize, I haven't read them all, but I'm trying to get a 12 link. What I find is an amazing degree of consistency. As 13 opposed to dichotomies. They wanted a procurement czar, they 14 got one. They want to decentralize the execution, and that's 15 available. How well we are doing it, that maybe another matter.</p> <p>16 But over the years, in all of these reports and whatnot, I 17 found an amazing amount of consistency in what's recommended 18 The observations. We call them different things, just as in 19 this chart back here, in my day, I got educated on Moscow I and 20 II, and now they're A and B. And you just go on and on, and on.</p> <p>21 But the more we try to change, the more we stay the same.</p> <p>22 There's a lot of generalities behind that statement. But 23 there is a tremendous amount of consistency in the reform. And 24 you have to ask yourself, why aren't we getting better results. 25 That leads me to one fundamental question, I'm not sure the</p>

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1 system is all that broken, as a lot of people think it is.  
 2 Particularly when you've got the challenge of trying to run  
 3 contingencies against a undetermined threat that's well  
 4 specified in the documents yesterday. And it's the wrong place,  
 5 or wrong time. That's a hell of a problem for DoD to face.  
 6 You've got to be prepared for a whole variety of contingencies.  
 7 Which simply means there is no explicit close form solution in  
 8 this business. But I'm not sure the system is always as bad as  
 9 people think it is.  
 10 Mr. Griffin: We shouldn't forget that United States has  
 11 the world's best army. And war fighters. I don't wish to  
 12 exclude the other services in that remark. That they're  
 13 equipped with the most technologically advanced, sophisticated,  
 14 and powerful weapon systems that exist in the world today. And  
 15 that therefore the final outcome of all of this system is its  
 16 success.  
 17 So I think the hypothesis that you're putting forward, I  
 18 think I would suggest two hypotheses. One of which is that  
 19 there is an implementation issue. And the second one is that  
 20 there's a systems issue that we need to think more broadly  
 21 across the entirety of the system. The good on is that no, it  
 22 isn't actually broken.  
 23 Mr. Kadish: Could I suggest a fourth one, you've got the  
 24 wrong metrics. In terms of measuring success in the sense, it's  
 25 not that for instance. That cost isn't important. That

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1 certainly isn't the case. But in certain instances we want  
 2 performance at any cost, because it's so revolutionary. We have  
 3 different oversight mechanisms and all those sorts of things but  
 4 rather than belabor that, I would just add the fourth. That  
 5 maybe we need additional metrics to set our expectations by.  
 6 Mr. Griffin: The only thing I would add to that, is  
 7 whether or not one believes it's broken. I strongly believe  
 8 there's room for improvement. And whether we want to call it  
 9 fixing the system, or improving the system, I believe there's  
 10 great scope and we should be striving to do a better job for our  
 11 war fighters. And that's something we should never cease to do.  
 12 Mr. Hawley: As I read through your product, I didn't see  
 13 much reference to past studies. The planning and the  
 14 programming front end of the acquisition process. Which of  
 15 course really sets the conditions for success or failure, within  
 16 the acquisition. Was there much discussion of that anywhere,  
 17 did you find that? Or is that kind of a gap?  
 18 Mr. Griffin: I think there is a good deal of discussion  
 19 about it. There's obviously been the move towards jointness in  
 20 meeting capabilities, requirements. The move towards a  
 21 capability model, and move towards jointness in the requirements  
 22 definition. Big changes in the last 20, 25 years. There's not  
 23 an enormous amount of discussion of ways in which the front end  
 24 is broken. Does that answer your question?  
 25 Mr. Hawley: So you confirm, there's not much there?

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1 Mr. Griffin: There's not a huge amount I think on it  
 2 being broken. There's quite a lot of discussion of the changes  
 3 that take place. I think there's some sense that Mr. Patterson  
 4 referred to the issue of time and I think it is interesting to  
 5 look at how that front end reacts over time as the programs get  
 6 pushed out, but there's not a huge discussion. Thank you very  
 7 much.  
 8 Mr. Kadish: I think at this point Dave, we have some  
 9 comments and questions that we would like to go over just to  
 10 make sure we recognize them.  
 11 One I think we can answer - is that you have in mind?  
 12 Mr. Patterson: Yes it is. I thought that those comments  
 13 that came forward - I mean we certainly can discuss them, and  
 14 some of them are answered within what we're about to undertake  
 15 here.  
 16 Mr. Kadish: What I intend to do is just basically read as  
 17 best I can, the submission and then we can either comment  
 18 presently or differ it to another answer in the formal process.  
 19 Or put it in the hopper to think about. One comment here says  
 20 with \$300 billion dollar claim in cost growth, five major  
 21 programs account for over \$240 billion in overruns. That means  
 22 the other 75 programs only accounted for \$60 billion in  
 23 overruns. That's a big number to me. This amount of overrun  
 24 does not seem that significant and probably suggests some degree  
 25 of success. Are we forgetting, although we acknowledge some

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1 success in the current acquisition process. Any comments?  
 2 Mr. Cappuccio: I think I tend to agree, the system is not  
 3 as broke as some say, in the sense that if the metric used is  
 4 overruns, costs, schedules, the question gets to managing  
 5 expectations. Was it a reasonable expectation to believe the  
 6 vehicle, or systems should cost that much. Was there a  
 7 reasonable expectation for the schedule, or were there what we  
 8 call in the industry, do we manage by hope. Well I hope I can  
 9 make it with that money, in that time. I think that a few  
 10 programs, versus the many are in the overrun mode. Is because  
 11 you have a distribution of personalities program management  
 12 personalities within the government and industry. Some like to  
 13 manage by hope. Some like to manage by hard ass facts. And  
 14 think that's why - I don't think the system is as generically  
 15 broken. But I think you have to take a look at our major  
 16 programs, they high visibility. Are we kidding ourselves as to  
 17 what the hell it's going to cost. I just came over from JSX,  
 18 and will tell you the most probable cost, and what we were put  
 19 under contract for said you had a problem on day one, day one.  
 20 So now is the problem as simple as acquisition? No. I think or  
 21 the smaller programs, most probably cost, and big cost. I think  
 22 on these smaller programs you understand the risks a little  
 23 better. On the larger programs you have somebody - let's take  
 24 JSF, 32 million fines of software. Can anybody truly say they  
 25 understand, or assess the systems integration risk. Not the

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1 technology risk, but the system integration risk.  
 2 So I think that the comment is true in the sense that it's  
 3 not all broken, but you know we're creating our own problems by  
 4 creating the expectations of delivering stuff to target numbers  
 5 that are maybe not right. I think it gets back to what Holly  
 6 was saying, are we planning? Do we have good pre-acquisition  
 7 strategies? And are we planning to those strategies  
 8 or are we planning to a budget? If we know we have a problem,  
 9 because we know we don't want to sacrifice that money, the  
 10 difference between most probable costs, and big ones?  
 11 Mr. Kadish: Is that a fault of the cost estimating  
 12 system?  
 13 Mr. Cappuccio: I don't believe so. I think if you go to  
 14 the guys. The K guys. You go to K and they'll tell you how  
 15 you're kidding yourself, you're smoking. The problem I have  
 16 with the K people in general is that they base it on historical  
 17 stuff, and historical stuff has ever overrun we've had in the  
 18 world. And that's valid, but I remember on JSF at the very  
 19 early stages, the program they were pricing in the GPS system, a  
 20 black box GPS system, that was \$70,000. So I sent down with -  
 21 at the time. And I took out a GPS system for \$300 bucks. So  
 22 there are various issues that you can look at. But I think  
 23 fundamentally the government has a glimpse of what the realistic  
 24 costs are. The only mistake I can see with making up both sides  
 25 of the ledger, is the systems integration piece, as the lines of

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1 software grow. We have no metric - we don't even have a term  
 2 called integrative systems. We have a technology risk for an  
 3 engine, we have a technology risk for a piece of software, we  
 4 have nothing that says how am I going to get that software, that  
 5 engine, that vehicle working together in a lab.  
 6 We don't even measure it. And the first clue should be if  
 7 you track, and I actually looked back. I tracked the overruns  
 8 on major programs. The amount of lines of software, it ain't  
 9 the coding of the software that's the problem. It's the  
 10 integration. We don't measure it, and so we get surprised.  
 11 Mr. Kadish: Any other comments? I can assure you that  
 12 this may be not - may not be stated quite as well as this, but  
 13 we'll look at it. It will be a part of the study. I have two  
 14 other activities, and by the way we'll come back to this if  
 15 anybody in the audience wants to comment on this.  
 16 I have two other questions that have to do with what Dave  
 17 briefed earlier and so we'll just pass those on. Nearly every  
 18 previous attempt to improve defense acquisition has punted. On  
 19 the aspects effecting cost schedule and performance, stable  
 20 requirements, stable funding, will this assessment address these  
 21 two critically important areas? And if so, how?  
 22 Yes. I mean I have to say in response to that, I've done  
 23 a lot of program reviews over the last 20 years, many on this  
 24 panel have, and if it's done by a Program Manager, the top of  
 25 the list of the issues is program funding stability. Usually we

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1 tell them to get over it. And it's a very emotion issue in  
 2 terms of your point of view. And we will address this issue in  
 3 context as a first activity. Does anybody have any comment?  
 4 VOICE: I think because industry doesn't understand the  
 5 rules, every time I brief a CEO, a defense contractor, there's  
 6 rules and the rules have been in place for 30 years. And every  
 7 program director, and every contractor ignores the rules. If  
 8 you know the rules, you design within those rules, you're  
 9 expenditures in all of that you're not losing a damn penny.  
 10 Last year, no programmers caught those executed on cost and  
 11 schedule. The point is, we realign the programs as we go along.  
 12 And what the contractor bids in most of the time they're not  
 13 touched anywhere. But when you don't take that into account,  
 14 and don't do it every program - I've done the history of studies  
 15 for the last 20 years. And that is what you will find. And  
 16 everybody looks at cost growth. The cost growth is based upon  
 17 the SAR not the estimate and that's been very important, because  
 18 it has nothing to do. The program is fully funded when it makes  
 19 a decision. As soon as it's base lined all the money disappears  
 20 beyond what the contractor costs and other government costs.  
 21 And then when you go to the original estimate, it's all called  
 22 cost growth, and all new requirements added in to consider cost  
 23 growth. Not the core programs. You're always measuring apples  
 24 and oranges. I'm sorry.  
 25 Mr. Kadish: No, I would ask do we get those studies?

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1 VOICE: We do have the cost growth stuff.  
 2 Mr. Kern: Ron, can I go back to the requirements?  
 3 There's two pieces of that. One we often write requirements  
 4 that are not achievable today. We hope we're going to get to it  
 5 in the time schedule, that's one aspect of it. But I think more  
 6 importantly, go back and look at the basic guidelines that we're  
 7 working against right now. We're working against a threat that  
 8 doesn't work against rules. So they're very agile in changing  
 9 their requirements to build systems. And we have to figure out  
 10 how to respond to that. The Soviets were very predictable.  
 11 We've just got to get over that.  
 12 Mr. Kadish: Okay. Next is more of a comment. The  
 13 acquisition states schematic out of the 5000 series documents  
 14 shows technology insertion and requirements insertion of  
 15 milestone C. The beginning of production introducing new  
 16 technology and new requirements at the beginning of production  
 17 has great potential for introducing instability into the  
 18 program. We recommend the panel take a hard look at limiting  
 19 the introduction of new technologies and requirements as to the  
 20 and only those technologies and requirements for the system  
 21 being produced. We will take that on, in terms of something to  
 22 look at.  
 23 Okay. The next one, why can't government contracts be  
 24 negotiated. Negotiated, contracted, operated under the same  
 25 legal requirements as U.S. Commercial company. For example we

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<p>1 need University to teach people how to operate under the defense  2 acquisition guidelines. That would put you out of business.  3 What percent? And so is there any comment on that? Frank?  4 Mr. Anderson: The biggest reason is because Congress  5 creates a separate set of statutory requirements that is beyond  6 the normal commercial business practice. And those are  7 mandatory requirements of those suppliers and buyers have to  8 comply with.  9 Mr. Kadish: Can you give an example?  10 Mr. Anderson: Well one of the biggest examples, there's  11 social economic requirements.  12 Mr. Cappuccio: Small business advantages.  13 Mr. Anderson: Truth in negotiation. I could go on  14 forever.  15 Mr. Kadish: We will make sure that this question gets in  16 the system.  17 Voice: There are Universities that teach contracting.  18 Mr. Kadish: What percentage of DoD contracts, that are on  19 time and within the original budget, versus private industry.  20 Who is held responsible for this. Any comment?  21 Mr. Kozlowski: I don't know how many programs come in on  22 target, and as my colleague here just stated, a lot of times the  23 reported statistics, are cost overrun or whatever are no longer  24 based on the same program. It changes. And that's one of the  25 things about metrics and whatnot, we need to go back and</p>	<p>1 comment on acquisition work for us. And I think I'll just leave  2 it. Does anybody else have a written comment, that hasn't made  3 it up here yet? Yes sir?  4 VOICE: I don't have a written comment, I wanted to  5 mention your request for a book. You might want to use Jim  6 Stevensons A-12 review, which is text at the Georgetown Law  7 School, which is probably one of the most current ones. And  8 it's pretty comprehensive. I want to just make a point that if  9 you look at the QDR right now, and the four focus points, you're  10 realizing that what we're talking about is an evolutionary  11 change. And you realize that an evolutionary activity, all of  12 that experience you're bringing from the wealth up behind. It  13 doesn't look that broke in a sense. Things can be smooth, but  14 there's a lot of people who believe right now, with the corporal  15 War on Terror, we are in a process of a revolution, in the way  16 of the conduct of Warfare, there for in a revolutionary change.  17 A lot of this beautiful evolutionary experience, might  18 become fatal baggage. And therefore I suggest to the panel.  19 Don't lose your native wit. Because in that collection of  20 people right there, you're already starting to sense it popeye  21 deals with very quickly. That may have to be absolutely out of  22 the box, in fact, no box. Things may be so beyond what we  23 really think that we may suddenly find ourselves really, without  24 a cart here. So that's just my two cents, and I thank you for  25 your efforts.</p>
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<p>1 calibrate, and track ourselves against the original scope. The  2 original target and that make take legislation to get that done,  3 but I think that is fundamental.  4 The other thing I want to point out. As bad as you may  5 think that DoD is, or how good you may think it is. Commercial  6 programs are generally speaking - whether you talk about a  7 highway, a bridge, a building, and even in some respects take  8 systems like commercial aircraft. And that sort of stuff, and  9 it's true on the low side. I came off of one small company, a  10 very short stint. But the initial estimates on performance and  11 costs of a little four or six place business jet kind of thing.  12 That company went bankrupt, for a whole variety of reasons.  13 Cost growth, et cetera, et cetera. So as taxpayers we need to  14 put a lot of this stuff in context. I'm not excusing cost  15 growth, I think systems cost too much and I think we can do  16 something about it. I think they take too long, that's part of  17 the problem. We can do something about that. We could use  18 streamlining, we've been trying it since 1948 we need to more,  19 et cetera, et cetera, et cetera.  20 I think there is great potential, it ain't all that bad.  21 Mr. Kadish: Anybody else? Why in many cases does  22 government have more people managing the contract, than the  23 contractors have managing the interface? There's an answer to  24 that that is multi-faceted, and we'll have to take it on. And  25 maybe the answer is not acceptable to us. Here's another</p>	<p>1 Mr. Kadish: The comment is well taken.  2 Mr. Cappuccio: Part of the criticism I hear, is the flip  3 side of your coin. Are we procuring the right things for the  4 future. And if you ask people, you have a hard time getting  5 people, or a person, any person that says the to be state for  6 long range strike, is this, or that. The issue isn't so much  7 are we buying the right things to protect this country in the  8 future. And if we're not, we say it - the question is where  9 does the money come. How do you cut the programs? And all the  10 aggravation comes from people are going to be hurt if we stop  11 what's going on, you see it now. The fundamental question is  12 having said that, how do you buy what's needed, faster, quicker  13 and better. You have to respond - it gets back to what Paul  14 said, you can say I need new devices, here and here. But if I  15 want to solve the IED problem you can't throw it at this  16 acquisition system. You have to think about how to get more  17 efficient. But the more fundamental question is are we buying  18 the right things. Is somebody really addressing that. That's a  19 tough question, and that's where a lot of uncertainty within the  20 DoD community, and how we're being viewed is looked at. The  21 acquisition problem I'm not sure most people are really attuned  22 with.  23 VOICE: What you're saying is you're always buying the  24 best, therefore your requirements are never achievable and your  25 costs are never attainable. And therefore I think Dave might</p>

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<p>1 answer that, because he's not your charter trying to package  2 this down. The point is, if you're going to contain costs,  3 you're going to contain schedules. That means you're going to  4 have to add incremental things that do the job for that moment.  5 And then find a way to pick up spiraling. I'm going to pass  6 that to Dave for his understanding. But I think you're totally  7 right. And the legislation now, that brings up the emergency  8 procedure activity which we're doing is probably a good go for  9 IEDs but it's not going to be a good go for JSF, or the next  10 spaceship. That's just a comment.</p> <p>11 Mr. Patterson: Along with that point, I would refer you  12 back to the principles that are guiding this panel, in that we  13 do take that on as an attempt to identify those things that  14 increase our agility, keep pace with changing in an uncertain  15 world. And shorten the cycle times as hedge against the prize.</p> <p>16 I also think, that we have to also - and we mentioned it  17 earlier. You do have to get away from this notion that we're  18 always buying. Today, any generation better than what we're  19 buying today. And that may require us as you say not being  20 bound by any particular rocks. But it is something this panel  21 holds as a principle, it's also integrated with what - where I  22 believe the U.S. DATNL is going today as a principle. And so  23 you can count on us addressing that in this panel.</p> <p>24 VOICE: Are you addressing David, how to kill a program?  25 I went through a study where we recommended to kill six</p>	<p>1 today. We have an awful lot of work to do. We've been charged  2 with very comprehensive look, and we intend to carry out these  3 responsibilities. And on behalf of Secretary Inmand we hope to  4 see you all again in the future. This meeting is adjourned.  5 [Whereupon the meeting adjourned at 11:55 a.m.]  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25</p>
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<p>1 programs and they were all back.</p> <p>2 Mr. Kadish: Let me take that on.</p> <p>3 VOICE: But I think somebody has to address that some way.  4 The thing is you have too many programs chasing too few dollars.</p> <p>5 Mr. Kadish: I'll just make one comment on that particular  6 issue. The issue on whether or not you can kill a program is a  7 behavioral issue, and not a process issue. In that, no process  8 is going to say, go stop this without the decision maker  9 standing up and saying that's what we want to do. And we need  10 to discuss this, and we will. In the discipline, and I think  11 we've proposed to look at behavior that might give us some view  12 there. But the fact of the matter is, that a Program Manager is  13 hired to get the job done. If somebody tells him to stop, the  14 Program Manager will. On the other hand, there's a whole host  15 of advocacies. So I think it is important we take that issue on.  16 But it has to be stated as a behavior issue, and not a process  17 issue.</p> <p>18 I think we're coming to the cost of the period that we set  19 aside for the open session. I would ask each of the  20 participants, because we will be deliberating in this panel, how  21 do we improve these sessions and get broader participation. If  22 you have any ideas along those lines, please let us know, either  23 through the public website. Or fill out on of these activities  24 before you leave. And certainly you can contact the staff here  25 to provide input. I would like to thank everybody for coming</p>	

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