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Before the

Subcommittee on
Readiness and Management Support

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

TO RECEIVE TESTIMONY ON AN UPDATE OF THE STATE OF
THE DEPARTMENT OF DEFENSE ACQUISITION SYSTEM

Wednesday, March 20, 2024

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6 U.S. Senate
7 Subcommittees on Readiness and
8 Management Support
9 Committee on Armed Services
10 Washington, D.C.

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12 The subcommittee met, pursuant to notice, at 2:00 p.m.
13 in Room SR-222, Russell Senate Office Building, Hon. Mazie
14 Hirono, chairman of the subcommittee, presiding.

15 Committee Members Present: Hirono [presiding],
16 Blumenthal, Kaine, Kelly, and Sullivan.

1 OPENING STATEMENT OF HON. MAZIE HIRONO, U.S. SENATOR
2 FROM HAWAII

3 Senator Hirono: -- system. I would say it is a
4 continuing challenge. Our witnesses today include Mr. Peter
5 Levine -- who I understand used to work for the Subcommittee
6 so he should know where we are; he will be here soon -- a
7 Senior Fellow at the Institute for Defense Analyses. Mr.
8 Moshe Schwartz, Senior Fellow for Acquisition Policy at the
9 National Defense Industrial Association. And Dr. William
10 Greenwalt, Nonresident Senior Fellow at the American
11 Enterprise Institute.

12 As Chair of this Subcommittee one area of focus is
13 ensuring that our servicemembers get the equipment they need
14 to defend our nation. That means delivering weapons
15 systems, supporting technologies and the necessary services
16 in a timely manner to ensure our warfighters have the best
17 possible capabilities. It also means ensuring acquisitions
18 remain on time and on budget -- on budget -- to steward our
19 taxpayer dollars.

20 Since the 2016 National Defense Authorization Act,
21 Congress has enacted nearly 500 -- repeating, 500
22 -- acquisition provisions to provide flexibility and options
23 to the Department to tailor acquisition pathways to best fit
24 the types of systems being acquired. DoD's six acquisition
25 pathways -- urgent capability, middle tier, major

1 capability, software, defense business systems, and services
2 -- these are all acquisition pathways. Together these
3 pathways comprise the Adaptive Acquisition Framework.

4 A recent reform included adding the middle tier of
5 acquisition pathway, I mentioned that, in the 2016 NDAA to
6 more rapidly prototype and field major defense weapons
7 systems. This important change is already bearing fruit in
8 some cases. For example, the Space Force is currently using
9 middle tier acquisition to quickly procure and launch low-
10 earth orbit satellites on time and on budget.

11 However, the Defense Department's acquisition process
12 still remains on the Government Accountability Office's High
13 Risk List, which includes programs and operations that are
14 vulnerable to fraud, waste, abuse, mismanagement, or in need
15 of transformation. The GAO recently found that DoD has
16 taken steps to increase its capacity for addressing risks
17 relating to weapons systems acquisition, but at the same
18 time it also found the Department has yet to fully determine
19 key programs' oversight aspects for the Adaptive Acquisition
20 Framework. Those are the six pathways I talked about.
21 Moreover, in February of 2023, the GAO reported that some
22 DoD components had yet to establish key processes for the
23 middle tier of acquisition pathway.

24 As we can see from these examples, while the Department
25 is making incremental progress there are still improvements

1 to be made. This Committee, the SAS Committee, has also
2 spent years creating tools to help the Department attract
3 and retain a skilled acquisition workforce. For example, in
4 2023, we established the Defense Civilian Training Corps to
5 create new opportunity for college students with an interest
6 in vital DoD acquisition-related occupations to receive
7 scholarships in exchange for a service commitment once they
8 graduate. Though this program is in a very early stage, it
9 holds a lot of promise for attracting new talent into the
10 DoD acquisition workforce.

11 The acquisition workforce, the men and women of the
12 Defense Acquisition Corps, is essential to getting the most
13 out of the acquisition system and ensuring that we provide
14 our servicemembers with the equipment they need while also
15 being good steward of taxpayer dollars. We cannot solve our
16 acquisition problems without an acquisition workforce
17 empowered to make full use of the authorities Congress has
18 provided the Department and the judgment to know when to
19 take calculated, smart risks.

20 I want to emphasize that part about risk taking because
21 acquisition is not about just zero risk. It is about
22 getting us to the point where we are taking calculated smart
23 risks, and those risk-taking decisions must be supported up
24 the chain of command so that we can have acquisition
25 practices that actually do give us the most effective ways

1 of acquiring the assets that we need.

2 So in my view, this requires a culture where
3 acquisition professionals know they have the trust and
4 support of senior leaders, and we must make sure that we
5 retain the specialized workforce once they have the skills
6 and certification that make them so highly sought after by
7 industry as well as government.

8 So my understanding is what happens is just as our
9 acquisition workforce is getting the kind of experience they
10 need to be able to fully utilize all of the acquisition
11 tools that we provide for them, they are wooed away to the
12 private sector. So there is a dip in our acquisition
13 workforce, and that is not what we need to see happen. So I
14 would like our witnesses to think about how we can retain a
15 skilled acquisition workforce.

16 In Hawaii we know firsthand the importance of a skilled
17 acquisition workforce to the success of our armed forces.
18 For example, Pearl Harbor Naval Shipyard relies on a skilled
19 STEM and technician workforce for positions from engineering
20 to welding but also contracting officers and management
21 specialists to ensure work is conducted on time and on
22 budget. This is particularly true right now in the building
23 of Dry Dock 5 in Pearl Harbor, which is the largest military
24 construction project in the Defense Department. And
25 unfortunately the price tag for the dry dock recently

1 incurred a large cost overrun, highlighting the importance
2 of ensuring robust oversight of how the Department acquires
3 goods and services and takes care of taxpayer dollars.

4 I thank the witnesses for your willingness to share
5 your insights with the Subcommittee, and collectively you
6 all bring many decades of experience working with and
7 reforming the Defense Acquisition System. And that
8 experience is critical as we consider ways our Committee can
9 help ensure the Defense Acquisition System is ultimately
10 servicing its intended purposes, delivering the capabilities
11 our servicemembers need in a timely manner. And while we
12 often focus on what is broken with our Defense Acquisition
13 System, I hope you will share with us your perspectives on
14 what has been working as well as pointing to the areas where
15 improvements are needed.

16 Thank you again for your expertise and your willingness
17 to spend some time with us. I look forward to your
18 testimony. And I do note that we are going to be in the
19 midst of voting so the Ranking Member and I will be taking
20 turns, going and voting and coming back.

21 And now I would like to recognize Ranking Member
22 Sullivan.

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1 OPENING STATEMENT OF HON. DAN SULLIVAN, U.S. SENATOR
2 FROM ALASKA

3 Senator Sullivan: Thank you, Chair Hirono, and thank
4 you for calling this hearing. It is an issue where there is
5 strong bipartisan support to make some bold reforms.

6 Historian Irving Holley recognized, in 1964, that,
7 quote, "the procurement process itself is a weapon of war,
8 no less significant than the guns, airplanes, and rockets
9 turned out by the arsenal of democracy in the United
10 States." Unfortunately right now this is a weapon that is
11 actually starting to be used against us, and I think in many
12 ways the purpose of this hearing is to start to turn that
13 challenge around.

14 Unfortunately, it was in the 1960s when the historian,
15 Dr. Holley, mentioned this idea of how important the
16 procurement process is to our national defense, that the
17 Pentagon started adopting the bureaucratic rules and
18 regulations that have come to define our acquisition process
19 today.

20 And it is not surprising that the rapid pace of defense
21 innovation in World War II and the two decades after World
22 War II has begun to slow down dramatically. Many of the
23 more recent technologies had to be forced upon our
24 acquisition process, such as unmanned systems, night vision,
25 and proliferated satellites.

1 While there has been no shortage of acquisition reform,
2 as the Chair stated, progress remains slow and inadequate.
3 Officials in the Pentagon have not maximized the use of the
4 substantial authorities already provided by Congress. For
5 example, the middle tier of acquisition pathway was intended
6 by Congress to simplify the process, empower program
7 managers, and deliver capabilities within 2 to 5 years. By
8 contrast, traditional programs take, on average, 11 years to
9 reach initial operational capability. Unfortunately, many
10 legacy programs are working their way back in and slowing
11 down the pace.

12 This seems par for the course with the Pentagon. Back
13 in the 1990s, Congress created commercial item procedures so
14 that the Pentagon could access companies that would
15 otherwise not take on defense business. Since then, more
16 than 165 unnecessary clauses have been added from the
17 onerous Federal Acquisition Regulation. The same problem is
18 apparent with other transactions which were intended to ease
19 the adoption of cutting-edge technologies.

20 So today, for this hearing, it is an opportunity for
21 our witnesses to diagnosis why past efforts have failed and
22 prescribe solutions to fully use existing authorities.
23 While it may be a tall order to change the culture of the
24 nearly 200,000 acquisition professionals on how they do
25 their job, we must focus our efforts on capabilities that

1 can have the greatest impact within the next few years,
2 including unmanned systems, munitions, and very importantly,
3 software and software upgrades.

4 At the same time, we in Congress have a role to play
5 ourselves. We are certainly not without fault in these
6 challenges. In some cases, burdensome approvals,
7 documentation, and reporting requirements have been added to
8 flexible authorities, in essence wiping them out. I would
9 appreciate if our witnesses could identify specific statutes
10 that you believe constrain the Pentagon or additional
11 authorities that could be useful.

12 Moreover, acquisition reform can go on so far without
13 improving flexibilities in the funding process. Earlier
14 this morning the full Armed Services Committee held a
15 hearing on the Commission on Planning, Programming,
16 Budgeting, and Execution reform. I would be appreciative if
17 our witnesses made connections between those reforms that
18 were highlighted in the full hearing today and the
19 acquisition process, especially what we term the "valley of
20 death."

21 Now, I know many of you are familiar with this. Here
22 is what is happening. We have this great opportunity right
23 now. Ten years ago, the vast majority of Silicon Valley and
24 our tech communities were not interested in working with the
25 Pentagon. You had the ridiculous situation, in my view,

1 where Google employees said, "Hey, we are not going to do
2 any work for the Pentagon." Okay. We are a free country.
3 That is fine. But then we started realizing they were doing
4 work with the Chinese Communist Party. That is not
5 acceptable to anybody in this Senate.

6 So what we have now is a change of culture in Silicon
7 Valley, in other tech communities, where they want to work
8 with the Pentagon, and you have funders who want to fund
9 companies that can work with the Pentagon. This is a giant
10 comparative advantage we have over our adversaries like
11 China and Russia, our innovative tech companies.

12 But here is the problem. They are privately funded.
13 Their funding does not last 3 to 4 to 5 years. It might
14 last 6 months. And the Pentagon has been too slow to take
15 up the opportunity to work with them, telling a high-tech
16 company with a great product, "We will put you in our budget
17 in 3 years." Well, they are going to be bankrupt in 6
18 months. That is the valley of death that is squandering
19 opportunities, and it is a big focus of mine, and I would
20 like to hear from the witnesses how we can address that.

21 So I would like to conclude, Madam Chair, just by
22 saying all the buzzwords on innovation and dual-use
23 technologies are not translating into action. Here is the
24 sad fact: it is taking a longer time for the Pentagon to
25 award contracts while, at the same time, the number of

1 companies in the defense industrial base is shrinking. We
2 have to reverse that, and we need big, bold ideas from all
3 of you whether to change the culture of the Pentagon or get
4 Congress to get its act together to finally, finally fix
5 what we all recognize is a huge strategic challenge that
6 hurts our ability to protect this nation.

7 Thank you again to our witnesses and the Chair for this
8 hearing. I think it is really important. And again, there
9 is enormous bipartisan support to fix this, witnessed here
10 by these two Senators. We just need the good, big ideas in
11 which to do it. Thank you.

12 Senator Hirono: Thank you, Senator Sullivan, and we
13 will start with Mr. Schwartz.

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1 STATEMENT OF MOSHE SCHWARTZ, SENIOR FELLOW FOR
2 ACQUISITION POLICY AT THE NATIONAL DEFENSE INDUSTRIAL
3 ASSOCIATION

4 Mr. Schwartz: Thank you, Chairman Hirono, Ranking
5 Member Sullivan, for inviting me to talk today about the
6 Defense Acquisition System.

7 Our Defense Acquisition System, as you both mentioned,
8 takes too long to deliver capability, costs more than it
9 should, and often fails to adopt the most advanced
10 capabilities industry has to offer. In addition, our
11 defense industrial base, as you mentioned, is shrinking.
12 This is a serious problem.

13 In this testimony I would like to make five points.

14 First, workforce is the key to successful acquisitions.
15 Better acquisition cannot be achieved through multiple
16 audits, more regulation, or legislative fiat. Rather,
17 giving a few capable people the authority to do their job,
18 putting them in positions to succeed, with that holding them
19 accountable, and minimizing red tape, this is the recipe for
20 better acquisitions.

21 But that is not what we do. Instead, we measure them
22 on compliance and process. In 2021, there was a GAO report
23 that found that of the six agencies they reviewed, including
24 the Department of Defense, all relied, and I quote, "on
25 primarily on process-oriented metrics when managing their

1 procurement organizations." In other words, compliance and
2 process were more important than performance. If we empower
3 the workforce and focus on outcomes, not metrics, we can
4 hold people accountable.

5 We should streamline the approval process. There are
6 statutes that focus on supply chains that are all written
7 just a little differently, without any policy reason for
8 doing so. Often the official with the authority to provide
9 waivers is so senior that the approval process is more time-
10 consuming than it needs to be. Such convoluted requirements
11 add to bureaucracy, it increases costs, it delays delivery,
12 and adds confusion as to who really makes what decisions.

13 A one program executive officer once said to me when
14 expressing his frustration over the approval process, "I was
15 hired to make decisions. If you don't like my decisions,
16 fire me, but let me do my job."

17 This brings me to the second point. We need to
18 streamline the acquisition rules and regulations. There are
19 just too many acquisition rules, and they are too
20 complicated. Done right, streamlining will increase
21 accountability by clarifying lines of authority, shorten
22 timelines, and improve outcomes, without undermining
23 oversight. This is the approach industry takes -- fewer
24 regulations, more consistently applied by an empowered
25 workforce.

1 We should encourage using commercial buying processes
2 and look at dollar thresholds that trigger regulations to
3 ensure that the cost and delay of imposing requirements do
4 not outweigh the potential savings these requirements could
5 generate. We should take a holistic approach to oversight,
6 ensuring that regulations aimed at solving specific problems
7 do not have unintended consequences to the overall
8 acquisition system that causes more harm than good.

9 This brings me to my third point. DoD needs to
10 modernize its IT systems and improve how it uses data to
11 make decisions. Data analytics can improve all aspects of
12 procurement, but DoD's IT and business systems are hampering
13 its ability to leverage data.

14 First, DoD is using outdated systems and plans to spend
15 more than \$275 million over the next 4 years on systems that
16 the DoD Comptroller's Office stated, quote, "can and should
17 be retired." And that is only the financial systems.

18 Second, DoD faces cultural and bureaucratic challenges
19 in adopting modern IT systems, as exhibited in the stalled
20 effort to replace the Defense Travel System with a modern
21 and proven commercial IT solution that is used today by
22 thousands of companies.

23 DoD is working to improve its data architecture. Just
24 a few weeks ago DLA awarded a contract to adopt commercial
25 supply chain and business capabilities. Such efforts can

1 dramatically improve acquisitions.

2 This brings me to my fourth point. Operations and
3 maintenance matter. Sometimes our focus on the procurement
4 of a weapons system and on driving down early procurement
5 costs has negative long-term effects. Seventy percent of
6 the lifecycle cost of systems is operation and maintenance,
7 yet we are not investing sufficiently in that area. This
8 trend is hurting readiness. It is cheaper to maintain
9 systems that we already have than to buy more systems to
10 make up for readiness gaps that are a result of insufficient
11 O&M.

12 Finally my last point. We can be smarter in helping
13 small businesses. Despite meeting all its small business
14 targets, the number of small businesses working with DoD has
15 declined over the last 12 years. The targets and set-asides
16 too often are an end in themselves rather than a catalyst
17 for expanding small business participation in the defense
18 industrial base or identifying capabilities that we need.

19 DoD and Congress can take other approaches to expand
20 small business participation. For example, small businesses
21 generally do not have the resources to build or maintain
22 secure compartment information facilities, or SCIFs,
23 creating a barrier to entry for small businesses. Allowing
24 businesses to access underutilized SCIF space or
25 establishing new SCIFs, for example in excess GSA

1 facilities, could help small and other businesses increase
2 competition and provide new capabilities to the Department.

3 Thank you for the opportunity to testify today, and I
4 look forward to our conversation.

5 [The prepared statement of Mr. Schwartz follows:]

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Senator Hirono: Thank you very much. Mr. Levine?

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1 STATEMENT OF HON. PETER K. LEVINE, SENIOR FELLOW AT
2 THE INSTITUTE FOR DEFENSE ANALYSES

3 Mr. Levine: Thank you, Chairman Hirono. Thank you,
4 Ranking Member Sullivan. Senator Kaine, good to see you
5 again. I would like to just first thank you not just for
6 inviting me here today but for the leadership that you are
7 showing on this issue. This is a tremendously important
8 issue, and it is really good to see Senators like you
9 committed to making the acquisition system better.

10 Rather than repeating my opening statement, what I
11 thought I would do is to respond to a few of the really good
12 points that you guys made -- Senators, sorry -- that you
13 made in your opening statements. So first, Senator Hirono,
14 you mentioned the acquisition workforce, and I agree that
15 that is completely key. And you talked about how we lose
16 some of our best acquisition people when they are in their
17 prime years.

18 I would urge you, one area to think about in that
19 regard is think about military rather than civilian, because
20 the real brain drain that we have in the acquisition system
21 is on the military side rather than civilian side, and it is
22 because of career patterns, where we push people out because
23 of up-or-out when they are still in their prime. And I know
24 this Committee has thought, in the past, about career tracks
25 that would be different for some military, but the

1 acquisition field is one area where we probably need to
2 think about that. We train these guys up, they are really,
3 really good, and then we push them out because they are not
4 going to make general officer or flag officer.

5 Second, Senator, you mentioned risk, and I agree with
6 you it is important to take risk. And I really appreciate
7 the fact, Chairman Hirono, that you mentioned smart risk
8 because it is important as we take risks that we understand
9 where we should take them and where we should not take them.
10 And what I would say is it is important to fail early. It
11 is important to take risks early also. So you want to take
12 your risks when you have less money at stake, less
13 quantities at stake. You do not want to take big risks when
14 you have a billion-dollar program and millions of items, and
15 if you fail you are going to be failing with billions of
16 dollars rather than hundreds of millions or tens of
17 millions. You want to figure those things out early.

18 Turning to Senator Sullivan, I really appreciated what
19 you said about some of the tools that are being
20 underutilized, and you particularly mentioned there the
21 middle tier acquisition, and I would agree that I think
22 there are some ways in which that has been underutilized.
23 But I would urge you to think about it this way. Not
24 everything can be bought with middle tier acquisition
25 authority. For example, we are never going to think about

1 building an aircraft carrier with middle tier because you
2 cannot build an aircraft carrier in 5 years. I think we
3 know that. A next-generation bomber is not going to be
4 built with middle tier because it is not going to be done in
5 5 years.

6 What I would urge you to think about is, and to push
7 the Department on is, what that authority really tells the
8 Department is think differently about what you are going to
9 buy, not just how you are going to buy it but what you are
10 going to buy. Think about things that are closer to being
11 ready for acquisition, more incremental, and you will be
12 able to buy them faster and field them faster, field them
13 more incrementally and continuous, and engage in continuous
14 improvement.

15 It is these huge projects where we put all of our eggs
16 in one basket that is going to take 20 years. It cannot be
17 done with middle tier, so you have to think about breaking
18 it down differently and buying different things. It is not
19 just a matter of using different procedures. It is a matter
20 of are we going to keep buying the same things in the same
21 way.

22 Second, you mentioned the PPBE Commission. I sat on
23 that commission, as well. I would be happy, as we get into
24 the Q&A, to talk to you about what we found and our
25 conclusions regarding the valley of death and some things

1 that Congress can do there.

2 The last thing that I would like to leave you with is,
3 yes, the acquisition system is overly bureaucratic, it has
4 too many regulations. I have some suggestions in my written
5 testimony of some areas where you could take action on it.
6 But to give credit to the people who are in the Department,
7 I think we need to remember that what they are trying to do
8 is really, really hard. It is really hard to build
9 something from scratch, to design it from the ground up. It
10 is also really hard even to buy commercial technology.
11 Commercial off-the-shelf should be easier than it is, where
12 we are buying something that already exists. But most of
13 the time when we are buying commercial we are not buying
14 off-the-shelf. We are buying a technology that will cost as
15 much time and as much money to adapt for military use as it
16 took to develop in the first place.

17 If you look at the Army's experience with battlefield
18 radios and communications with JTRS and WIN-T you can see
19 systems that took decades. That is not because they are
20 technologies that have not been used in the commercial
21 sector. It is because putting those into a military
22 situation and adopting them to be battle-hardened and ready
23 for use in all the circumstances where we need it, in a
24 contested environment, requires adapting them, and once you
25 start changing them it becomes extremely expensive and time

1 consuming. It is hard to do.

2 So all the points that you make are really valid, but
3 this is a hard problem to crack. It is not something where
4 there are going to be any easy answers.

5 Thank you for your time, and I look forward to your
6 questions.

7 [The prepared statement of Mr. Levine follows:]

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1 Senator Hirono: Thank you very much. Mr. Greenwalt.

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1 STATEMENT OF WILLIAM C. GREENWALT, Ph.D., NONRESIDENT
2 SENIOR FELLOW AT THE AMERICAN ENTERPRISE INSTITUTE

3 Dr. Greenwalt: Thank you, Chairman Hirono and Senator
4 Sullivan, Senator Kaine, other distinguished members of the
5 Subcommittee.

6 I think I am going to do the same thing. I entered a
7 statement for the record, and I will just kind of summarize
8 and try to take on some of these points.

9 The first thing is yes, we do have a system today, an
10 acquisition system, that is optimized for peacetime, and I
11 think we have to understand that. A lot of conflicting
12 different executive orders, regulations, law that drive
13 behavior in the acquisition system.

14 For 30 years we have been optimizing this system, and
15 it is frankly now too slow to do what is necessary. This
16 Committee, this Subcommittee, about 10 years ago essentially
17 looked at that and said we need to go faster, and created a
18 toolkit, including middle tier, including production and
19 other transactions, including ways of hiring acquisition
20 workforce faster. And it was adopted and tried to replicate
21 a system of innovation that the Department of Defense used
22 to have in the post-World War II era, in the 1950s, and it
23 was driven by time. It was driven by urgency. It was
24 driven by step-by-step, serial operational prototyping. In
25 other words, middle tier type of acquisition was a way of

1 trying to replicate that system.

2 And guess what? What did we do in the '50s? We
3 deployed aircraft carriers, new aircraft classes in less
4 than 5 years, bombers in less than 5 years, ICBMs, first of
5 a kind, in less than 5 years, first reconnaissance
6 satellites in less than 5 years. We did these types of new
7 innovations.

8 Now would they be like the type of system that we have
9 created in the '60s, '70s, '80s, and '90s? No, because
10 there were different criteria we have added to ensure
11 certain types of process and certain types of systems that
12 are producible or maintainable or whatever. But innovation
13 was driven in that time through a time-based, competitive
14 process of serial operational prototypes. And this
15 Committee, with middle tier, tried to replicate that.

16 The second most important part was at that time the
17 industrial base was brought together. The commercial and
18 the defense industrial base was working together. And the
19 barriers that exist today between Silicon Valley working
20 with defense or other commercial companies did not exist
21 then and is so much higher today. So other transactions are
22 one of the ways to do that because you can negotiate a
23 commercial terms and conditions, a commercial way of doing
24 business with those companies. And the idea is to bring
25 them forward.

1 Probably the biggest barrier today -- and I am glad
2 Peter is here from the PPBE Commission -- is budgeting. In
3 other words, the valley of death problem is a budget issue-
4 driven problem. Venture capital needs revenue, and each
5 time you move forward in the acquisition process there is
6 kind of a waiting period. And in any of those waiting
7 periods is there is a need for flexible funds to carry it
8 through to the next stage. And wherever the PPBE Commission
9 has proposed those types of flexible funding, that is
10 something I think for this Committee to seriously consider
11 because it really could do a lot of good things.

12 I proposed a pilot in my testimony in which Congress
13 could essentially consider as a way of empowering agencies
14 like DIU or SOCOM or whatever to essentially pull together
15 these acquisition authorities and streamline the ability for
16 them to use that. I think the Replicator Initiative is a
17 really positive initiative if we can get there. You have
18 got to put an organization in charge of these things. You
19 need to ensure that they have got the right acquisition
20 workforce. That requires hiring authority and that requires
21 various authorities to be able to use there. You have to
22 empower them to use other transactions, empower them to use
23 rapid acquisition authority, empower them to use middle tier
24 authority, and finally, give them the types of flexible
25 budget flexibility that can carry these programs into the

1 next phase.

2 With that I think I am looking forward to your
3 questions, and hopefully we will be able to give you some
4 answers.

5 [The prepared statement of Dr. Greenwalt follows:]

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1 Senator Sullivan: [Presiding.] Great. The Chair went
2 to go to vote so I am going to take over here. Let me
3 begin.

4 Mr. Schwartz, did you bring a copy of the FAR?

5 Mr. Schwartz: Among other things, yes.

6 Senator Sullivan: Can I see it, or is it too heavy to
7 lift?

8 Mr. Schwartz: I will lift it, but Congressman, this is
9 the complete works of [inaudible]. You also have the
10 Federal Acquisition Regulation, the Defense Federal
11 Acquisition Regulation, and the PGI for the Defense Federal
12 Acquisition Regulation. If you work for some of the
13 services there is more guidance and regulation, but I
14 apologize. I ran out of paper this morning. So it will bge
15 a little bit higher.

16 This is what we have to do for acquisition. Now when I
17 was in a grade school it was hard enough for me to read
18 William Shakespeare. This is a difficulty, and I think one
19 of the things that this does, when we are talking about
20 empowering the workforce, it freezes the workforce.

21 Senator Sullivan: Yes.

22 Mr. Schwartz: At this point to tell one story about
23 it, if I may. I remember after Hurrricanes Katrina and Rita
24 I went down with the GAO team to visit, and we are talking
25 to a bunch of contracting officers working really hard for

1 recovery for people, for FEMA. And these people were
2 working 16, 17 hour days, and at one point they turned to us
3 and said, "Just tell us what you want. If you want small
4 business, we will get you small business. If you want best
5 price we will get you best price. If you want speed we will
6 get you speed. If you want best quality we will get you
7 best quality. We can't do it all, all the time."

8 One, he is right, but two, what that concerns me with
9 is the one thing he did not mention is what is best for the
10 people. He mentioned he is always thinking about what the
11 regulations tell me to do and what will I be yelled at.

12 Senator Sullivan: Yeah. So let me ask this real
13 quick. If you are a company with a great innovative idea,
14 and you have done a prototype on your own with private
15 investor money, and you are like, all right, now I want to
16 get this to the Pentagon, because this is going to help in
17 our upcoming war with China, or whatever, do they have to
18 all of a sudden understand that stack, or is that for the
19 contracting officers, or the combo?

20 Mr. Schwartz: It is both. Contracting officers, for
21 sure.

22 [Clerk turned on mic.]

23 Mr. Schwartz: Oh, thank you very much. Thank you.
24 But you need to know if you need a cost accounting system.
25 You need to know if you have to have certain small business

1 plans. You need to know what domestic buying requirements
2 you have. You need to know --

3 Senator Sullivan: So if you are beginning, an
4 innovative American company, which again, in my view is a
5 giant strategic advantage we have over everybody else. And
6 now they are interested, these great Americans who are
7 really innovative and really smart want to help. They see
8 the challenges in the world. They see that authoritarian
9 dictatorships are on the march, whether in Iran, China,
10 Russia, North Korea, working together. So they want to
11 help. But then they see that and they are just like, what?

12 Mr. Schwartz: They do not. Many do not. I know a
13 company that has a great technology, someone who worked on
14 the Hill, and I said, "This is great. Have you brought this
15 to DoD?" He said, "I am not going to. It is just not worth
16 it. We are small. We have a great technology. We have
17 limited resources. I am not going through that." And it
18 broke my heart.

19 Senator Sullivan: Yeah. Okay. Let me ask Dr.
20 Greenwalt. One thing that I think a lot of people miss
21 -- so I like to read a lot of history. I am reading this
22 really good book that was actually given to me by the CNO a
23 couple of weeks ago, called "The Admirals," and it is all
24 about five-star admirals that we had during World War II,
25 and the innovation, and of course that was an entire

1 societal effort. But I think from -- I am trying to
2 remember. I do not want to get the numbers incorrect, but
3 we cranked out, in 1943, '42 to '43, I think, like 17
4 aircraft carriers or something, and then in '44 the numbers
5 are incredible.

6 But the innovation was also occurring, as you just
7 mentioned, in the '50s. So we are not at like World War II
8 levels of entire economy focus. We are in peace, with the
9 exception, of course, of the Korean War, which is a big
10 exception. So what happened after that? You just gave some
11 good examples.

12 The other one I always like to cite is the SR-71, which
13 I think I have read they designed on a slide rule and it
14 came from concept to prototype in 18 months, or something
15 crazy like that. And that spy plane lasted for decades.

16 So what happened? What happened between the '50s SR-71
17 and the F-35 that took, I think, 25 years to field. What
18 happened, in your view?

19 Dr. Greenwalt: It is a long story but I will try to
20 summarize. In the 1960s we adopted a way of putting a
21 system around all of that innovation, and I even kind of
22 think about there is the good Rickover and the bad Rickover.
23 And the good Rickover was the one who essentially was of the
24 time-based innovation approach, you know, developed the
25 first naval reactor, if you remember how many classes of

1 nuclear submarines were created in the '50s, to get to the
2 point where we wanted to.

3 We got to the point where we wanted to, and then we
4 decided, well, we are going to manufacture these, and we
5 shifted into a different system. And what we should have
6 done is had two acquisition systems, one for how to be
7 incredibly innovative and drive new technology into the
8 hands of the warfighter and the other was how to produce
9 systems at scale.

10 But when we started producing systems at scale, Admiral
11 Rickover wanted cost accounting standards. He wanted
12 greater insight into contractor costs. And that is kind of,
13 I do not know if you want to say the bad Rickover, that is
14 just the Rickover that transitioned to something that was
15 needed to produce things at scale. So that is one thing.

16 The other thing is that we adopted what were business
17 best practices of the 1950s from the private sector, which
18 actually were not really good business best practices. And
19 they were based on centralized planning, based on
20 prediction, very linear ways of thinking. They were brought
21 from Ford Motor Company with McNamara in the '60s. And the
22 DoD adopted these, writ large, and we have been working on
23 this system for the last 60 years.

24 But what happened was we did not quite realize that the
25 same management system did not work out very well for the

1 private sector. The Japanese essentially, with quality
2 management and other approaches, essentially out-competed
3 us, and the private sector threw out all this centralized
4 planning. They threw out all these ways of bureaucratized
5 linear process. But the Department of Defense never did.

6 So we adopted many of those processes. We essentially
7 looked at our adversary, the Soviet Union, and mirrored some
8 of their processes, and we created a morass of bureaucracy
9 in the '60s. So the thought is let's go back to the '50s,
10 let's go back to how we can produce things better, and
11 create two acquisition systems that essentially can
12 complement each other.

13 Senator Sullivan: Good. Great. Well, listen, a lot
14 more to discuss. When you talk about imitating our
15 adversaries I have always thought it would make a lot of
16 sense -- hopefully no Chinese Communist officials are
17 listening right now -- but we mark that giant pile "Top
18 Secret." They have been stealing all of our stuff anyway.
19 We dump it in front of the Chinese embassy and hopefully
20 they get it, and are like, "Oh, this is amazing. We will
21 use this." And then we will destroy the way we have kind of
22 destroyed our system." But maybe that would not work.

23 Senator Kaine.

24 Senator Kaine: Thank you, Senator Sullivan, and thanks
25 to colleagues. I want to follow up a little bit on where

1 Dan started -- and Peter, I liked that you called us "you
2 guys" because you are so familiar to this Committee. I saw
3 you slip there, and I appreciated that -- which is entry
4 points for the small innovators. If the small innovators
5 look at that stack, or as you said, Mr. Schwartz, they are
6 just like, "I have a capacity I could bring and I would like
7 to but they are not going to do it."

8 Talk about the efficacy of the DIUs and the AFWERX. I
9 think Dr. Greenwalt mentioned DIUs. There is the effort to
10 create some entry points that might be more friendly to
11 these small innovators. Are they achieving their value? Is
12 there more we should do to help them achieve their value?

13 Dr. Greenwalt, do you want to start since you mentioned
14 that in your testimony?

15 Dr. Greenwalt: Yeah, no, I think Congress and the
16 Secretary of Defense need to empower them and give them the
17 tools to do what they are empowered to do. So DIU should be
18 given flexible hiring authorities. They should be given
19 flexible budgeting authorities. They should be given the
20 ability to move fast and transition these types of systems.

21 You know, we have the nucleus of doing the right
22 things. We probably just need more of them. And they need
23 to be empowered to take that there and say, let's use an
24 OTA, which is a one-page agreement, and work with the
25 private sector, and then eventually evolve into something

1 better. Peter?

2 Senator Kaine: Please, Peter.

3 Mr. Levine: Senator, yes, I think they are helpful,
4 and they are helpful not just because of a less bureaucratic
5 approach. They are helpful because one of the biggest
6 problems facing that small business is figuring out where,
7 in the Department of Defense, to go with the product. Just
8 looking at 800,000 civilians and 1.2 million, or however
9 many military we have, and trying to figure out all these
10 different commands, who is that is going to want my product?

11 So if you have entry points who look like they are
12 friendly to innovative products, that is a really good place
13 to start, not just from a point of view of regulation but
14 from the point of view of having an entry point.

15 If I could, I would like to take a couple of minutes
16 and speak in favor of regulations, since you do not get to
17 hear that very often. You are too young -- I know you are
18 my age so I guess I cannot say that -- but you are almost
19 too young to remember back to the beginning of the Clinton
20 administration when Al Gore was doing his reinventing
21 government.

22 But one of the things that they did when they came in
23 was to look at regulation, not just this, which was here at
24 the time, but other regulations. And one of the things that
25 they actually did was, on the personnel side there was

1 something called the Federal Personnel Manual, which was for
2 civilian personnel policy, which was about as thick as this,
3 and they said we are going to deal with regulation by
4 throwing that out. The Federal Personnel Manual does not
5 exist as of today.

6 And the problem is that all the problems, all the
7 issues that personnel professionals had to deal with were
8 still there. So you had pirated copies of the Federal
9 Personnel Manual that people still had on their shelves,
10 even though they were not official, because they needed to
11 figure out a framework that they could use to answer those
12 questions.

13 And so my take on these regulations is when you are
14 buying everything from nuclear aircraft carriers to paper
15 clips you do not have two acquisitions. You do not even
16 have four acquisition pathways. You have 15, 20, 50
17 acquisition systems. And in order to govern 15, 20, or 50
18 acquisition systems which are governing different types of
19 decisions, a full range of decisions on everything from
20 technical data rights to negotiating price to small business
21 privileges, whatever it is, it takes a lot of words.

22 And, in fact, I have this contrarian view that if you
23 want to give more flexibility, what you actually need is
24 more pages, not less. And the reason is if you just take
25 away the pages then people will go into their defensive

1 crouches and do what they have always done, because they do
2 not know what they can get away with and what they cannot.

3 If you want to encourage them to do something different
4 you need to tell them, "Here are your options and here are
5 the things you can be thinking about as you consider those
6 options." Then you are giving them protection to take
7 risks, and telling them it is okay to take risks. If you
8 are silent then you have not answered any of their questions
9 and they go back to this is the way I have always done it.

10 Senator Kaine: If I could, Madam Chair, I would love
11 to ask another question, and it might involve an answer
12 pretty deep into my stoppage time.

13 I am the Chairman of the Seapower Subcommittee, and so
14 in particular I would love any of your thoughts on ship and
15 sub procurement. Like what do you think about the way the
16 Navy procures ships and subs, and are there big-picture
17 pieces of advice you would offer to us as we are getting
18 into the NDAA. There is some controversy right at the gate
19 in the President's budget about, you know, the carrier block
20 by sliding the reduction in Virginia-class at the same time
21 as we are telling the Aussies we are going to produce
22 Virginia-class subs for them.

23 Talk to us about your thoughts about ship and sub
24 procurement.

25 Dr. Greenwalt: I think on the ship and sub side that

1 is where the traditional acquisition system actually works
2 pretty well. And I think our biggest problem in some of our
3 other areas is that we have tried to take the ship and sub
4 acquisition process and apply it into areas where it is not
5 really appropriate.

6 I think what we need here is we have an industrial base
7 problem. We essentially have a workforce, supply chain,
8 budget problem. But the way we buy things is pretty time
9 tested.

10 Now, if you wanted to do new, autonomous vehicles, new
11 technology, I would take it in a different way than how we
12 are buying submarines today. And that is why we need
13 multiple pathways and multiple ways of doing things.

14 Senator Kaine: Can I put you on the spot, Mr.
15 Schwartz, on this question about the Navy?

16 Mr. Schwartz: Yeah, on the Navy? Absolutely.

17 Senator Kaine: Ships and subs.

18 Mr. Schwartz: Yeah. So a couple of things. One is
19 the workforce of the contractors is a huge problem. If there
20 is too much of a gap between ships that you are building you
21 lose the welders. That is not an easy skill, right, and the
22 cost of bringing back the welders and retraining them and
23 losing welders in and of itself has a consequence on budget.
24 So that is one.

25 The second is thinking through how we do CapEx. I

1 remember -- and this was a number of years ago -- but going
2 down to a shipyard, and everything was outdoors, right.
3 Now, some of that has changed, but I think it is
4 illustrative because in Asia they had already, for years and
5 years and years, been doing a lot of this building indoors,
6 to the point where the Navy was paying for material that was
7 rusted because it was outdoors. The sick leave for workers,
8 because they were doing the welding outdoors, was a cost.

9 Sometimes those things, in trying to save money really
10 has the larger consequence of not saving money because of
11 the perturbation of the workforce, because of not wanting to
12 invest in the facility that has people outdoors. I think
13 those are a couple.

14 And then, if I may, I want to get you two data points
15 on small business and DIU and those, because you asked.

16 As the defense industrial base is shrinking, from 2010
17 to 2020, the number of companies in consortia, which
18 primarily do OTAs, of 12 consortia that work with the
19 Federal Government went from 365 to 5,600. It is not that
20 companies do not want to work with the DoD. Companies do
21 not want to work with this, because the consortia are the
22 entry point, and does not do some of this. And I am not
23 saying regulation is bad. You know, I do not disagree with
24 Peter at all on that. It is how we do it.

25 The other point is of the 12 consortia, their

1 membership was either 56 to 72 percent small businesses. So
2 there are entry points. We just need to leverage those
3 more.

4 Senator Kaine: Could I ask Mr. Levine, please, Peter,
5 on the Navy ship and sub procurement.

6 Mr. Levine: Senator, you take me down memory lane
7 because if you remember the last year I was here I believe
8 we had an administration that cut an aircraft carrier, and
9 you and I had to work together to figure out how to pay for
10 that.

11 Which brings me to what I think is really the crux of
12 the issue, which is we are trying to build and maintain a
13 Navy that is bigger than we can fit into the budget we have.
14 And that is what leads to the problem with the workforce.
15 That is what leads to the problem with gaps in production.
16 And we are always looking for ways to build ships
17 differently and less expensively, and we have run into
18 problems with that where we have tried to cut corners and it
19 has come back to hurt us.

20 But if there were one place that -- and I know this is
21 not going to be new to you -- but if there was one place
22 that we need to continue to look it is the lack of a
23 commercial industrial base in this area. Because we do not
24 buy commercial-built ships in the country anymore we have a
25 big problem with maintain an industrial base. And if there

1 were some ways that we could rebuild a commercial industrial
2 base it would be an awful lot easier on us to build military
3 ships.

4 Senator Kaine: As I hand it back to the Chair you
5 sound like Mark Kelly, a proud Merchant Marine Academy
6 graduate, who makes that point often at our hearings. So
7 thanks, Madam Chair.

8 Senator Hirono: [Presiding.] Thank you. Having
9 chaired the Seapower Subcommittee before, yes, that is
10 another committee that is always pretty much frustrated. I
11 think that is a good way to explain a lot of the challenges
12 that we face.

13 One thing that did catch my attention, Mr. Schwartz, is
14 when you say the DoD is planning to spend \$725 million in
15 the next 4 years on systems that are already outdated. But
16 having said that, that sounds outrageous, but isn't it the
17 case also that by the time we figure out what systems would
18 make sense for us to acquire and figure it out and
19 installing it, we are already behind. We were constantly
20 behind. Maybe the question is how far behind, how far
21 outdated are we going not find acceptable.

22 But what is your answer? You gave that as, I would
23 say, an outrageous example of inefficiencies.

24 Mr. Schwartz: I would suggest one of the fundamental
25 problems is the challenge DoD has after they have identified

1 a system they are actually implementing. And that comes
2 down to business transformation, or it can go by a number of
3 names.

4 And an example is the Defense Travel System. It is
5 not, in fact, the most popular system in the Department of
6 Defense. I know a lot of people use it, but it is not. A
7 system was identified to replace it with a successful OTA,
8 one that is used by thousands of companies and hundreds of
9 thousands of people every day, a commercial system. It is
10 huge.

11 They tried to adopt it, and they just gave up and said,
12 "we just cannot do it. Not because the system does not work
13 but because it is too hard culturally for us to get it
14 adopted throughout the Department of Defense." That is a
15 cultural problem. It is not just identifying the system.
16 It is that business process transformation that DoD does not
17 do well.

18 Senator Hirono: Is it that it does not do well because
19 we do not have the acquisition people, workforce, that can
20 make it happen? Is it that we do not have enough
21 experienced people, they leave just when they get the
22 experience that they need to make smart decisions? I mean,
23 what it is that makes them incapable?

24 Mr. Schwartz: I think there are a lot of reasons, but
25 I know Peter has got some thoughts on this.

1 Senator Hirono: Mr. Levine.

2 Mr. Levine: Senator, it is hard, and let me talk about
3 DTS. I was here on Capitol Hill when a couple of attempts
4 to replace DTS failed. I was in the Department of Defense,
5 and I cannot remember which position, but with some
6 responsibility for DTS when the Defense Digital Service came
7 to me and said, "We want to replace DTS." And I told them,
8 "Good luck. You are not going to be able to." And I will
9 tell you why -- because it is not a technology problem. It
10 is not a problem of adapting a commercial technology. It is
11 not a problem that you have a commercial system that does
12 not work. It is not a cultural problem.

13 The problem is, with DTS, we have a set of travel
14 regulations that are almost as big as this set of
15 acquisition regulations, and so our Defense Travel System
16 has to comply with these regulations. You can take a
17 commercial system, with commercial technology that works off
18 the shelf, but when you try to build into it these
19 regulations the whole thing collapses, and that is what we
20 have been up against over and over again.

21 You cannot solve the DTS problem until you solve the
22 defense travel regulations problem. That is a corner of
23 what you deal with, with business systems in the Department
24 of Defense, generally. We take an off-the-shelf commercial
25 system, an enterprise resource program, for example, an ERP,

1 and we say this is something that business uses to run their
2 business. Why can't we run it? And then you discover that
3 Defense looks different, and it works differently, and we
4 have different systems we need to plug into different data,
5 different requirements, and the commercial system cannot
6 bear all of that. So we have a huge problem with adoption
7 of commercial technology because we are different.

8 Mr. Schwartz: I would actually disagree with some of
9 that on DTS because DoD's own view of the pilot program was
10 that it was successful. And while I totally agree with you,
11 Peter, that the financial rules, which I would have printed
12 out had I had more paper, are a problem, it is also a
13 cultural barrier, because there was a directive that this
14 shall be the system of record, and then the services decided
15 they are not going to implement it.

16 So I think it is both. I do not think it is one or the
17 other. I think it is both.

18 Senator Hirono: So those reams of paper that you have
19 there, that is to show what? All the requirements?

20 Mr. Schwartz: Oh, sorry. I apologize. So what we
21 have here is the Federal Acquisition Regulation. Now if you
22 are in the Department of Defense you also have to follow the
23 Defense Federal Acquisition Regulation. Then you will have
24 the PGI for the Defense Federal Acquisition Regulation, the
25 guidance. There is also, depending on what service you are,

1 more regulations that could be Army or Navy specific, but as
2 I mentioned, I ran out of paper so I could not print more,
3 so I apologize. And that was just to compare it to the
4 complete works of Shakespeare.

5 Senator Kaine: Madam Chair?

6 Senator Hirono: Yes.

7 Senator Kaine: Could I just interject something? In
8 which of those two sets of texts is the phrase "A tale told
9 by an idiot, full of sound and fury, and signifying
10 nothing"? Is that Shakespeare or is that the Federal
11 Regulations?

12 Mr. Schwartz: I believe it is Shakespeare.

13 Senator Kaine: Okay. Just checking.

14 Senator Hirono: So, okay. What I get is that we have
15 overregulation, or all these requirements, that we can
16 reduce some of those requirements and still get what we need
17 in terms of, say, for our warfighters' capabilities. So
18 that is one. We have reams and reams of stuff that they
19 have to comply with.

20 But on the other hand, I am also told that through
21 these pathways that I talked about, six pathways, those
22 pathways were intended to speed up the acquisition process,
23 but that does not happen. Those are tools that we have
24 provided to the acquisition workforce, but they are not
25 fully utilized because we do not have a workforce willing to

1 take smart risks.

2 I want to spend a little bit of time -- I know I am
3 over time but what the heck, I am the Chair. By the way, if
4 you like a second round since we are here, you know, please
5 feel free. But really, when we focus on the acquisition
6 workforce the full Committee hearing also focused on a
7 workforce that would be experienced and trained to make use
8 of the tools that are currently available to speed up the
9 processes, including acquisition process. So what can you
10 tell this Committee about what to do about a workforce,
11 retaining the kind of a workforce that is willing to take
12 smart risks in acquisitions? Anybody?

13 Mr. Levine: So first I would say that a fair amount of
14 the problem that you identify with using different
15 acquisition pathways is leadership direction rather than the
16 acquisition workforce. So we need to be clear. I think we
17 have a very talented acquisition workforce and we do not
18 want to run them down too much. We do have a problem with
19 recapitalizing and rebuilding and retaining and building on
20 expertise.

21 When I was on the Committee 15 or so years ago I think
22 one of the things that we did that was the most important
23 the whole time I was here that I worked on was creating the
24 Defense Acquisition Workforce Development Fund. The reason
25 I say that is because we neglect our civilian acquisition

1 workforce. We spend hundreds of millions of dollars every
2 year on military recruiting, on military training. We plan
3 for our military strategically. We think about what talent
4 we are bringing in today, not only in terms of filling the
5 job today but where are they going to be in 10 years and 15
6 years and 20 years, and how are we going to have the
7 expertise that we need.

8 On the civilian side we do not recruit, we do not
9 systematically retrain, we do not take advantage of the
10 training when we send people to training. We bring them
11 back and we put them in jobs that do not relate to the
12 training that they had. We do not plan career paths. We
13 really neglect our civilian workforce.

14 And yes, we can do more there with the resources we
15 have, but it really is an area where we ought to think about
16 more resources, and we ought to think about reinvigorating
17 the Defense Acquisition Workforce Fund or creating something
18 similar, because it is a pervasive problem, the underfunding
19 and the neglect of the workforce.

20 And just to put it in perspective, my wife, who is a
21 civil servant, used to come home with computer problems, and
22 my son would look at her and say, "I can't believe that they
23 are paying you however much they are paying you and you have
24 a problem with a \$300 computer, and they won't just replace
25 it. That is 2 hours of your time and the Federal Government

1 won't do that."

2 It is the same thing with the investment that we put
3 into the civilian workforce and other places, in recruiting,
4 in training, in career paths, in building quality and making
5 the workplace an attractive place to work. A small amount
6 of investment would go a really long way there.

7 Senator Hirono: Well, I would like to identify, how
8 many people are in the civilian workforce part of the
9 acquisition workforce?

10 Mr. Levine: Well, the acquisition workforce is
11 somewhere in the order of 150,000, and it is predominantly
12 civilian.

13 Mr. Schwartz: But if I may, we also do not always put
14 people in positions to succeed. And I will give you an
15 example. There was, I believe it was a lieutenant colonel,
16 and this is going to the uniformed personnel example that
17 Peter was talking about in his statement. He was doing his
18 first stint as a program manager on an IT system for
19 logistics. So I said to him, "Oh wow, this is great. It is
20 your first program manager position. That is great. So you
21 must have experience in IT." He said, "No, I never did IT
22 before." "Okay, but you have done logistics." "No, never
23 did logistics before."

24 We did not put him in a position to succeed, and that
25 is a problem.

1 Dr. Greenwalt: Can I follow on to what Peter said?

2 Senator Hirono: Certainly.

3 Dr. Greenwalt: I think Peter was being way too modest
4 about the Defense Acquisition Workforce Development Fund.
5 That was probably the most significant piece of legislation
6 this Committee passed to improve the acquisition workforce,
7 and unfortunately about 3 or 4 years ago that fund was
8 abolished and replaced by something else, which is not even
9 capable of doing what is necessary. And I think the
10 recommendation that I would make -- and I do not know if
11 Peter would make too -- is to reestablish that funding
12 mechanism, because that funding mechanism was very unique
13 and clever in the way it took expiring appropriations or
14 took a tax on expiring appropriations and brought that money
15 in to pay for training and new hires and things like that.
16 It worked well for at least 10 years.

17 Senator Hirono: Okay. I know I am going to need to go
18 and vote soon. I do not know if you do also. I understand
19 that Senator Sullivan is coming back. I assume he wants a
20 second round. You may want a second round.

21 But really focusing on what we need to do in
22 acquisition changes, I understand that we need to do better
23 with the civilian workforce. I also understand we need to
24 do better with the military workforce. So if you were to
25 focus on just on the workforce, I would very much appreciate

1 some very specific things that we should be doing to empower
2 the workforce to take what I would call smart risks,
3 understanding that smart risk is also in the eyes of the
4 beholder. It is not that easy to define.

5 But I do understand that there are some specific things
6 we can do to train our workforce better, to retain them, and
7 those things. So if you can provide us with some specifics,
8 which I think you did -- staff has them -- we will follow up
9 with some specific changes that we can do.

10 What to do with the \$700 million we are going to spend
11 on our outdated system I am not quite sure what we can do on
12 that, but we will certainly give it a whirl.

13 Did you want a second round of questions?

14 Senator Sullivan: Oh, I have like 20 more questions,
15 but I am good, and I voted twice so I am ready to cover for
16 the Chair if she wants to. Is that over to me, Madam Chair?

17 Senator Hirono: Yes.

18 Senator Sullivan: [Presiding.] Okay. Mr. Greenwalt,
19 or Dr. Greenwalt, I want to just follow up, and this is for
20 all three of you. This idea, and I have heard it a lot, and
21 I think it makes a lot of sense, the idea of maybe a two-
22 track system. And, you know, you have the system that you
23 need. It is kind of a command economy system that you need
24 to build a sub or an aircraft carrier. Okay, we all get
25 that, and that has its own processes and everything.

1 But another track that would be much more focused on
2 speed -- although the first track should be focused on speed
3 too. Could you elaborate on that a little bit more, and any
4 other witnesses who want to, if you think that is a good
5 idea.

6 Dr. Greenwalt: I would be happy to. And I think the
7 acquisition pathways that DoD has come forward with actually
8 is trying to do that. So the major capability area pathway
9 is exactly what we were talking about as far as the
10 submarines and the large legacy production of things that we
11 are going to continue to produce as platforms in the next
12 few decades.

13 Senator Sullivan: And there is no giant market for
14 subs, right? I mean, there is one buyer. I mean, well,
15 maybe a few buyers.

16 Dr. Greenwalt: It is a different industrial base
17 problem. It is a different acquisition problem. Now yes,
18 efficiencies can be had, but a lot of it is just dealing
19 with the industrial base and addressing throughput in
20 budget, and long-term, multiyear type procurements would be
21 something that would be helpful there.

22 In the innovation side, that should be a time-based
23 innovation process, and we have two pathways, actually three
24 pathways that could be helpful there -- the rapid
25 acquisition pathway, which is the pathway that was created

1 essentially with congressional authority in the early 2000s
2 to deal with post-9/11 wars in Iraq and Afghanistan, and
3 those were designed to deploy capability of the warfighter
4 in less than 2 years.

5 Senator Sullivan: Okay. Is that working?

6 Dr. Greenwalt: It has worked in the past.

7 Senator Sullivan: A few times.

8 Dr. Greenwalt: A few times. The key thing there is it
9 has the ability to start things without a new start
10 authority, and it has flexible funds to move forward on
11 those type of starts.

12 Probably in that area the most important thing would be
13 is to bring the combatant commanders into the equation more
14 than they are, and potentially even to think about some type
15 of limited acquisition authority for them to drive some of
16 that change, or at least some type of limited demand.

17 Senator Sullivan: So that is authority you think they
18 have that they are not using.

19 Dr. Greenwalt: They do not have that authority.

20 Senator Sullivan: Oh, they do not have it.

21 Dr. Greenwalt: The combatant commanders do not have
22 the authority. SOCHOM does and Cyber Command has it to a
23 degree --

24 Senator Sullivan: So give it to other combatant
25 commanders.

1 Dr. Greenwalt: But the geographical commands do not.

2 Senator Sullivan: Was that a good idea for this year's
3 NDAA, for example?

4 Dr. Greenwalt: If you did you could create authority
5 like we had with JFCOM. Joint Forces Command was designed
6 to essentially buy on behalf of the geographic commands and
7 drive innovation into the geographic commands.

8 Senator Sullivan: Should we give that to every
9 combatant commander?

10 Dr. Greenwalt: You could do that. They may not be
11 able to handle it, but at least some should pilot it and
12 think about the possibility of doing that.

13 The third pathway is middle tier, and middle tier is
14 the 3 to 5. And again, that authority, if you give it to
15 the right organizations and they can drive innovation, we
16 can be seeing that --

17 Senator Sullivan: But again, didn't we already provide
18 that authority?

19 Dr. Greenwalt: You have provided that authority, and
20 it is being used probably about 1 percent of the budget is
21 now being used middle tier. I mean, that is where we are.

22 Senator Sullivan: Any other thoughts on these two
23 questions, gentlemen? Mr. Levine?

24 Mr. Levine: Senator Sullivan, yes. You are absolutely
25 right. We need at least two pathways, and as Bill has been

1 talking we do have --

2 Senator Sullivan: Or maybe more than two?

3 Mr. Levine: We have a lot more than two, and that is a
4 good thing, and we are underutilizing some of them. I think
5 that is all fair.

6 The one that I would point you to is the software
7 acquisition pathway. I think that there is a lot more that
8 we need to do in that area. Software is unique. We need to
9 buy it different.

10 Senator Sullivan: Almost the flip side of a carrier,
11 right, because software you are updating every 6 months,
12 right, and you have to --

13 Dr. Greenwalt: Maybe every 6 days.

14 Mr. Levine: You are updating frequently, and this is
15 an area, particularly you mentioned the PPBE Commission
16 earlier, where there is a recommendation in there that I
17 would point you to, which is as you update software
18 frequently you are going through development, procurement,
19 testing, debugging, redevelopment, reprocurring, refueling,
20 going around that and around that and around that. If you
21 use the traditional funding system that means you are
22 changing color of money maybe several times in a year. And
23 to get that right and have the right color of money -- I
24 assume color of money is good -- and to have the right color
25 of money at the right time and in the right place is almost

1 an impossibility.

2 So what we say is let's have a different rule for
3 software. If you are buying software with O&M, go ahead and
4 develop it and test it and field it. If you are buying it
5 with procurement, same thing. Go through the entire cycle
6 and just stay in the same color of money because we know
7 software is different and you have to be able to go through
8 that.

9 Senator Sullivan: Like a private company would.

10 Dr. Greenwalt: Absolutely. You are not going to have
11 to go back and ask Congress, because I went through a new
12 cycle where I am debugging something and now that counts as
13 development and I need to get a different color of money.

14 Senator Sullivan: That is one of your big
15 recommendations?

16 Mr. Levine: It is a small recommendation.

17 Senator Sullivan: Well, it sounds pretty substantial.
18 But that authority does not exist right now?

19 Mr. Levine: No, it does not. There is some --

20 Senator Sullivan: That would have to be legislated.

21 Mr. Levine: It would have to be -- it is complicated.
22 So it in the Federal Financial Regulation which you would
23 say is just legislative. In fact, it is sort of dictated by
24 the Appropriations Committee. So you risk getting crossways
25 with the appropriators who feel strongly about how their

1 money is spent.

2 Senator Sullivan: Yeah, that happens here a lot, as
3 you know. Okay.

4 Mr. Schwartz, any other --

5 Mr. Schwartz: Yeah, I will just add two things. One
6 is I have seen that problem with the budget and IT systems,
7 and even not IT or software all the time, and it has a lot
8 of impacts. One is schedule, of course. But the other one
9 is the time it takes to figure these things out. I remember
10 being in a meeting with two programs. One had too much
11 money, one had too little money, because of their schedules,
12 in the same PEO office, and they could not move it. So in
13 an hour and a half meeting, probably 45 minutes was spent on
14 how do they deal with these issues, and that has these
15 knock-on effects.

16 Mr. Levine: Senator, if I could just add one other
17 thing on software. I worked with the Defense Innovation
18 Board's Software -- I cannot remember, SWAP. Def Swap
19 Acquisition? The Software Acquisition Process study,
20 whatever they called it. And they had a recommendation for
21 a separate software acquisition pathway, which Congress
22 adapted.

23 There was one piece of their recommendation that Bill
24 and I actually worked on together, which I thought was very
25 important, which Congress did not adopt. I have it in my

1 testimony, but I think it is worth mentioning here.

2 The issue is that you have some software engineers and
3 developers who are much better and more productive than
4 others. The way our Federal acquisition system works, when
5 we run a competition price has to be a factor. And when
6 price is a factor for something we do not know what we are
7 going to build yet, the way we consider price is by
8 considering rates. So if Company A is going to charge me
9 \$300 an hour for an engineer and Company B is going to
10 charge me \$250 an hour for an engineer, that looks less
11 expensive. Of course, the \$300 engineer may be 10 times as
12 good, and proving that and justifying going to the high-
13 priced contractor is hard.

14 So what we recommended is that this is an area where we
15 need to learn the lessons that we learned 50 years, 40 years
16 ago, with architect/engineer contracts, where we said let's
17 do a competition initially, in certain circumstances where
18 it is appropriate, just based purely on qualifications, and
19 get the best guy in here to do the job, because this is
20 software where it is really critical software, and I want to
21 have the best guy. So I am going to do a competition based
22 on qualifications, and once I get the best guy in then I
23 will negotiate a price with him.

24 Senator Sullivan: Is that in your recommendation?

25 Mr. Levine: It is, and we do that for architects and

1 engineers on the theory that if you are building critical
2 infrastructure you do not want to go to the low-price
3 bidders to design it. You should have the same thing. You
4 should have that same authority for software.

5 Senator Sullivan: Let me ask one more question before
6 I turn to Senator Kelly. This issue of the valley of death,
7 and again, I think this is a giant strategic opportunity for
8 us now that we have all these tech companies and innovators
9 who really want to help on our national defense.

10 I know it is a complicated issue. I hear it from so
11 many, and I am sure all of you do too. What would you, in
12 all of your vast experiences, A, do you agree with me that
13 it is a big problem -- and it is also an opportunity that we
14 have, again, this part of our economy that wants to help the
15 Pentagon. And then what would you give to us as kind of the
16 top three pithy recommendations, and are they regs or is it
17 authorities that we need to provide?

18 And I will just open that up to all three of you.

19 Mr. Levine: Senator, let me just take that one too, at
20 least to start, because this is something the PPBE
21 Commission spent a lot of time thinking about. This deals
22 with how we fund things, and there are two different ways
23 that the PPBE Commission went at this.

24 One is the question of the way the budget is
25 structured. So we structure our budget into such small

1 boxes that it is hard to move money around, so it is hard to
2 make it available if we have an opportunity that shows up in
3 the year of execution. So the technology suddenly is proven
4 and we do not have any money in the right box so we cannot
5 make it available.

6 Senator Sullivan: And that company goes out of
7 business.

8 Mr. Levine: And the company may go out of business,
9 exactly. So we have budget structure recommendations that
10 talk about structuring the budget differently so that money
11 is more flexible.

12 We have reprogramming recommendations which talk about
13 making it easier to move money if you need to, at the last
14 minute. And we have smaller recommendations like the
15 software recommendation I just mentioned to you, about
16 relieving some of the pressure on software. That would make
17 money more flexible. And we have recommendations about
18 delegating further down within the Department of Defense, so
19 things the Department can do itself, delegating further down
20 within the Department of Defense, writing budget
21 justifications more clearly. All these things can provide
22 more flexibility in the year of execution, which could make
23 it easier to move money, which can make it easier to solve
24 problems like that.

25 The one thing I would add to that is I do not want to

1 make it like this is a complete panacea, because a part of
2 the problem will always be is there enough money.

3 Senator Sullivan: Yeah.

4 Mr. Levine: And where do we find the money? So it
5 would be nice if we could commit to all these companies, if
6 your technology proves out we will fund it. But we do not
7 have enough money to make that commitment to all those
8 companies, and sometimes it proves out and we have to look
9 at it and say, "Well, it would be nice to have but I don't
10 have money for it."

11 So the problem will not go away even if you make the
12 process easier, but we ought to take out some of these
13 hurdles that we have got in the system.

14 Senator Sullivan: Okay. Any other quick thoughts on
15 that?

16 Dr. Greenwalt: Yeah. I think the Department of
17 Defense needs to start looking at this as a venture capital
18 firm. And there is a valley of death in the VC world from
19 Round A to Round B to Round C to Round D, and we could be
20 looking at the same thing for initial prototype, advanced
21 prototype, operational prototype, and so on. And there
22 should be bridge funds between every one of those, just like
23 a VC would, and if something hits, we are going to spend it
24 on this, and it is flexible enough to do that.

25 I would bring together, like the VCs do, which

1 essentially is they compete. I mean, the companies are
2 competing for their money all the time, I would bring the
3 entire industrial base, if it is possible, into an OTA
4 consortium, a non-traditional OTA consortium, to do that,
5 where you could essentially drive Round A's, Round B's,
6 Round C's, Round D's, different types of competitions within
7 that industrial base for the type of programs necessary.

8 Because if they hit then you can just go to the next
9 bridge fund and say, "Okay, this is C round. We are going
10 to go for it." If you do not have enough money in your D
11 round funds, well, then everyone is just kind of going to go
12 away. But if you have got that money that is flexible
13 enough to put on the table if someone succeeds, then you
14 have got something.

15 And I have to say, the most successful OTA we have had
16 was with SpaceX in the sense that we promised that they
17 would essentially, if you can build it we will pay for it.
18 MRAPs were the same way. If you build it, we will have
19 money to put on it. That offer of some kind of potential
20 payoff is what will leap over the valley of death, but if
21 you do not have it you are always going to have a valley of
22 death.

23 Mr. Levine: I will say that I can remember sitting in
24 DMAGs -- this is the senior DoD budget decision forum -- and
25 having the group make a decision, we are going to fund these

1 dozen different experiments in an area, and having the Under
2 Secretary of Defense for Acquisition stand up and say, "I am
3 all for funding these. It is the right thing to do. But
4 you all should know, if they are successful we don't have
5 money to field any of them."

6 Mr. Schwartz: So three things. Let me perhaps suggest
7 guiding lights. But before I do, to reiterate one thing
8 Peter said. This is very hard. This is very complicated.
9 I would suggest no three ideas will absolutely solve the
10 problem. It is a lot of ideas and a lot of effort and a lot
11 of ways over time. It is very complicated.

12 But some guiding lights, if I may offer.

13 The first one is you mentioned, Senator, all these VCs
14 and other companies that want to help. They also need to
15 run a business. And sometimes DoD does not recognize cash
16 flow and profits matter to these companies. And if they
17 cannot make money, if they jeopardize their commercial
18 markets, they are not going to stay in this business, and we
19 will lose them. There is a reason why the defense
20 industrial base has decreased in size for the last 12 years.

21 Second guiding light. Time matters for these
22 companies. They do not have the luxury that DoD does of
23 saying, well, we are going to delay delivery because this
24 part is not qualifying, when it is not a safety issue. That
25 is a problem. Time for delivery, time to contract. In this

1 warp speed, which was another successful OTA, in fact,
2 General Perna said, "Warp speed -- it wouldn't have gone at
3 warp speed without an OTA" in that particular case, which
4 was his exact quote. Time matters to companies, and DoD
5 does not always appreciate that.

6 And the third thing I would say is relationships matter
7 to industry. You know, sometimes industry has a setback.
8 Sometimes DoD gets a setback. But it is not about always
9 what is the letter of the contract or the law but how you
10 work together. And I would suggest they could probably use
11 a relationship therapist sometimes.

12 Senator Hirono: [Presiding.] Senator Kelly.

13 Senator Kelly: Thank you, Madam Chair. I want to just
14 follow up a little bit on this. Thirty years ago, when I
15 was at the Naval Postgraduate School, I had one elective,
16 and I took an acquisition elective, and I was shocked at how
17 complicated this whole process was. I mean, it seemed to be
18 more complicated than most any other class I had, and I was
19 there as an aeronautical engineering student.

20 I would say over 30 years I think we have made some
21 progress here. I mean, SpaceX is one example; I am not sure
22 we have another. Maybe you could share, Dr. Greenwalt, if
23 we do have other examples. And I am perfectly willing to
24 take the blame here for Congress, but has this been a
25 failure of Congress not to be able to innovate fast enough

1 in acquisition, or is it just entrenched interests at DoD
2 and maybe some of the big defense contractors? Like what
3 has been the big stumbling block to actually making
4 significant progress in reforming the system?

5 Mr. Levine: Senator, before you take blame for
6 Congress for 30 years ago I should confess that Bill and I
7 met 30 years ago when we were on congressional staff
8 together working on this problem. So we are to blame. We
9 worked together. The first thing we worked together on was
10 the Federal Acquisition Streamlining Act in 1994 --

11 Senator Kelly: Did it pass?

12 Mr. Levine: -- which passed, and which was the first
13 major congressional effort to streamline commercial
14 purchasing. So this is an issue that Congress has been
15 battering its head against for decades now. I think we are
16 making progress on it. I think we are better at it than we
17 used to be. But it is hard.

18 And I just need to come back around to there are things
19 we do to make it harder, and Bill and I both discussed some
20 of these and have some recommendations in our prepared
21 statements about reducing unnecessary requirements and
22 peeling back some of the build-up. So in 1992, we said
23 produce a streamlined contract for commercial contracts
24 where you eliminate clauses that are not necessary and
25 should not apply to commercial companies. And we got down

1 to a certain number, and then over 30 years it has built up
2 again, and it is time to relook at it.

3 But do not underestimate how hard it is for the
4 Department to buy commercial technologies, because it is all
5 great that these technologies are out there in the
6 commercial marketplace and that are available to us, but the
7 experience over a period of decades is it costs more and
8 takes longer to take a commercial marketplace and apply it
9 to defense uses than it does to build it in the first place.
10 It is really hard work.

11 Senator Kelly: I was at the ribbon cutting last week
12 at the Southwest Mission Accelerator that we procured money
13 to build five of these around the country. I think there is
14 one in Hawaii, Oregon, Kansas, some other location
15 somewhere, and it is to try to help some of these
16 entrepreneurial companies get across that -- maybe not get
17 across the valley of death but even the stuff that is more
18 up front and connecting them with financing and expertise.
19 Do you see something like Southwest MAC or these other
20 accelerators to be helpful in this process?

21 Dr. Greenwalt: I think what is important is, and in as
22 many ways as possible, bring together that non-traditional
23 industrial base so the government can essentially work with
24 it.

25 And the other example I will give as far as success is

1 Operation Warp Speed. And why was that successful? Because
2 we brought together the non-traditional medical industrial
3 base in one acquisition vehicle, and it was ready when an
4 emergency hit. We should be doing that with every single --

5 Senator Kelly: Was that done before the pandemic?

6 Dr. Greenwalt: It was done before. It was it was not
7 done before pandemic we would probably still be trying to
8 figure out what kind of acquisition vehicle to use to
9 develop a vaccine. I mean, that was essentially --

10 Senator Kelly: So that was all stood up and ready to
11 go.

12 Dr. Greenwalt: It was stood up and ready to go, and it
13 was bumped by accident. But it was the right vehicle to be
14 able to put a lot of money through in research and do it
15 fast. We have a traditional system, and we can go slow in a
16 lot of different area, but we should have emergency vehicles
17 ready to go if things happen that we need to go with. And I
18 think that one was one of those success stories.

19 Peter talking about success story on commercial item
20 acquisition, it is a lot different system than it was pre-
21 1994. That is a positive thing. We backtracked a lot, but
22 we still are buying, to a great degree, a lot of commercial
23 items, and that is a good thing.

24 Mr. Schwartz: If I may, Senator, there is a lot that
25 has improved, substantially. So a lot of us are talking

1 about what is not going as well as we would like, but there
2 is a lot that is going very well. Defense Acquisition
3 University was established. Even all these regulations that
4 Peter mentioned, there was not even centralized regulations.
5 We have a more professionalized workforce. If you even want
6 to look at the data, the cost growth is not higher than it
7 used to be historically, really far back, even though the
8 systems are that much more complicated with that many more
9 technologies.

10 You could go to the Civil War -- and this is true.
11 Congress put out two 1,100-page reports, and the things that
12 they talk about that happened would never happen in our
13 current acquisition system. A lot has been done. I think
14 what we are talking about is how we can do more and do
15 better because of the geopolitical issues that we have.

16 Senator Kelly: You are talking about bad things that
17 happened during the Civil War in acquisitions?

18 Mr. Schwartz: Yes. Absolutely.

19 Senator Kelly: Can you give us an example?

20 Mr. Schwartz: Yeah. Lamé horses, horses that actually
21 you could not ride. Food that was, in effect, spoiled.
22 Cannons that, in fact, would not fire, I guess would be the
23 term. There was even one -- I will not go into that one.
24 But things that actually would be shocking to see today, but
25 now we are able to do logistics overseas in Iraq and

1 Afghanistan at a level that they could not even do 30 miles
2 away. So there has been a lot of progress, and I do think
3 that is important to highlight.

4 Senator Kelly: All right.

5 Mr. Levine: Senator, if you would like I would just
6 put in a pitch for one other thing. As we try to deal with
7 non-traditional contractors, and they face this stack of
8 regulations, the Federal regulations, and they also face the
9 problem of not knowing even who to talk to in the Department
10 of Defense -- it is a vast and imposing organization -- one
11 of the things that I have learned on a project that I am
12 working on right now is that really helpful to non-
13 traditional contractors when they want to do business with
14 the government is to have sort of a sherpa to take them
15 through it, somebody who knows the process. Who knows the
16 process? People who have left government and understand how
17 the process can work.

18 And we have regulations on post-government employment
19 that make it harder and harder for them to do that. And
20 there are reasons why we have limitations on what people can
21 do after they leave government. But I would urge that you
22 need to think about what the impact is on the non-
23 traditional contractors especially, because they need those
24 people to guide them through this morass and tell them,
25 "Here is who you need to go to talk to. Here is the kind of

1 paper you need to do. Here is what you are getting yourself
2 into if you do this," and who can be honest guides to that.

3 Senator Kelly: Thank you.

4 Senator Hirono: Senator Sullivan.

5 Senator Sullivan: I just had one final question, and
6 this can be for everybody. Mr. Schwartz, can you discuss
7 some of your findings on the other transactions, consortia,
8 and whether they lower the barrier to entry for non-
9 traditional defense contractors?

10 Mr. Schwartz: Yeah. Absolutely. And a lot of the
11 credit for those authorities are for the other people here.
12 But I will give you a couple of examples.

13 We already went through the data of how the number of
14 companies in consortia have increased dramatically where, at
15 the same time, the defense industrial base has decreased.
16 The way Operation Warp Speed worked is that a consortium was
17 put together. A consortium, in short, is a number of
18 companies, all with a similar interest around a particular
19 technology, in this case health, because it can be a broad
20 thing. And there were a lot of companies, and they had been
21 working together already, and they already had existing base
22 contracts with the Department of Defense, in this particular
23 case. So they already know each other. They already have
24 the mechanisms. They already have the processes and the
25 relationships down.

1 So what happened here, with Operation Warp Speed, DoD
2 said this is what we need. And I might get the numbers a
3 little bit wrong -- it is in this report that I have on
4 consortia right in front of me -- in something like 72
5 hours, I think it was, they got out requests to something
6 like 1,100 companies. In days they get responses because it
7 was already set up. And that helps with the market
8 research, and it helps with the processes, so you do not
9 have to start going through this because it was already put
10 in place.

11 That is the power of what consortia can do. It
12 increases communication between the government and industry.
13 It increases the ability to work more efficiently because
14 most consortia work with other transaction authorities, and
15 other transaction authorities, for the most part, are exempt
16 from most of the regulations in the Federal Acquisition
17 Regulation.

18 Now it is not for everybody, and it is not for all
19 circumstances. It is definitely not a silver bullet. But
20 it does do that, and there are small companies that have
21 said -- and I can absolutely provide this information after
22 the hearing -- that but for the consortia they worked with
23 they never would have contracted with the Department of
24 Defense.

25 Does that help?

1 Senator Sullivan: Yeah, very helpful. Good. Well,
2 thank you, Madam Chair.

3 Senator Hirono: Can you just tell me a little bit more
4 about what you mean by consortia that are already set up to
5 push the kind of --

6 Dr. Greenwalt: I will start with the other
7 transactions because another transaction is essentially not
8 a contract. It is a contract but it is legally defined as
9 not a contract. And because of that -- it is very confusing
10 -- because of that it does not have to apply to things that
11 apply to a contract. So it is a new business relationship
12 that the government can enter with the private sector, and
13 essentially negotiate any type of relationship they want.

14 So a consortium, essentially, what that does is brings
15 together, in a vehicle, a way of bringing as many
16 contractors as possible onto that consortium, into a certain
17 area. And then what you can do with that consortium is task
18 it to do certain things, very simply, not through this
19 process but through a process that may be like this.

20 Senator Hirono: So you are saying that the DoD can
21 create these kinds of consortiums as it did in Operation
22 Warp Speed, depending on what it is that is defined as the
23 need. They can already do that. Is that what you are
24 saying?

25 Dr. Greenwalt: They have the authority, and they have

1 done, what, about 40 of them now.

2 Mr. Schwartz: Yeah. They, in fact, do it.

3 Dr. Greenwalt: But what is necessary is a lot of these
4 are in traditional defense sectors, and there are a lot of
5 non-traditional defense sectors like AI, or quantum, or
6 autonomy, where it would be a good idea to set these up and
7 pull together new small businesses, new non-traditional
8 companies, so the Department can start working with them.
9 And they can work with them on a set of frameworks that is
10 not based on this but based on something that is more
11 commercially available and understandable to these
12 companies.

13 Mr. Schwartz: And it does two things. I mean, it does
14 many things, but two that I would like to highlight. One is
15 it sends a message, this is what DoD is interested in, or
16 any other agency, and those companies start gathering around
17 that technology -- like undersea; undersea would be an
18 example of another one -- and they get together. And what
19 is great is it is not small businesses. It is not non-
20 traditionals. It is not large contractors. It is all of
21 them in that milieu of innovation, which is very valuable.

22 The second thing it does is it really creates a
23 catalyst for better back-and-forth communication with DoD,
24 of what do you really need. Sometimes DoD will put out an
25 RFP and they will be surprised -- and there is an example,

1 actually, in the report I mentioned -- that nobody
2 responded. And then in this consortia mechanism there is a
3 wait for better communication, where industry is freer to
4 communicate back, and like, oh, okay, we got it. We can
5 craft something together, and then they get to better
6 results.

7 Mr. Levine: Senator, at the basis of it, a contract
8 that you can only enter with one company, that is why we
9 have prime contractors and everybody else is going to be a
10 subcontractor. Because the usual contract rules do not
11 apply to OTAs, we can enter an OTA with a group or a
12 collection.

13 And by the way, I would add to that it is not just
14 companies. It is also research institutions.

15 Mr. Schwartz: Right, and academic institutions.

16 Mr. Levine: Academic institutions are included in
17 these too. And then they can informally get together and
18 talk about what the best use of money is and consult with
19 the government as to where funding should go to address the
20 purpose. It gives you some of the flexibility that we
21 talked about, that our budgeting system denies in so many
22 ways, because once the money is allocated to a consortium
23 there is a lot of flexibility to where you move it around to
24 best purpose.

25 Senator Hirono: So you were on the Commission, right,

1 that we heard from this morning in the full hearing.

2 Mr. Levine: Yes, Senator.

3 Senator Hirono: So I do not know that there was any
4 discussion about we should create these kinds of entities
5 called consortiums to address some of the needs of DoD. Was
6 there some discussion about this kind of way of doing
7 things?

8 Mr. Levine: The Commission did not go into consortia,
9 and largely because there have been lots of commissions on
10 acquisition reform, and we were focused on the budget side
11 of the way the Department works. We had some
12 recommendations that go to the same kind of thing, talking
13 about the level to which we budget and the different boxes
14 that we put our budget into, being so small and inflexible,
15 and getting bigger boxes and different boxes and better-
16 refined boxes to give greater flexibility.

17 Senator Hirono: Yes, but it sounds as though creating
18 these kinds of consortiums would be another way that we can
19 get to the kind of acquisitions that would be faster.

20 Mr. Levine: It is helpful, but we should realize --

21 Senator Hirono: It is not the answer to all of our
22 problems.

23 Mr. Levine: Consortiums are usually used in, I would
24 say, to the 99th percent -- you can disagree with me -- for
25 research, and usually advanced research, and that is where

1 the consortiums have focused.

2 Senator Hirono: Yes, because I was wondering when we
3 were going to talk about AI and all of those aspects of what
4 the DoD and everybody else is concerned about these days.

5 Well, I notice that I am the only one left, so I want
6 to thank you all for a very stimulating testimony. We will
7 be doing some follow-up from my office with those of you
8 that we need to continue to talk to. But I find the
9 consortium idea very intriguing. I would like to think a
10 little bit more about that.

11 But I do have one question about the stack of papers
12 that you all have. Now at some point the acquisition people
13 who have to comply with all of those requirements, I mean,
14 after a while don't they have enough experience that they do
15 not have to resort to all of that, and they know that they
16 can skim over or be smart about what they need to be doing
17 so that they are not hide-bound, like all of those
18 requirements, and through experience they can take smart
19 risks?

20 Mr. Levine: Yes, Senator. For any given type of
21 procurement and any given type of issue you are going to be
22 looking for what is on page so-and-so of this. Nobody reads
23 through this whole thing. I doubt anybody has ever read
24 through this whole thing, unless Moshe --

25 Mr. Schwartz: I have not, actually.

1 Mr. Levine: Okay. You are the only person I ever
2 thought might. What you do is you look for the answer to
3 the specific question you have. And about 15 or 20 years
4 ago this was supposedly all rewritten -- and since I have
5 not read it I cannot guarantee that it was -- to separate
6 between what is called "direction" and "guidance," so that
7 only those words that needed to be directive are directive,
8 and the rest of it was going to be informative advice and
9 consideration, so it would build more flexibility into it.

10 I cannot tell you how successful it was in being
11 rewritten that way, but I made the point before, if you are
12 going to rewrite it that way so it is more flexible it
13 probably makes it longer, because when you give somebody
14 guidance and talk about here are all your different
15 alternatives, you have got to lay out choices and explain
16 considerations, that is a lot harder than just to say here
17 is the rule, you can only use a fixed-price contract.

18 Mr. Schwartz: I will say two things. One is even
19 though -- and you are absolutely right -- people only
20 necessarily need 150 if they are doing commercial buying or
21 something like that, at some point the brain shuts down,
22 right. And this is true if I am told to go buy cereal, and
23 I go to the supermarket and see how many cereals they have,
24 I just need someone to tell me which cereal to buy because I
25 cannot compute that many choices. There are too many

1 choices.

2 And I have dealt with contracting officers who just
3 revert back to the three or four authorities they know,
4 because even though there are 17 or 18 authorities, they
5 cannot compute that many, so it does not matter you gave
6 them more authority. They are just going to keep doing the
7 same thing.

8 So I would argue sometimes less authority is, in fact,
9 more authority.

10 Senator Hirono: Well, based on this morning's hearing
11 also, the idea of having people who take smart risks is not
12 to minimize all risk, but to take the smart risk that is
13 necessary to get us the decisions that we need.

14 Thank you very much for your time and testimony. This
15 hearing is adjourned.

16 [Whereupon, at 3:39 p.m., the subcommittee was
17 adjourned.]

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