Stenographic Transcript Before the

Subcommittee on Readiness and Management Support

> COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

HEARING TO RECEIVE TESTIMONY ON REFORM OF THE DEFENSE ACQUISITION SYSTEM IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2016 AND THE FUTURE YEARS DEFENSE PROGRAM

Wednesday, April 22, 2015

Washington, D.C.

ALDERSON REPORTING COMPANY 1155 CONNECTICUT AVE NW SUITE 200 WASHINGTON, D.C. 20036 (202) 289-2260

HEARING TO RECEIVE TESTIMONY ON 1 2 REFORM OF THE DEFENSE ACQUISITION SYSTEM 3 IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2016 4 5 AND THE FUTURE YEARS DEFENSE PROGRAM 6 Wednesday, April 22, 2015 7 8 9 U.S. Senate 10 Subcommittee on Readiness and 11 Management Support 12 Committee on Armed Services 13 Washington, D.C. 14 The subcommittee met, pursuant to notice, at 2:39 p.m. 15 in Room SR-232A, Russell Senate Office Building, Hon. Kelly 16 17 Ayotte, chairman of the subcommittee, presiding. 18 Committee Members Present: Senators Ayotte 19 [presiding], Ernst, Kaine, and Heinrich. 20 21 22 23 24 25

OPENING STATEMENT OF HON. TIM KAINE, U.S. SENATOR FROM
 VIRGINIA

3 Senator Kaine [presiding]: If I can get everyone's 4 attention. We are in the middle of six votes. We just cast 5 vote two. I am going to go ahead and get the hearing 6 started. Senator Ayotte and I will ping pong a little bit, 7 as will committee members. But if I could have the 8 witnesses take their seats and bring you all in, the meeting 9 of our subcommittee is now called to order.

10 This is a SASC Readiness Subcommittee meeting on the 11 very important topic of defense acquisition system reforms. 12 It is a matter that is deeply important to all committee 13 members. I know that the chairman of the committee, Senator 14 McCain, has a keen interest in this, and you will see us 15 taking it up not only in Readiness but in the larger 16 committee.

And I am very honored to work with Senator Ayotte together on the Armed Services Committee and this particular subcommittee.

You are the key executives, service acquisition executives, who say grace and have control over this very, very important part of what we do. I certainly know from close family and friends in the military how much they rely upon the acquisitions that you make to help them perform their missions. And so this is about a process of

1 understanding reforms that are already underway. We do not 2 need to do things that get in the way or cut across efforts 3 that the service and DOD are already working on.

4 But we do know that there are a number of challenges in 5 the management of acquisition programs. How do you develop 6 the most technologically advanced solutions to some of our challenges, complex weapons systems, under both the 7 8 constraints of budget with sequester and other budget constraints and also with a diminishing defense industrial 9 base? Consolidations and other activities in the broader 10 11 economy are shrinking that base.

How do we balance risks? We want to try to promote flexibility and speed but also try to balance some of the financial risks that can come with flexibility and speed, and what is the right balance there?

16 What is the right level of oversight either by the 17 SecDef's office of the service branches or by Congress over 18 the services themselves? Appropriate oversight is needed. 19 Excess oversight slows us down and impedes our

20 effectiveness.

And then a huge issue that I feel -- and I talk to my own people about in northern Virginia and elsewhere. What is the right way to make sure we have the best acquisition workforce within the DOD? This is a huge issue. I as Governor once faced a challenge of taking a massive

1 organization, our State's department of transportation, that had been built up to be basically project providers and 2 3 project managers, but over time the industry changed and 4 what they really needed to be was contract managers for 5 outside organizations doing a lot of the work. And the 6 skill set is not exactly the same. You have got to have the right skill set to manage acquisition programs, and that is 7 8 also complicated by furloughs and sequesters and some of the 9 budgetary constraints we are under.

So you are grappling with all of those things, and we want to hear about them.

12 As I said, Chairman McCain has repeatedly made plain that he knows that we can improve acquisition programs and 13 we have to do it. You will not find a more passionate 14 15 advocate against the foolishness of sequester than Chairman 16 McCain, but he always says we are going to do our best job 17 of convincing others to release foolish budgetary ideas like sequester if we do our best job of convincing everybody that 18 19 when we have the resources, that we are going to use them in 20 the best possible way in acquisition programs and elsewhere. 21 So how do we get a system that is more agile that keeps 22 up with the accelerating pace of technological change? How 23 do we continue progress that you have already made as a 24 result of the Weapon Systems Acquisition Reform Act of 2009 25 that the DOD is doing?

So there is ongoing debate about the various role of different governmental agencies, and we are looking forward to hearing from you what the appropriate level of oversight is.

5 With that, I want to go ahead and move forward. 6 Chairwoman Ayotte will be here presently. She was going to 7 cast one more vote and come, and then as I say, you will see us moving back and forth. But this is the opening of a 8 9 discussion on a matter that I think is going to play some 10 importance as we work this month and next on the NDAA for 11 this year. And I thank the chairwoman for calling this 12 hearing. Thank you for attending. And I would like to ask 13 each of you to go ahead and give your opening statements. And maybe I can just begin with Secretary Shyu. 14 15

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STATEMENT OF HON. HEIDI SHYU, ASSISTANT SECRETARY OF
 THE ARMY FOR ACQUISITION, LOGISTICS AND TECHNOLOGY

Ms. Shyu: Chairman Ayotte, Senator Kaine, and distinguished members of the Subcommittee on Readiness and Management Support, thank you for this opportunity to provide comments on our collective efforts to make the defense acquisition process more effective and responsive to our national security needs.

9 Defense acquisition is a highly risk-averse, 10 compliance-based process with a checklist mentality that has 11 become unduly cumbersome. Prior to my service to the 12 Government, I spent 33 years working in the defense industry. I would like to provide you some insight and 13 14 share some of my program management experience in industry 15 and compare and contrast that to that of a Government PM. I 16 was able to develop a sophisticated radar system in record 17 time with authorities that simply a Government PM does not have. So I would like to expand upon that. 18

When I was in industry, I controlled my budget. The Government PM, on the other hand, does not really control his or her budget. On an annual basis, there is budget perturbation that occurs without regard to program impacts. So it is very difficult to sustain a program based on an annual basis it is perturbing.

I had the ability to hold reserve budget at my level to

mitigate unanticipated risks. There is no way you will have 100 percent visibility on all potential risks that could happen in the life of a program. But I was able to pivot. Within the Government, you are unable to hold a reserve budget because it is deemed early to need.

6 The requirements -- we fully understood the 7 requirements that are desired, and we were able to do the 8 trade space to identify its impacts of performance versus 9 cost versus schedule versus technical risks. On the 10 Government side, what I have seen requirements are derived 11 or changed without the full knowledge of cost, schedule, of 12 technical risk to the program.

13 Let us talk about stakeholders. In industry, the 14 functional staff -- that means engineering, finance, 15 manufacturing, contracts, you name it -- are actually 16 incentivized to help the PM to achieve the cost, schedule, 17 and budget. In the Government, there are many, many stakeholders. They are all stovepiped with different 18 19 interests directly impacting programs. So what happens is, 20 however, none of them are responsible for program cost, 21 schedule, and performance. Just the PM.

Let us talk about tests. When I was in industry, I was able to coordinate testing plans with the testers. In the Government, an operational tester can add additional tests without consideration of programmatic impacts.

Documentation. I was able to move fast because I can tailor documentation to my program needs. In the Government, there is an extensive amount of mandatory documentation that you have to compile before you can go through a milestone.

6 Senator Ayotte: Let the record show she showed a pile7 with her hands.

8 [Laughter.]

9 Ms. Shyu: Taller than me.

Financial incentives. I am able to hire employees, incentivize them to work overtime with overtime pay, with stock options, with bonuses. I do not have such flexibility within the Government.

Hiring. I used to get very upset in industry when it took me a month -- when the human resource person took a month to hire somebody. Here I am delighted we can hire the person in 8 to 9 months.

So I think the best way I can talk about the process 18 19 that we have in industry versus the Government, I would give 20 you an analogy that is simple to understand. Over here, I 21 have an acquisition bus. The PM, as you know, is in the 22 front. That is bus driver. All of the stakeholders within 23 the Army, as well as OSD and CAPE and Comptroller and 24 Congress, by the way, is on this bus. Everybody on this bus 25 has a separate steering wheel and a brake, but no

1 acceleration pedal.

So what happens when a program gets into trouble? The best analogy I can give is the bus is turned upside down. So what happens in industry? Everybody would jump in to bail out the program manager because you are bleeding cash. There is a financial incentive to reduce loss. So everybody helps out the program manager. You will throw the best and brightest across the company to help out.

9 In the Government, what I have seen the 4 and a half 10 years of being in the Government, they will shoot out the 11 windows, the tires, and the kneecap of the bus driver. Why? 12 It is an opportunity to actually take the program manager's 13 money and use it for their stovepipe purpose.

14 So compared and contrasted to, it is so starkly 15 different. So it is this fundamental lack of program 16 manager authority that is commensurate with the 17 responsibility, as well as the failure to properly align the 18 various stakeholders' responsibilities for the program's 19 success that has contributed most heavily to the critical 20 shortcomings in the acquisition process in my opinion.

I urge Congress to empower the PM's with authority needed. Help them guide the program successfully to completion in a manner that is similar to industry, which I could move very rapidly. More documentation does not enable agility.

| 1 | So, Mr. Chairman, members of the subcommittee, thank |
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| 2 | you for your steadfast and strong support of the outstanding |
| 3 | men and women of the United States Army, Army civilians, and |
| 4 | their families. I look forward to your questions. |
| 5 | [The prepared statement of Ms. Shyu follows:] |
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| 1 | Senator | Kaine: | Thank | you, | Secretary | Shyu. |
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STATEMENT OF HON. SEAN J. STACKLEY, ASSISTANT
 SECRETARY OF THE NAVY FOR RESEARCH, DEVELOPMENT AND
 ACQUISITION

Mr. Stackley: Yes, sir. Senator Kaine, Senator
Heinrich, thanks for the opportunity to appear before you
today.

7 Let me start by saying that I concur wholly with 8 Secretary Shyu's characterization of the challenges 9 particularly that the program manager faces inside of our 10 acquisition system. Now, I would provide a slightly 11 different perspective in terms of how we are going about 12 dealing with some of these challenges.

First, it cannot be lost on this subcommittee that as we talk about acquisition and the need for improvement, that in fact we deliver extraordinary capability to our warfighter today. The challenge is that we do so at great cost, and it is a cost which is proving increasingly difficult for the Nation to bear.

Foreseeing the budget challenges of our current day, Secretary Gates gave guidance and warning back in 2010 remarking, given America's difficult economic circumstances and perilous fiscal conditions, military spending on things large and small can and should expect closer, harsher scrutiny. As a matter of principle and political reality, the Department of Defense cannot go to America's elected

representatives and ask for increases each year unless we
 have done everything possible to make every dollar count.

3 Shortly after Dr. Carter, who was then the Under Secretary of Defense, issued his directive on how we buy 4 5 what we buy, which today we know as Better Buying Power. 6 So today in building our budget, every program, things large and small, is subject to answering four most basic 7 8 questions. What will it cost to buy it? What will it buy 9 us in performance? What can we afford? And what can we do 10 to make it more affordable? Simply put, we must change the 11 cost equation.

We have gone about adhering to this by using five basic principles.

First, get the requirements right. Requirements definition is the most critical phase in determining the outcome of a major weapon systems program. Requirements that are well informed by a thorough assessment of technical feasibility and a realistic cost estimate are inherently at lower risk of overrun or delay during execution.

And two, because today our services' requirements exceed our budgets, the Department of the Navy has made affordability or a cost requirement alongside performance in defining a system in order to drive capability trades needed to reduce the cost of our programs. Properly define and seamlessly transition from requirements to design to build,

test, and field to do so within agreed budgets and schedules based on realistic estimates necessitates total alignment between requirements and acquisition, and it all begins with qetting the requirements right.

5 Second, perform to a stable plan. Our most successful 6 programs are underpinned by stable requirements, stable designs, and stable budgets. Stability translates into 7 8 predictable, reliable performance, unit cost reduction, improved material purchasing and workforce planning, 9 10 retention of the skilled labor, and the ability for industry 11 to invest in facility improvements, all resulting in more 12 efficient production and a more affordable program. And further, program stability enables the use of multiyear 13 14 procurements to further reduce the cost of our acquisitions. 15 Alternatively, uncertainty, delay, or changes to 16 requirements or the budget or the acquisition plan all 17 destabilize a program ultimately leading to cost growth and 18 schedule delay.

19 Third, in Secretary Gates' words, make every dollar 20 count. It is essential that we pursue efficiencies by 21 procuring at efficient rates, leveraging investments across 22 multiple programs, maximizing competition, employing open 23 architectures, reducing overheads and bureaucracy, and 24 sustaining a constant effort to pursue cost reductions, and 25 change practices that would meaningfully reduce program cost

or risk without substantively impacting key requirements
 regardless of what phase the program is in. In short,
 return to the basics of what our systems should cost.

4 Fourth and most importantly, build a skilled and 5 experienced acquisition workforce. To meet our objectives, 6 we must be smart buyers and, two, tough customers, and to be so, we must possess a skilled and experienced acquisition 7 8 workforce. The Department, with strong support from 9 Congress, is taking measures to strengthen this workforce, 10 and we must stay the course. This is the single most 11 important fundamental in achieving strong performance in 12 defense acquisition.

Fifth, foster a healthy industrial base. In the end, 13 14 improvements to acquisition rely upon performance by 15 industry. The critical skills, capabilities, and capacities 16 inherent to our weapon system developers inarquably underpin 17 our dominant military position. Accordingly, in the course of considering policy to improve acquisition, the effect of 18 19 such policy on the industrial base must be closely weighed. 20 From research and development to production, implicit to 21 each of these principles we must pick up the pace. Time is 22 money, and time is stripping much-needed capability from the hands of our sailors and marines. We demonstrated the 23 24 ability to accelerate capability in response to urgent 25 needs. The MRAP was a great example. Production increased

1 100-fold in a year's time, saving countless lives while meet 2 the most urgent need of the warfighter. While the rules and 3 process may differ, we need to bring a similar sense of 4 urgency to major program acquisition to deliver a capability 5 not at the speed of bureaucracy but at the speed of 6 technology. We must pick up the pace.

7 In closing, I would like to return to Secretary Gates' remarks at the Eisenhower Library. What is required going 8 forward, he said, is not more study, nor do we need more 9 10 legislation. It is not a great mystery what needs to 11 change. What it takes is the willingness to make hard 12 choices. In order to remain the most capable military in the world, we will always face hard choices. Making the 13 14 right choices -- that returns me to the need for a highly 15 skilled, experienced acquisition workforce.

16 Thank you, Mr. Chairman -- Senator Kaine and Senator 17 Heinrich, for the opportunity to appear before you today. I 18 look forward to your questions.

19 [The prepared statement of Mr. Stackley follows:]
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| 1 | Senator Ka | aine: | Thank | you, | Mr. | Secretary. |
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STATEMENT OF HON. WILLIAM A. LaPLANTE, ASSISTANT
 SECRETARY OF THE AIR FORCE FOR ACQUISITION

3 Dr. LaPlante: Senator Kaine, Senator Heinrich, thank4 you for holding the hearing.

5 And I too endorse strongly my colleagues here, both the bus analogy, as well as everything that Mr. Stackley said. 6 It is an honor to be here with them today. These are two 7 8 remarkable public servants. They are actually role models for a lot of folks in the Government, as well as in academia 9 10 and industry, and they are exactly the kind of people that 11 we need in the Government. So I just want to call them out. 12 This is an important hearing. We have a solemn duty to 13 the taxpayer and the warfighter to get this right. But this 14 is a well studied topic. I was on the Defense Science 15 Board. At one point we had a moratorium against doing 16 acquisition reform studies. It lasted for about 2 years, 17 but then we got back into it again. It is important that this ground, though, be looked at and continually improved. 18 19 I welcome what this committee is doing, as well as its

20 counterpart in the House, to help us here.

I want to mention one thing about agility. Senator Kaine, you mentioned agility as a fundamental issue that we are trying to get. I had the privilege of co-chairing a study on adaptability and agility for Secretary Gates back in 2010. What you fundamentally find out in agility and

adaptability is the metric is speed. Speed is the
 fundamental metric. If you do things fast, do it fast,
 failing fast is better than doing things slow that may or
 may not succeed.

5 The second thing you can do if you cannot do it very fast, if it is a modular type approach laid to a big 6 platform, then build in hooks, build in open architectures, 7 8 ability for you to pivot as the threat changes, as 9 technology changes, as the warfighter learns things. So agility has to be fundamental to how we do acquisition. And 10 11 so I am a very strong believer in that. I think it echoes 12 what my colleagues here have said.

I also think I am going to spend a few minutes here in the opening remarks just the level-set everybody. In science, it is usually good to get definitions on the table because a lot of times you find out people are not talking about the same thing. So if you bear with me, I am going to go through a few definitions and come back to this issue of people.

So, first, let us take your plain, generic acquisition program. Most of the time what the means is we have three phases to that program. We develop it. We procure it, and then we sustain it. Now, in the Government for the complex weapons systems that we deal with, we do not have the luxury -- we wish we did -- to go to a parking lot and buy

1 something off the parking lot. We have to develop it. We have to pay industry to do the research and development. 2 3 That means get to a mature design, get the test articles done, do the developmental testing where you learn where the 4 5 problems are, get ready for production, get all ready to go. 6 That is the first phase. That is RDT&E money. The skill set for that is usually a very sophisticated, deep 7 8 understanding of engineering.

9 The second phase is procurement. You are now in the 10 production line. There it is usually a different color of 11 money, different type of contracting, typically a fixed-12 price type contracting. There you are after learning. You 13 are after cost reductions.

14 And then the third phase. The third phase is 15 sustainment. Actually it turns out most people believe, who 16 have looked at it, 70 percent of the lifecycle cost of the 17 program is actually in the sustainment. So what you do in that first phase or that second phase, even if it might be a 18 19 little bit more expensive, might actually save you money if 20 you think it through for the third phase. Now, what is 21 sustainment? Sustainment is about performance-based 22 logistics, understanding the depots, understanding how we 23 spend our operations and sustainment. And I have found in 24 my time in the Government that you can have an expert in 25 sustainment, 20-25 years, and you can have an expert in

acquisition, 20-25 years, I have not found hardly one person
 who is an expert in both.

3 Okay, so that is just the standard three-phase acquisition. What else are we not talking about? Services. 4 5 The Department of Defense last year spent \$156 billion in 6 the acquisition of services. Services can be anything from cutting the lawn to launching our most precious national 7 8 security payloads into space. Those are all services. Different skill set. Right? Totally different skill set. 9 10 Different management.

11 Okay. Then the third category, which Secretary 12 Stackley mentioned. He mentioned MRAP's, rapid acquisition. Over the last 15 years, we have had a proliferation of rapid 13 14 acquisition offices. Most of them are responding to rapid 15 UON's we call it. That is a totally different model as 16 well. Usually it is an 80 percent solution. Usually the sustainment part is often put aside. Very different skill 17 set. Very different contracting. 18

19 So imagine what all of that has in common. Very 20 little, except one thing: people. The experts you need in 21 each part of that system have to be customized to where they 22 are. And that is what you were getting at, Senator, right 23 at the beginning about your experience. So that is 24 important to this, is the people.

25 So I just want to make sure we are all level-set on

1 that because oftentimes when I hear people talking about 2 acquisition, I am not sure which phase or which aspect they 3 are talking about.

4 There are promising signs. There are good things going 5 on that should be built upon. I am always a believer in 6 looking at what is going well and building upon it. The Better Buying Power initiatives that Secretary Carter 7 8 announced that Secretary Kendall initiated is paying off. The "should cost" savings that all three of our services are 9 having are real and they are incredible. They are not cost 10 11 avoidance. People sometimes say it is cost avoidance. No. 12 Very specifically, they are real savings. That is paying 13 off.

14 We also do have outreach to non-traditionals. We are 15 running experiments in the Air Force with non-traditional 16 ways to bring in academia or small businesses. Open 17 architectures, which I mentioned earlier, for adaptability are a great way to bring in non-traditional companies and 18 19 players into our system. We are trying things in the Air 20 Force. I know the other services are -- outside the 21 acquisition 5000, doing something that is called "other 22 transactional authority." We are doing an experiment next 23 month on one of our systems to try to get folks under 24 contract within a week if they impress us with one of their 25 algorithms. So there are lots of these little experiments

going on that I think we need to watch, pay attention to, encourage. And I would just look forward to working with the committee as we work on this. Thank you very much. [The prepared statement of Dr. LaPlante follows:]

Senator Kaine: Excellent.

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We are going to stand in a quick recess so Senator Heinrich and I can -- I have not voted in number three. Senator Heinrich, I am not sure you have either. We will stand in recess, and we will likely start back up with questions. And I suspect the chairwoman will likely arrive first because I think she has voted. Senator Ernst, you just voted on the second or third?

9 Senator Ernst: Actually it was the third.

10 Senator Ayotte: If you would like to begin with 11 questions. We just finished opening, and Senator Heinrich 12 and I have to go vote. So we will do that and return. 13 Great. Thank you all.

Senator Ernst: Thank you everyone for being here. I appreciate it. A lot of activity on the floor today.

16 First, I will go ahead and get started. I will go back 17 and review some of the information that you have given 18 already today.

But, first, to Secretary Shyu, if you would please, I have been looking into a number of different areas regarding program and project management. And this is an issue that we had actually discussed in visiting with the Government Accounting Office last week in the Homeland Security and Governmental Affairs Committee. And for years, the GAO has categorized the Department of Defense's program management

1 as high risk. And it shows up year after year on the 2 infamous list with still very large problems and processes 3 that need to be fixed and improved. And what specific steps 4 are you taking to improve program management at DOD, and is 5 there any way that we as legislators can assist in that 6 process?

Ms. Shyu: What we do to ensure the skills of our
program managers are adequate, we actually have different
levels of courses that program managers have to take.

10 And the other thing that we do -- there is actual 11 structure. So you do not jump in as early level being the 12 most senior program manager. There is different lower level 13 program management than the senior level program managers. 14 So within the acquisition process, we actually do train our 15 program managers.

They are mostly military with some civilians also as program managers, but primarily the ways that we train them are from DAU courses that they take. Also, internally we bring them up for assignments into the Pentagon so they can sit and listen and see, observe how programs are being reviewed. So there are many different ways we are actually training our program managers.

23 Senator Ernst: I appreciate that.

And then any comments from either of you gentlemen?Mr. Stackley: I would simply add I was a career Navy

1 officer. My last job in the Navy was as a program manager. Course training is interesting, but the greatest experience 2 3 you get is on the factory floor, rolling up your sleeves, being hands on the project. That is irreplaceable when it 4 5 comes time to actually be in charge of a major weapon 6 system. So we are ensuring that in our pipeline for program management the first tour coming out of grad school will be 7 8 an industrial tour so they can get that hands-on experience 9 and continually put it to work as they climb the ladder and 10 become more competitive for the program management.

I sit on the panels. I review the panels, and I approve the program managers. I will tell you it is very competitive. We have stellar program manager candidates, civilian and military. The challenge we have got is depth and breadth to fill that base that needs to be there for the overall acquisition workforce.

17 Senator Ernst: Very good.

18 Secretary?

19 Dr. LaPlante: Thank you, Senator.

I would add to that that the best indicator of whether a program manager is going to be successful at a program is whether they have been successful before at a program. And so what we have to do is do what Secretary Stackley said, which is give them experience early so that they can, in a safe environment, learn the ropes so that when they get up

1 to the bigger environment, they have already been a program 2 manager.

3 When I came into this job 2 years ago, I came in from academia and FFRDC community. The stereotype I had heard 4 5 ringing in my ears, particularly in the Air Force, was that 6 we would take pilots and switch them from being a pilot one day and they could go in and be a program manager. That was 7 8 kind of a stereotype, but I was surprised at what I found. 9 The average acquisition professional running a program in the Air Force has 17 years of acquisition experience. They 10 11 start as a second lieutenant and they go up to 17 years. 12 They have actually experienced more than 17 because they have done a tour somewhere else to give them experience. 13 14 The second thing is they are competitively selected, 15 the same thing as Secretary Stackley said in the Navy. We 16 always can do better, but I was shocked at how different I saw the program managers and the PEO's, which is one level 17 above it, which is typically 25 years of acquisition 18 19 experience.

And I also do not understand when people say, well, there is not an acquisition career field for the military. My military deputy, Lieutenant General Ellen Pawlikowski, is an acquisition professional. She is now going to be a fourstar AFMC commander next month, the top of her game. There is a career path. So I think that maybe are not explaining

the situation as well as we could. There are challenges there, but there is a lot of attention put into training our program managers.

4 Thank you.

5 Senator Ernst: Yes, and I appreciate that very much. 6 You mentioned there are different ways to gain 7 experience, whether it is on a factory floor, actual hands-8 on experience, whether it is civilian courses. And I was 9 just going to jump in and mention an identifier or MOS. And 10 I do recognize that it takes a lot of time developing those 11 skills.

But at the same time, it seems that the DOD has had some significant trouble in keeping program managers. Once they gain that skill, they seem to move on into other areas. What can we do to improve that, keep those people that have gained those skills in that area in program management?

Mr. Stackley: I think we all have some comments to that one.

Let me first describe that. Yes, you are correct. In terms of a military career path, when you reach program manager for a major weapon systems program, you are a senior 06. And in order to continue on, you either need to be promoted or you might have some runway left in your career to move on to a graybeard type of position.

25 What we are exploring is how do you, in fact, retain

1 those senior military to stay past that program manager position. What would encourage them? In fact, it takes an 2 3 appeal, frankly, to an individual's -- it is a patriotic appeal. Now, that you are at the peak of your career, now 4 5 that you are at the height of your experience, and now that 6 you have completed your major command tour, we are going to ask you to go ahead and continue on to serve because we need 7 8 your experience. We need to continue that experience in 9 military in uniform in the Government. That is a challenge. 10 And so what we are trying to identify is are there 11 opportunities that would make it less of a challenge, make 12 it more attractive for an individual, post major command, to 13 continue to serve.

14 Senator Ernst: Are there any specific suggestions? 15 Mr. Stackley: I can just give you one example. So I 16 know the Naval Academy and I believe West Point has a similar program where they actually take on senior 06's and 17 put them in a permanent military position. In that case, it 18 19 is as an instructor, but what they are able to do is 20 continue to accrue benefits that come with military service, 21 and in certain cases in the past, what you have had is 06's 22 that actually gain benefits beyond their rank by continuing 23 to serve. In certain cases, it is non-monetary. In other 24 cases, it is monetary benefits. So we are trying to see 25 what makes sense, work with the service chiefs and see if

there is a program in the making there that makes for select andividuals, not across the board, but select individuals that you want to retain for the long haul.

4 Senator Ernst: Very good.

5 Yes, ma'am.

6 Ms. Shyu: I would like to expand upon that. I 7 absolutely concur with Sean.

I will give you a couple examples that actually happened. For example, it is actually the senior 06 that runs the more complex, what is called the ACAT 1D programs. And we have had very senior 06's retire, then come back in as GS-15, and also be a program manager. So that is a way we can entice them to come back even after they retire as a great program manager to hiring them back in as a civilian.

The other thing is a lot of the outstanding program managers get promoted to program executive officers to run an entire PEO. So this is a way they can then mentor all the PM's underneath a PEO.

Dr. LaPlante: And I would just add to that. One thing that when I came into Government that even though intellectually I knew it, but what broke my heart was seeing the people like we were just talking about -- let us say a very, very talented senior 06 or in some cases a one- or a two-star who the country has invested 30-35 years in, has incredible knowledge -- retire. And it just breaks your

1 heart.

And so programs like what Sean was mentioning about perhaps the academies -- now, one question there is, okay, let us say you get on the academies. Can they still be a program manager? You know, that is a question.

6 I have another case right now, which I do not want to give the specifics on because we are still working it. 7 8 Clearly we have a star. We have an absolute star in one of 9 the most important programs you could imagine. And we are 10 trying to keep this person as a highly qualified expert, the 11 Highly Qualified Expert program. I am hoping it will work. 12 But what you find even with the HQE program is it is not 13 nearly as easy to do as you might think, and then you still 14 know that you are going to have to appeal to the patriotism 15 of this individual and their family to take this job and 16 stay as a civilian. And we may pull it off; we may not.

But we have got to do something about that because you would not do that outside. You take your best program managers and put them on your hardest programs. You do not sit there and say, wow, they are at the peak of their game, go find another job, thank you very much. So we need to figure out a way to do this.

23 Thanks.

24 Senator Ernst: I would agree. Really bottom line, we 25 need to make sure that we are working with these programs to

make sure that our taxpayers are, of course, getting the best bang for their buck as they can while making sure that our service men and women have exactly what they need through these programs.

5 Do you find that a number of these qualified, wonderful 6 individuals are being drawn away into private industry? Are 7 the benefits and salaries that they might receive as a GS-15 8 competitive with what they would see in the private 9 industry? No. And I think I knew the answer to that before 10 asking.

11 But we have invested a lot of time, energy, money in 12 these individuals to make sure they are appropriately trained. It would be nice to use that expertise in these 13 14 programs and the management. Secretary, any thoughts there? Ms. Shyu: You are absolutely right. I think the 15 16 example we have had is we have some great colonels, senior 17 colonels, who did not make it to the GO level. That does 18 not mean they are not great because there is a pinnacle. 19 Very few get selected to the GO, but they are outstanding 20 program managers with lots of years experience. So we have 21 had the opportunity to hire them back. So we have done a 22 pretty good job of hiring back. Again, this is because they 23 want to serve. They can make a lot more money in industry. 24 I can tell you that from experience, being there.

25 Senator Ernst: Yes.

1 Ms. Shyu: It is because their heart is in the 2 services. They want to continue to serve. So that is where 3 we leverage their desire to continue to serve and bring them 4 back as a civilian and keep them in the program management 5 side.

6 Senator Ernst: Fantastic.

Mr. Stackley: I cannot add too much except to say that 7 8 there is no single solution here. Secretary LaPlante 9 described flag potentials. We have 18 acquisition flag 10 officers in the Department of the Navy, and those are the 11 best and brightest. We have a number of post-major command 12 program managers that are continuing to serve. They have 13 been enticed and they are continuing to serve. We found the 14 right job for the right individuals because they love to 15 serve. And as Secretary Shyu described, we have others that 16 in fact retired and have come back as a civilian and are 17 civilian program managers. Again, it is a great win-win for the Department and the individuals. 18

And then there is the larger number that after they complete their major command, they move on. They move on. Then what we look to do is, frankly, we look to have them to continue to serve except in a different capacity out of uniform and see if those skills can continue to contribute to what we are doing in acquisition, which is trying to develop and field the best weapons we can for our sailors

1 and marines.

No single solution. It is a case-by-case basis, and we work with the individuals. One thing about the acquisition workforce is you get to know all of your program managers personally and you work with them to find the right best fit for that individual and what the Department needs.

7 Senator Ernst: Great. Thank you.

8 Dr. LaPlante: I have just a couple, two quick things. 9 The Highly Qualified Expert program I think is potentially 10 one we could use more.

Second is the program called IPA -- it is a personnel assignment, interagency personnel assignment. My experience is we are using it much less than we used to, and I have views why. So there are flexibilities like that that we can investigate to bring highly gualified people in.

Remember during World War II there was the "dollar a year men" is what they were called, very wealthy people. I heard a recent term for them called "post economic people" that come into the Government. Of course, we all want to be post economic. But we have to do something to get the highly motivated, talented people in this country to get into the Government.

23 Thank you.

24 Senator Ernst: Thank you. And again, I just want to 25 reiterate thank you very much for being here today. We do

have some challenges out there with acquisition. We want to make sure that we are retaining good qualified people in that program management. Whatever we can do to benefit our taxpayers is greatly appreciated, as well as making sure that we are protecting our men and women in uniform. So I thank you again.

I turn the floor back over to the chair.
Senator Ayotte [presiding]: Well, thank you, Senator
Ernst, for holding down the fort, and thank you, Senator
Kaine, for doing the same. As you know, we are voting on
the floor.

12 I want to thank all of our witnesses for being here. 13 And I am just going to submit for the record my opening 14 statement and just go right to questions for all of you. 15 I wanted to ask a question about lessons that we have 16 learned from prior acquisition failures. Each of the 17 services have had their share of programs plaqued by major cost overruns, schedule slippages, and performance 18 19 shortfalls. For example, we have seen important programs 20 like the Air Force's evolved expendable launch vehicle 21 managed badly resulting in a 270 percent unit cost growth. 22 We have had the ECSS. I am not picking on the Air 23 Force, but that is another Air Force one. That increment 24 one program took over 9 years and expended over \$1 billion 25 before it was canceled and shut down. We never had an

1 acquisition program baseline on that one.

2 Another example. The Marine Corps ground air task-3 oriented radar program has seen 175 percent growth in research and development costs and 151 percent unit cost 4 5 growth. An expert panel chartered by the Navy last year 6 found that the program cannot achieve its current reliability requirements within the program's planned cost 7 8 and schedule and that the requirements do not reflect Marine 9 Corps operational needs.

We can go on and on. As you know, there are too many examples like that where our constituents say to us, listen, we want to defend the Nation. We want to support our military, but you all better address these issues.

14 So rather than getting updates on each of those, would 15 you each share with the subcommittee what you have learned 16 from your service's acquisition failures and tell us how 17 those lessons are informing your efforts to improve how your 18 service conducts acquisition going forward.

Dr. LaPlante: I can start with at least one of the examples you said representing the Air Force. You asked me at my confirmation hearing -- you may not remember this -about ECSS.

23 Senator Ayotte: You have a better memory than me.
24 Apparently I have been on this program --

25 Dr. LaPlante: No. It is a good one to be on because

1 it is a great --

The Air Force has done this process that I think is 2 3 really a useful thing. They started it 2 years ago. I cannot take credit for it. But it was, you know, when you 4 5 have an accident, a crash, there is a safety investigation. 6 Remember we had this last year with the F-35. We are doing the same thing when we have an acquisition crash. 7 So the 8 first one that was done was an independent review of the 9 ECSS program, the one you mentioned. The second one was a 10 small business program that had a problem.

And I will just tell you what the lessons learned from ECSS. The Senate Armed Services Committee has also studied ECSS.

First of all, to make a long story short, I think it is one of the reasons why the position that Peter Levine has been nominated for was created, was to prevent things like ECSS.

The lessons learned on that came down to about six root 18 19 causes, and they are very fundamental: not understanding 20 the data of the business system that you were talking about 21 using; not doing the business processes, because the whole 22 reason you do an IT system modernize is you are trying to 23 modernize your business processes. And you are supposed to 24 change your culture. That was not done. And the analogy 25 that the reviewer of this report did for ECSS said imagine

like it is like the Big Dig in Boston. If you have been to Boston, maybe you know this. Remember for many years it was if you went into the airport up there. Well, the easiest part of doing probably that project was going to a map and drawing a line and saying would it not be great to have a tunnel from here to here. That is the vision. That is the "to-be." That was done in ECSS.

8 Here is the part that was not done. What do we have 9 today? What is the traffic using today? What do the cars look like? What is the volume? That is the data. How are 10 11 the users using the system? And here is most important. 12 What is the transition plan? How are we going to get 13 workers to work in the next 5 years while we build this 14 The today and the transition plan were not done. thing? So 15 these are fundamental errors.

What we did in the Air Force after this report is we took those same lessons learned and went with our DCMO, the new position, and went program by program and said do we have any of those same root causes. And when we started to see them, we were addressing them.

21 So it was a big learning experience, and I would 22 recommend anybody who has not read that report -- it has 23 been provided to Congress. Very interesting reading. 24 The second one -- I will not go into any more detail --

25 was a personal beacon that we had a failure. It was

1 actually a small business and it came down to -- I am going 2 to over-summarize it -- systems engineering. The Government 3 program office did not do the systems engineering on that. 4 It was something we call the technical baseline. We are 5 trying to build back into our program offices the ability to 6 be a smart buyer. So those are two examples I will bring 7 up.

8 Senator Ayotte: Thank you.

9 Mr. Stackley: Yes, ma'am. I am going to go back to 10 about a decade ago where there were a number of major 11 programs in the Department of the Navy that had significant 12 failures in terms of cost and schedule performance. It 13 brought to light, as you did the forensics on each of these, 14 that we failed in step one of the process which is 15 understanding the requirements and what we refer to as 16 getting the requirements right. So this is not challenging 17 the operational requirement. This is when you set the operational requirement having acquisition right side by 18 19 side and identifying that in order to meet this performance, 20 it is going to require this level of technology. Here is 21 the risk that goes with it. Here is the cost that goes with 22 So when you lock down the requirement, you understand it. 23 maturity, feasibility, cost, and risk, and then you hold 24 that firm as you move forward in the program.

25 So with that in mind, we basically went back and

1 rewrote our acquisition governance process to a thing that we call the "gate review process" where today the 2 3 requirements in the acquisition community are lockstep, side by side, around the table in each step of a program, 4 5 starting with the definition of the requirement, moving from 6 that definition of the requirement to transition to specifications to a request for proposal right down to 7 contract award and execution of the contract so that there 8 is no separation between requirements and acquisition 9 throughout the process. You keep control over not just the 10 11 requirements but also the cost and schedule to meet those 12 requirements.

So we have found that to be a very effective process. 13 14 The partnership that exists today between myself, the CNO, 15 and the Commandant -- I would say that we are inseparable 16 when it comes to end to end from requirements to delivering 17 the requirements in terms of the budget. And this has been a learning experience going back to some major failures 18 19 perhaps 10 years ago, and we are continuing to improve as we 20 qo.

Ms. Shyu: So based upon my background -- by the way, I have had 33 years in the defense industry before coming to the Government in the last 4 and a half years. I was a PM back in industry as well. So I have lots of experience actually designing, developing, producing products.

1 So based upon my experience, when I have seen a failed 2 program, I have seen unrealistic requirements. The 3 requirements were set not by what Sean had talked about, namely it was not necessarily informed by technical risks, 4 5 by cost and schedule realism. So if the requirements said 6 that I want to have this capability and nobody challenges, that becomes the requirements. And then they are lobbed 7 8 over to the acquisition community, go design, develop 9 something that meets this goal. Every contractor will say, 10 yes, I can do it. Right? I can do it until you are 11 pregnant. That is what happens.

12 So one of the things you have got to do up front is do the trade space. What are the requirements you desire? 13 14 What type of technology can actually give you that 15 performance, and what is the cost associated with that? And 16 what is the schedule it will take to develop it? You got to 17 go through that entire trade space before you lock down on requirements and say, yes, I want to get going on this 18 19 program. On the Army side, I do not see that being done 20 very well.

The second piece I want to talk about is realistic schedule. Just because somebody dictated you are going to produce this next year, engineering does not always follow what you dictate. So if you set an unrealistic schedule up front, you are just setting yourself up for failure. I have

seen that on a program in which it squished the milestone because somebody somewhere said I want this by this date. So you work backwards into the art of possible. Well, if that was your end goal and worked backwards in a development program that has high risk, you are doomed to failure, and I have seen that happen.

7 The third thing, really important, stable budget. If 8 you hack away at the program budget on an annual basis, your 9 baseline is constantly moving. You are standing on 10 quicksand. How on earth do you build a foundation of a 11 program if your every single year is changing.

12 Three biggest things that impact stability of our 13 program.

Senator Ayotte: Thank you all. That is excellent.Appreciate it.

16 I want to turn it back to Senator Kaine for any follow-17 up questions he has.

18 Senator Kaine: Thank you all.

And I understand that Senator Ernst asked some questions about the talent workforce, you know, PM. And I do agree. And all of you said that that is absolutely key to this. I will not ask questions about that, but I think that is important.

As we are looking at reform, the Better Buying Power initiative is already about reforms. We do not want to do

reforms that are overlapping, just creating more documentation requirements. We would like to do reforms or be part of reforms that are streamlining requirements so that they find that sweet spot between enough oversight to avoid problems but not so much as to get in the way of aqility and timing.

7 What advice would you have for us as we are looking at 8 drafting an NDAA on what we ought to be doing to try to find 9 that sweet spot?

10 Mr. Stackley: Sir, I am going to go back to my opening 11 statement and the quote from Secretary Gates with regard to 12 we do not need more studies and we do not need more 13 legislation. And I mean that in the most respectful manner. 14 We have a tremendous amount of oversight, process, a 15 minefield of rules and regulations that we are trying to 16 navigate.

With regard to a sweet spot, I think we have paved over the sweet spot. If it is possible, as you review this, to delayer some of the rules and regulations, this framework that we operate in -- Secretary LaPlante described the Big Dig. Let me give you a different view of the Big Dig. I am going to guess, Senator, that you have driven in and around Boston.

24 Senator Ayotte: I sure have.

25 Mr. Stackley: So asking what the sweet spot is is like

1 asking how would you fix traffic in downtown Boston. What 2 would you do to the roads? And after hundreds of years of 3 trying to improve the roads by adding more roads, they 4 realized that it only gets "worser" the more you try to make 5 it better. And so they decided that you cannot drive 6 through Boston. You have got to get, in this case, under it. And that is what gave us the Big Dig. And so \$10 7 8 billion and a decade later, it is much improved, but it was 9 not by trying to straighten out the roads in Boston.

10 So I would start by trying to figure out how do you 11 roll back to Goldwater-Nichols. I mean, it was actually a 12 pretty good starting place, and since then we have added 20-13 plus years of -- 30 years almost of additional rule and 14 regulation in how to improve things. And it has made it 15 harder, but it has not necessarily made it better.

16 Senator Kaine: Secretary LaPlante?

17 Dr. LaPlante: Yes. I mentioned in my opening remarks that we did a study on adaptability and agility. What we 18 19 did on the Defense Science Board is we looked at cases in 20 the Department of successes and in industry successes and 21 failures. The ones that were successes all had a few things 22 in common, which was interesting, maybe by accident. They 23 all were relatively small, small activities usually 24 protected by leadership.

25 The F-117, the stealth fighter. We interviewed Paul

Kaminski, who was the colonel at the time who ran that program. Paul said it was a small functional team, about 7-8 people. They could make decisions. They were protected by leadership. They had a lot of things that Heidi Shyu talked about in her opening. They controlled the budget, the requirements. They were allowed to fail, and they were left alone. But they were held accountable.

8 Whenever we went around and said what was this 9 successful here, it all had the same characteristics, very 10 highly skilled. What I see when I see those activities 11 going on in the Defense Department, I see they are either 12 there because the leader is protecting them. They are 13 hiding and nobody knows they are doing this great stuff. Or 14 they are highly classified.

15 So something tells me we know to do this. If it has 16 those characteristics, if we can streamline the way that 17 Sean describes, we can be successful. I do not believe you can scale these things. I do not believe you can take 18 19 something that is really highly agile, mobile delivering 20 things and make it three times as big because then it will 21 be slow. I think you can multiply those models. So we do 22 know how to do it. There are success stories in the 23 Department, but they all have those characteristics.

24 Thank you.

25 Senator Kaine: Secretary Shyu?

1 Ms. Shyu: So number one, streamlined oversight. I can 2 tell you coming from industry and coming to the Government 3 was mind boggling to see the layers of oversight that you have. And also my program manager will have to -- to get to 4 5 a milestone decision, one of our major programs, the PM will 6 drag through into the Pentagon 31 separate times to give briefings to various stakeholders. It does not happen in 7 8 industry because you cannot afford that. So there are 9 things that we are doing to ourselves within the Government 10 that just does not make any sense. It slows you down. 11 Increased bureaucracy does not enable you to be agile.

12 The other second thing is there is mutual 13 accountability in industry. Namely, when I was a PM and 14 then moved on to become director and vice president, while I 15 was managing multiple programs, on the monthly operations 16 review you would report to the president. If I am short 12 17 engineers, this is why I am red on my program, I need your help, he does not just beat me up. He turns to the VP 18 19 engineering and says what are you doing about it. So there 20 is mutual accountability here. That does not happen inside 21 the Pentagon. We are just beating the crap out of the PM 22 while everybody else has a steering wheel and a brake. So 23 mutual accountability is very important.

And nobody makes things better just because you filled out 79 documents. So you can spend your time managing the

1 program or you can spend your time filling out documents. 2 Senator Kaine: Can I ask one more question, Madam Chair, or do you have a question that you want to ask? 3 4 Senator Ayotte: I definitely do, but go ahead. 5 Senator Kaine: How about each of you just brag? What 6 is an acquisition program you are engaged in right now that you really think is doing great and that you want to brag 7 8 about? Because, yes, we talked about problems, but you have 9 got some that you think are going well. So that is just an 10 opportunity for each of you. What is going great and why? 11 And try to be quick. 12 Mr. Stackley: I am going to tell you one you already know about. Virginia. Virginia is going great. And why? 13 14 One, stability. 15 Senator Ayotte: We like that. 16 [Laughter.] 17 Senator Kaine: Yes, that is right. That is one we can 18 both agree on. 19 Mr. Stackley: The program has stability. It has 20 stability and it has got a quality team that is running it. 21 And when you put those two together, it has got the support 22 of the Department of Defense. So everybody is pulling in 23 the same direction on the Virginia program. Everybody is 24 pulling in the same direction. That is not the case in all 25 programs.

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Senator Kaine: Even with a little friendly competition
 to drive it ahead, as each side shows that their module is
 fantastic.

4 Mr. Stackley: They pulled faster.

5 So there is something that comes with stability and 6 quality leadership and getting the alignment of the 7 organization all pulling in the same direction that drives 8 success.

9 Senator Kaine: Secretary Shyu, Secretary LaPlante?
10 Ms. Shyu: I will give you the Paladin Integrated
11 Management, the PIM program. Why? We had an outstanding
12 program manager who just drove this program through. This
13 is what you need. You need tenacity to succeed in this job,
14 and you need God to be on your side.

15 On top of that, we had congressional support to help us 16 protect the budget because otherwise, our programs are just 17 vulnerable to be hacked away on the budget on an annual 18 basis.

19 Senator Kaine: Great. Thank you.

Dr. LaPlante: I am very proud of our munitions portfolio in the Air Force. A lot of the preferred munitions that are being used right now in the fight, a lot of them are done by our guys in the Air Force. At the big picture level, they have carved out about half a billion dollars in "should cost" savings. A lot of them bought back

more weapons, things that are being used in the fight today.
 I am very proud of them.

3 A specific program I want to call out, though, is something called small diameter bomb 2. It has got a tri-4 5 mode seeker, all-weather weapon. Think of it as something 6 that will go against highly moving targets in all weather with very low collateral damage. This program was initiated 7 8 -- very interesting. It was initiated in about 2009-2010 right when WSARA legislation had come into play, right as 9 10 the Better Buying Power initiative. So I was very 11 interested in looking at this program. It is going to a 12 milestone C in the next couple weeks. Milestone C is where 13 you make the decision to go to full-rate production.

Here is the thing. The program has come in under the cap. It was fixed-price development. Very unusual. It is coming in under that cap. The cost per weapon is coming in about \$60,000 cheaper than the objective requirement which is the stretch goal. And what it is is what my colleagues said. The requirements were not changed. There was singular focus by the contractor.

Here is the fascinating thing for us acquisition nerds. The milestone C took about 6 months/8 months longer than we expected. How did they come in under the ceiling? Because everybody thinks time is money. Well, it turns out, you know, if you have worked in industry and outside, you know

1 that actually you cannot take engineers and charge to a 2 project that they do not have work to do. So this 3 contractor, maybe because it was a fixed-price contract, maybe not -- but I would like to find out -- actually took 4 5 the engineers off when they stopped flight testing to fix 6 their problems. So even though the schedule slipped a little bit, we still came under the ceiling. Really 7 8 remarkable. And it is going to be a great weapon. 9 Thank you.

10 Senator Ayotte: I have some additional questions. So 11 I am going to start this, but then we have a vote on the 12 floor that we have to be back in 4 minutes. And so if you 13 do not mind, I might recess and then come back.

14 But I am going to have the staff give you out -- all of 15 you have touched upon this, but maybe not all of the details 16 are correct on this, but it is pretty close. You know, I heard from each of you that we do not need more layers. 17 What we need to do is eliminate some of the layers. I mean, 18 19 it is crazy. Look at this. I do not know how anyone could 20 work through this process. And truthfully, in many ways, if 21 you have that many layers, it actually does, as you have 22 already touched upon, eliminate responsibility because you 23 can pass it on to the next layer versus having people just 24 take responsibility for the area of oversight rather than 25 layering.

1 So I think one of our goals in this acquisition reform is actually to streamline and to actually make this a more 2 3 efficient yet accountable system for all of you and for us so that we know who to hold accountable. You know, we are 4 5 making our contractors jump through so many hoops that I 6 worry that we are going to stop not only the contractors that work in this space, but I am hoping that we can better 7 8 attract some new folks that are more on the high-tech side that we need in terms of innovation of new products who are 9 not normally used to operating in this type of space. 10 11 So any thoughts you have on how we can streamline this, 12 which I think will be good news for all of you, but also 13 make it just a better system. I think that is our goal in 14 this markup. 15 Mr. Stackley: We have been working on streamlining 16 this since this flowchart was started. I actually have a pocket version that I break out --17

18 [Laughter.]

Mr. Stackley: -- to show people that this is the problem.

21 Senator Ayotte: You really need reading glasses for 22 that one.

23 [Laughter.]

Mr. Stackley: I had a conversation with the CNO about 6 weeks or so ago, and we talked about the service chief's

1 role in acquisition. And he asked me can you lay out how a
2 bill becomes a law. In other words, how does a requirement
3 become a weapon.

4 Senator Ayotte: It reminds me of Schoolhouse Rock. 5 Mr. Stackley: When you take this and up in the upper left-hand corner is where the service chief signs off on a 6 requirement. And at that point in time, he believes he just 7 8 made a decision, not recognizing that what he as the service 9 chief decided was necessary to meet his statutory responsibilities to man, train, and equip the force then has 10 11 to be agreed upon by literally hundreds of individuals who 12 do not have accountability to man, train, and equip the 13 force.

14 So how to improve upon this? We are working with the 15 service chiefs to be able to come back to you all to 16 describe some things that we believe can be done. It might 17 not delayer this, but what it should not do is strip away 18 the service chief's authority when he says I need this 19 capability, I am putting this money against it to deliver to 20 the warfighter to meet our responsibility.

21 Senator Ayotte: So I will have to interrupt for a 22 minute so I can go and vote. But let me just say this, that 23 I think that working together on this, it is the service 24 chief getting what the service chief needs for his or her 25 service, but also there will be more accountability for the

1 service chief. But that is okay if it is not a morass that 2 no reasonable person could actually make their way through 3 in terms of the layers here.

4 So I am going to run and vote, and we will take a quick 5 break and come back and we will reconvene. Thanks.

6 [Recess.]

7 Senator Ayotte: I know that I had a chance to hear 8 from Secretary Stackley on his take on this whole thing, but 9 anything that any of the other Secretaries wanted to add, I 10 would be happy to receive.

Dr. LaPlante: I was mentioning during the break that I think it was the first time I saw as exhibit A where somebody did this was Jack Gansler who did a DSB study on urgent operational needs in 2009. He showed this chart, and he said "exhibit A." That is all I need to say. We cannot do rapid acquisition with it.

17 The next year, on our adaptability study, we showed the same chart and said "exhibit A." But then what we did --18 19 and I think others have done this -- they have taken -- they 20 have gone to non-defense industry and they have said what is 21 your version of this chart. And it is, of course, much, 22 much simpler than this. And I would recommend as a way to 23 go is look at the work where people have done that, where 24 they have taken and they said how in the commercial world do 25 they make this realization. And people have done that and

1 said why can we not make it more like that.

2 Senator Ayotte: Well, they have used process like the 3 Lean Process that can be used in companies to be able to 4 look through each step and eliminate steps that are 5 unnecessary.

6 Ms. Shyu: So I will say we absolutely need to streamline the processes, but enable us to tailor it. 7 That 8 is what we do in industry when we are designing, developing 9 programs. We have a standard engineering process that you 10 have to go through, but we allow the program manager the 11 flexibility to tailor it. If it does not apply to my 12 program, I can axe it off. It does not apply. Just focus 13 on the piece that is relevant to what you are doing. The 14 tailoring does not exist. This is why we have dumb things we end up doing like you go to go through corrosion -- if it 15 16 does not matter if it is a software program.

17 Senator Ayotte: Right. Thank you.

I wanted to ask a question about foreign military 18 19 With regard to contracting for foreign military sales. 20 sales, it seems that the U.S. Government is, in essence, 21 negotiating on behalf of foreign governments against U.S. 22 defense companies. And that is done by imposing the same 23 standards, auditing, and regulations, what we would do if 24 the U.S. Government were buying using taxpayer dollars to 25 buy a U.S. product. And after working to negotiate a better

1 deal on behalf of the foreign taxpayer, in reality then we add as much as 8 to 10 percent markup for U.S. Government 2 3 services and transaction costs. These cost dollars then go to subsidizing money, I guess, back into the DOD, not to 4 5 maintaining the industrial base. And given that foreign 6 sales are intensely competitive, is the foreign military sales contracting process really in the best interest of the 7 8 United States and the long-term health of the defense industrial base? 9

10 You know, one of the challenges I think we are facing 11 is as we spend less on defense, we want to maintain our 12 industrial base and, where appropriate, we want to allow them to engage in foreign military sales. Obviously, 13 14 anything that infringes on our national security interests, 15 that is really where the focus needs to be from our 16 perspective on regulation and the Department of Defense. 17 But things that do not do that we can sell to our partners, it seems to me it benefits us because it helps keep our 18 19 companies robust.

So can you help me understand this process? Because I learned more about it the other day, and I was somewhat surprised by the fact that we would be pushing back on our companies on prices on behalf of foreign governments and wondered whether that was the best use of DOD time when the market itself would adjust any kind of exorbitant prices

1 that the buyer was willing to pay.

2 Mr. Stackley: Ma'am, I will start and ask my 3 colleagues here to join in.

4 First, when it comes to foreign military sales, it is a 5 win-win. It is a win-win-win. It helps our industrial 6 base. It helps our international partners, and that helps us from the standpoint of security and affordability of our 7 8 programs. So it is in our best interest to foster increased 9 foreign military sales, particularly now that you see our defense spending flattening out. And so particularly our 10 11 major defense contractors, they are in pursuit of increased 12 foreign military sales, and we are supporting that to the 13 extent that we can.

When it comes to the mechanics of the foreign military sale itself, that foreign country looks to us to protect their best interest in the sale.

17 Senator Ayotte: Why?

18 Mr. Stackley: Because they do not sit down at the 19 table to negotiate with industry.

20 Senator Ayotte: It is the strangest thing I have ever 21 heard because usually in a buyer-seller relationship, why 22 would we negotiate on behalf of taxpayers in other 23 countries? That is what I am trying to understand. I 24 understand our interests in making sure that we are not 25 engaging in foreign military sales that could undermine

technology and interests that we want to remain protected,
but I guess I do not understand why we are negotiating for
them when we are dealing with scarce dollars and we could be
better focusing our resources on oversight of our own
taxpayer dollars.

6 Mr. Stackley: In almost all cases, the thing that is 7 the subject of the foreign military sale is something that 8 we are producing for our own military.

9 Senator Ayotte: Right.

Mr. Stackley: So quite often, they are either buying off of our contract or an extension of our contract. And so there is a single negotiation that typically is taking place associated with this product line, and then if it is Australia buying F-18's, for example, they are going to work off of our pricing for the F-18. We strive for a singular effort when it comes to negotiating.

17 Senator Ayotte: So it never happens that they are just 18 doing an add-on to our contract. So it never happens that 19 they independently want something that we are not at the 20 moment procuring?

21 Mr. Stackley: There are going to be some exceptions 22 where they might be ahead of us in terms of procurement, but 23 those are --

24 Senator Ayotte: You understand why conceptually I am 25 having a difficulty with this in the sense that some of the

1 feedback I have heard is that we often push our companies, but we are not pushing our companies on behalf of our own 2 taxpayers. It is on behalf of our foreign partners, which I 3 am all for our partnerships with our allies. It is just 4 5 that usually would be the role of that government doing 6 this. I am just trying to understand why that is necessary. Mr. Stackley: There is a separate avenue called direct 7 8 commercial sale where that other country could go direct to 9 the vendor to procure the item. Then you start to get into 10 security issues in terms of releaseability, but that is an 11 alternative. What they look for is they look to stay as 12 compatible with the U.S. version as possible for 13 interoperability purposes, and if we are in production and 14 we are procuring, they want to get as close to the same deal 15 that we get with industry as possible. 16 With regard to a surcharge --Senator Ayotte: What if they did not get the same 17

18 deal? How does that hurt us? Like what if they are willing 19 to pay more but we are not because we are negotiating on 20 behalf of taxpayers. How does that undermine our interests? 21 Mr. Stackley: Okay.

22 Senator Ayotte: I am just being honest. I just want 23 to know. I am trying to figure out how that undermines our 24 interests.

25 Mr. Stackley: The process starts with the foreign

1 military sales customer identifying what their requirement 2 is, and if the requirement matches something that we are 3 currently procuring, then what we do is we put side by side 4 what the requirement is versus what we procure and whether 5 or not it is releaseable to them as is.

6 Senator Ayotte: Which is important.

7 Mr. Stackley: If it is not, there will be some deltas. 8 If there is something that they want, they might want their 9 own missile integrated into an aircraft, that type of thing, 10 then those are further deltas. But we have a baseline in 11 terms of the cost of the item.

12 Senator Ayotte: So if they want their own missile 13 incorporated into an aircraft or some other piece of 14 technology and yet that is not what we want, we would 15 actually still, though -- we would be the ones trying to 16 negotiate the best price for that delta as well. Correct? 17 Mr. Stackley: If it is being done over here. We do a pricing check in terms of pricing as provided by industry. 18 19 Senator Ayotte: It is hard for me to get my head 20 around.

21 Dr. LaPlante: I think you are asking good questions 22 about exactly what the --

23 Senator Ayotte: We are in a scarce resource 24 environment, and so I want to understand where is the best 25 use of our resources. You know, our number one job is to

1 protect U.S. taxpayers. That is what I am trying to get at. 2 Dr. LaPlante: I think one thing. When I see companies going the FMS route versus direct military sale -- they can 3 do direct military sale -- what they are usually getting for 4 5 that is they are getting the Government expertise, the 6 Government-furnished equipment. For example, if the government buys a radar that would be put on it, they are 7 8 getting the Government's benefits. Right? What comes with 9 air worthiness, sometimes when you are buying an airplane, you want to make sure that the U.S. Air Force, U.S. Navy 10 11 have certified it for air worthiness. So they are getting 12 these kind of -- think of them as Government services. But 13 what they also get with that is all the joy of contracting 14 with the U.S. Government as well. And the contracting 15 officers, who are trained to do their job as contracting 16 officers for a fair and reasonable price for using things --17 and so that is the dilemma that you are seeing here. If it was a direct military sale, then it would be the 18

10 If it was a direct military safe, then it would be the 19 Government is not involved. Once the Government gets 20 involved, then we have to do all the things that the 21 contracting officers are trained to do. And I think that is 22 what you are getting at.

23 Senator Ayotte: Yes. I think it is worth considering 24 whether every step needs to be followed through with the 25 contractor. Like it would be a U.S. contractor versus --

with taxpayer dollars a purchase here versus a purchase
 there.

I also wanted to ask about -- New Hampshire has, of course, many small- and medium-sized defense suppliers who do some incredible work. And obviously, especially on our small- and medium-suppliers, the sequestration effect is even greater because they cannot necessarily reallocate in a way because they are a small supplier. Many of them, unfortunately, I think are going out of business.

10 So I wanted to get your perspective as we look at the 11 impact on small suppliers. And have you had a situation 12 with where we are in the fiscal climate toward having to go 13 toward more sole suppliers or foreign suppliers for critical 14 components?

Ms. Shyu: I will talk about that one. We do look at the industrial base and not just on the first tier. We look at the impact on the second tier and potentially the third tier as well because the first tier guys will tell us our production rate has gone down to half of what it used to be and here is the impact that I am worried about to small businesses.

So we have had multiple workarounds. For example, one program that we had had a supplier that builds transmissions that was really going bankrupt. So what happened, the prime actually floated money financially to help this company to

keep going until they could get a buyer. So that is one
 example of what happened.

3 In another situation we had, we worked with another company that built a very unique product for the Army. But 4 5 we already have a 7-year supply of that product. So we got 6 lots of inventory just sitting on the shelf. We do not need to buy more. But we told the small company, hey, you got to 7 8 diversify. You cannot have one eqq in this basket. Right? That is very risky. So over a period of 2 years, this 9 10 particular supplier went from 90 percent dependent upon the 11 Army down to 50 percent because that person diversified into 12 the commercial space.

So those are a couple of real-life examples that we have experienced the last couple years.

15 And I will say one third thing to give you one other 16 example. So when we have had congressional plus-ups, what we have done, as an example, is look at the second tier, 17 what is also potentially vulnerable, and taken some of the 18 19 congressional plus-up money to fund the second tier to make 20 sure that we have the base at a minimal, sustainable rate. 21 Dr. LaPlante: I think there is a tactical like near-22 term aspect to this and then there is the strategic. The 23 tactical near-term is a focused effort all the time in every 24 program to see are you maximizing opportunities for small

25 business.

1 Senator, you mentioned New Hampshire. One thing you 2 learn about small business -- they say all politics is local. All small businesses -- it is kind of a local thing. 3 In other words, the small businesses that we have around 4 5 Hanscom Air Force Base up in New England tend to be the type 6 that work on command and control applications because that is what we do up there. And contrast that with Maxwell 7 8 where we have a lot of IT small businesses. What we are finding is doing a lot of regional roundtables with small 9 business to customize and open up opportunities for them is 10 11 the way to go as opposed to a wide sweep. Our small 12 business numbers are up, but it takes a lot of work. The strategic comment I would make is I think this is 13 14 why open and modular systems are really important. I really 15 want to make sure people understand that. As we build our 16 platforms with open and modular systems where the standards 17 are open standards, then there is no reason that small business should not be a competitor for a sensor, an 18 19 algorithm, as we refresh them every 1 to 2 years. That is 20 the benefit of going to open systems as opposed to a prime 21 where the system is closed, which is traditionally the way 22 we do it. We need to get small business into the open 23 system market is what I believe.

24 Mr. Stackley: I would simply add that the comments 25 that Secretary Shyu made regarding what happens with regard

to cash flow and how we have to fill in the cash flow when we have delays for a continuing resolution or in the case of sequestration, things of that nature, working either directly through use of things like advanced procurement, which we get in our contracts, or with a large defense contractor.

However, what I have found is small businesses are not 7 8 on the radar screen for most of our program managers. And 9 so what we need to do is put it on the radar screen. So 10 each program has a deputy program manager, and so each 11 deputy program manager in the Department of the Navy has 12 been assigned a responsibility to be the small business 13 advocate for all things associated with his program. So to 14 have a watch on the health of his second tier, lower tier 15 small businesses that are directly affected when we have ebb 16 and flow in terms of cash on a program and also when we 17 change our production rates or if we are going to shut down 18 production and go into a sustainment mode to understand not 19 just your prime, not just your major subcontractors, but 20 what is happening down at that small business level because 21 quite often they are not just unique. Quite often they are 22 the sole source. And in fact, your question, have you seen 23 vendors go out of business, the answer is yes, we have. And 24 we have had to go offshore as a result because the 25 manufacturer in the U.S. was "one of" and we have had to go

1 offshore to replace that company.

2 Senator Ayotte: Excellent.

Before I conclude the hearing, is there anything that, as we look at this markup and trying to improve our ability to perform with the dollars we have -- and, you know, we talked about this, but anything that you feel like we did not ask you that you want to make sure that we are focusing on?

9 Dr. LaPlante: I think one specific thing is the DAWDF 10 fund for the acquisition workforce has been very, very 11 useful for us. All of us are suffering from when the 12 acquisition workforce was decimated in the 1990's. With the DAWDF fund and other tools, we have gotten the workforce 13 14 back up from levels to kind of almost where it needs to be. And so that is really important for us to continue to do 15 16 that. So I would just call that out.

17 Thank you.

Mr. Stackley: I am going to pound that point. You 18 19 asked about failures, what have we learned from certain 20 failures. This dates back to WSARA in the 2008-2009 21 timeframe. One of the more noted failures in the Department 22 of the Navy was the LCS program and how it got out of the 23 starting blocks. And one of the things that came out of 24 that was the lack of oversight on that program, right down 25 to the deck plates. So you trace that. Well, what drove

1 that? Well, the fact was that the acquisition workforce had 2 been drawn down in terms of size to the extent that we were 3 stretched too thin.

4 So in terms of the Department of the Navy, setting out 5 a strategic plan for the size and shape of its workforce and 6 Congress -- you know, basically putting the weight of Congress behind that as reflected in WSARA and the Defense 7 8 Acquisition Workforce Development Fund, we have, in fact, modestly restored our workforce to where we believe it needs 9 to be in order to support our programs going forward. 10 That 11 is under threat today because of the budget picture.

12 So here we are today talking about what we have done to 13 improve and the criticality of the acquisition workforce. 14 Today that exact acquisition workforce is under the gun in 15 this budget environment and threatens to go back to where it 16 was pre WSARA. So that is a concern for us. You have 17 provided incredible support in this regard in the past, and 18 we look forward to that continued support.

Ms. Shyu: So I absolutely concur with my colleagues, protecting the acquisition workforce, because I see a bimodal distribution in our workforce. We are going to have a lot of senior folks that are going to be retiring in the next 5 years, and then we will get into even deeper trouble because we do not have a skilled workforce. And right now there is significant pressure in reducing the civilian

workforce because the force structure is coming down. So I
 have a significant concern on that side.

3 The other piece is I will say WSARA provided the sound system engineering. What we do need to understand is what 4 5 happens is the interpretation of the law from this side of the Hill to the other side of the Hill -- what happens? We 6 7 reinterpret the meaning of the language and it becomes much more onerous. So if there is anything that you guys take 8 9 away, allow us to do tailoring to expedite, to enable our 10 agility. 11 Thank you. 12 Senator Ayotte: Thank you. 13 Well, thank you all. I appreciate everything are doing, and we look forward to working with you. And thanks 14 for your important focus on this issue. Thank you. 15 16 [Whereupon, at 4:12 p.m., the hearing was adjourned.] 17 18 19 20 21 22 23 24 25