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**INITIAL FINDINGS OF THE SECTION 809
PANEL: SETTING THE PATH FOR
STREAMLINING AND IMPROVING
DEFENSE ACQUISITION**

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

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ONE HUNDRED FIFTEENTH CONGRESS

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CONTENTS

	Page	
STATEMENTS PRESENTED BY MEMBERS OF CONGRESS		
Thornberry, Hon. William M. "Mac," a Representative from Texas, Chairman, Committee on Armed Services	1	
WITNESSES		
Lee, Deidre, Chair, Section 809 Panel, Former Administrator for the Office of Federal Procurement Policy, Former Director, Defense Procurement and Acquisition Policy; William LaPlante, Commissioner, Section 809 Panel, Former Assistant Secretary of the Air Force for Acquisition; Charlie E. Williams, Jr., Commissioner, Section 809 Panel, Former Director of Defense Contract Management Agency; Joseph W. Dyer, Commissioner, Section 809 Panel, Former Chief Operating Officer and Chief Strategy Officer, iRobot Corporation, Former Commander, Naval Air Systems Command	2	
APPENDIX		
PREPARED STATEMENTS:		
Smith, Hon. Adam, a Representative from Washington, Ranking Member, Committee on Armed Services	41	
DOCUMENTS SUBMITTED FOR THE RECORD:		
Advisory Panel on Streamlining and Codifying Acquisition Regulations, Section 809 Panel Interim Report, May 2017	45	
WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING: [There were no Questions submitted during the hearing.]		
QUESTIONS SUBMITTED BY MEMBERS POST HEARING: [There were no Questions submitted post hearing.]		

INITIAL FINDINGS OF THE SECTION 809 PANEL: SETTING THE PATH FOR STREAMLINING AND IMPROVING DEFENSE ACQUISITION

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Wednesday, May 17, 2017.

The committee met, pursuant to call, at 10:02 a.m., in room 2118, Rayburn House Office Building, Hon. William M. “Mac” Thornberry (chairman of the committee) presiding.

OPENING STATEMENT OF HON. WILLIAM M. “MAC” THORNBERRY, A REPRESENTATIVE FROM TEXAS, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. Committee will come to order.

The purpose of today’s hearing is to receive the initial findings from the Section 809 Panel. Now, as members may remember, in the fiscal year 2016 NDAA [National Defense Authorization Act] we created an advisory panel under, appropriately, section 809 to review acquisition regulations and make recommendations for streamlining and improving defense acquisition process, and also to advise us on improving our defense technological advantage.

We are pleased to welcome four of the commissioners here today to report on the interim findings of that panel. I understand that the panel has—was, due to no fault of its own, delayed in getting started, partly because of the Department. But all members have before them an interim report dated May 2017 that, in my opinion at least, does a very good job of explaining the problems and where we are.

I think my favorite sentence is where the report says, “The way the Department of Defense buys what it needs to equip its warfighters is from another era.” None of us can afford to have that situation continue because the era we are in is dangerous enough, and it is not stopping to wait on us.

We are pleased to have, as I say, four of the commissioners with us today.

Before turning to them, I will yield to the distinguished acting ranking member, Mr. Carbajal, for any comments he would like to make.

Mr. CARBAJAL. Thank you, Mr. Chair.

I don’t have any comments, but I would like, without objection, to submit Ranking Member Adam Smith’s testimony into the record. And I have a few questions for later on.

[The prepared statement of Mr. Smith can be found in the Appendix on page 41.]

The CHAIRMAN. Without objection, so ordered.

Let me welcome our witnesses today. We have Ms. Deidre Lee, who is the chair of the Section 809 Panel; Mr. William LaPlante; Mr. Charlie Williams, Jr.; Mr. Joseph Dyer. Each of them have impressive backgrounds that are helpful, I think, for this purpose. Members have more complete bios in front of them.

We, again, appreciate the work you all have done so far and the work that you will do in the months to come.

Ms. Lee, we will yield to you for any comments you would like to make.

And, ma'am, if you would—and put that microphone right in front of your face.

That works better. Thank you.

STATEMENTS OF DEIDRE LEE, CHAIR, SECTION 809 PANEL, FORMER ADMINISTRATOR FOR THE OFFICE OF FEDERAL PROCUREMENT POLICY, FORMER DIRECTOR, DEFENSE PROCUREMENT AND ACQUISITION POLICY; WILLIAM LAPLANTE, COMMISSIONER, SECTION 809 PANEL, FORMER ASSISTANT SECRETARY OF THE AIR FORCE FOR ACQUISITION; CHARLIE E. WILLIAMS, JR., COMMISSIONER, SECTION 809 PANEL, FORMER DIRECTOR OF DEFENSE CONTRACT MANAGEMENT AGENCY; JOSEPH W. DYER, COMMISSIONER, SECTION 809 PANEL, FORMER CHIEF OPERATING OFFICER AND CHIEF STRATEGY OFFICER, IROBOT CORPORATION, FORMER COMMANDER, NAVAL AIR SYSTEMS COMMAND

Ms. LEE. Thank you, sir.

Chairman Thornberry, Ranking Member Carbajal, thank you, on behalf of the 18 commissioners, for the opportunity to present the 809 Panel's interim report. I will give an opening statement, and then we have the other commissioners who will hear—will answer your questions, and we will all try to answer your questions and respond to you.

Since the panel's first meeting we have heard from the men and women who work as professionals in the defense acquisition system; those who support the Department in industry, including those who have yet to do business with the Department; those who study the system in think tanks and academia; and those who provide leadership and oversight in Congress. We sincerely thank all of those who have offered their thoughts to us and welcome others to reach out and contribute.

Through these conversations themes have emerged, and these themes are the foundation for the panel's work going forward. We know that mission must come first. We have to value time. The system needs to be simplified. And another—probably more discussion later—we need to decriminalize the commerce.

We have learned that there are barriers to entry doing business with the government. Some are small, while too many others are large, complex, and time-consuming.

We have learned that there are out-of-date regulations that have served their purpose and today only serve as drag on the system.

We have learned that protests, or the fear of protests, makes a slow, cautious contract process. We have learned that there is a lot of flexibility in the system and we need to be systemically confident enough to use it.

We have learned that we fail to adequately distinguish between those systems that are multi-decade platforms and those that have a short technology life.

And we note that the pace of innovation in America is the hare, while we wish and act as if it is the tortoise. There are too many unique policies, exceptions, thresholds, and reviews for acquisition to be timely at a fair price to the taxpayer.

These complexities prevent our trusted, qualified personnel from making decisions at the appropriate level and create barriers for our access to new technologies when industry cannot even fathom how to engage.

The 809 Panel is working toward a system that puts trust in our professionals to do the right thing at the right time, and empowers them to make appropriate risks and to be able to make an honest mistake. Oversight is important, but not to the degree that it punishes many for the acts of a few and creates more burdensome costs and expends more precious time than can ever be recovered.

Some businesses—especially small businesses—hesitate to engage in commerce with the government because they fear minor, unintentional mistakes may result in criminal charges, hefty fines, and damaged reputations. For many, including some of the—on the cutting edge of technology, the benefits of doing business with the government are insufficient to offset the potential downsides.

Companies should not have to invest time and money just figuring out how to do business with the government. Wouldn't it be better if instead they could focus all of their resources on innovation, trying new technologies, establishing new thinking, and encouraging transformative ideas?

We are at a critical inflection point. The geostrategic challenges the U.S. are facing is—are not lessening. In order to continue to ensure our technological dominance on the battlefield, we need an organization that is capable of looking past how it has always been done and how it can be done—to how it can be done.

We must be agile enough to respond to rapidly evolving threats and fast enough to develop and deliver new capabilities within the arc of emerging threat. Let's design for the 22nd century in the beginning of the 21st.

Reforming DOD [Department of Defense] acquisition is a most admired problem, and we are not the first to consider it. Dozens of reform efforts precede this panel, and in order to move past tweaking around the edges of the system as it exists today, we have charged ourselves with being bold yet actionable, and you will see those reports in our subsequent report.

Our interim report illustrates the demand for change. It provides just a small example of a level of detail that will accompany our recommendations.

In the supplemental, the case studies illustrated may seem minor, but as we all know, hundreds of minor combined with major changes make a difference. No recommendation is too small nor too large. Let me say that again: No recommendation is too small and no recommendation is too bold.

We look forward to continuing to engage the community and welcome thoughts and recommendations on areas of improvement. We are hearing a lot from industry, from people in the community, and

we appreciate their input and are considering all those recommendations.

As laid out in the written report, we are committed to recommending a system that will adapt at the speed of changing world, leverage the dynamic defense marketplace, allocate resources effectively, simplify acquisition, and enable the workforce. Our tagline is, “Bold, simple, and effective.”

And we are today releasing our interim report, and as you know, it is on our website and our team has put it on a QR code and are—so this is how we are releasing the report and it is available for everyone. So we present our interim report to you today and we anticipate your questions.

Thank you.

[The Section 809 Panel Interim Report can be found in the Appendix on page 45.]

The CHAIRMAN. Thank you. I will just say, everything you just said is consistent with and, I think, supportive of the emphasis that this committee has put on acquisition reform over the last 2 years: the imperative for us to act. And we made some significant changes, as you know, but I don’t think any of us believe that we have done enough or fixed the problem. And that is part of the reason this panel was created, and we look forward to your further—to your recommendations and to your final report.

I might just mention that tomorrow I will introduce a—some further proposed changes, and I do that about a month before we mark up our bill so that everybody can comment. And I certainly invite the panel as a whole or individual members of the panel to make comments, suggestions, especially if you think we are headed in the wrong direction for the bill that I will introduce tomorrow in anticipation of further reform.

Let me just start out with a question for each of you, because each of you has in the past served in the government or—in either civilian, military capacity. And just for a little perspective, is it worse now than it has been in the past?

Ms. LEE. Yes, sir.

The CHAIRMAN. And we can’t go on too long here, but just for each of you, can you describe how much worse? Can you give me a couple sentences on why you think it is worse?

I mean, what is—you said this is an inflection point. Why is this an inflection point? What is the imperative of acting now?

Dr. LAPLANTE. So I would start by just saying, as the committee knows, that our technological superiority has been eroding. We have been all, unfortunately, watching this for the past decade, whether it is in cyber, weapon systems, air dominance, space, EW [electronic warfare]. It has just been consciously eroding right in front of us.

While we are doing as much as we can the traditional way—the industrial way, Mr. Chairman—doing things like studying for analysis of alternatives for 3 years before we decide what to do on something, our peer adversaries don’t seem to be doing that. They are not studying things. They are fielding things.

And what seems to be happening to us is our ability to deliver things quickly to the warfighter, other than through workarounds,

like the MRAPs [Mine-Resistant Ambush Protected vehicles] or other ways we have done it, is worse than it has ever been.

Mr. WILLIAMS. Yes, Mr. Chairman. I would note that in order to achieve this necessary advancement in technology it is going to require a significant amount of collaboration across industry and DOD.

And unfortunately, I would suggest to you that today the trust factor across the table isn't what it used to be. And I think as a result of that we create a tremendous amount of risk-adverse attitudes; we create a tremendous amount of oversight. And that burdens the system down such that you don't have the collaboration across the table necessary to ensure that we get to the right collaborative solution.

Mr. DYER. Mr. Chairman, thanks for the question. And we commend the progress that the panel has made and your leadership, sir. But much more does need to be done.

As Mr. LaPlante—Dr. LaPlante indicated, it is the erosion of dominance that worries some of us the most. And a return to dominance needs to come from high-tech, innovative, nontraditional companies that have become reluctant to do business with us either because of the complexity or because of greener fields being found elsewhere.

The CHAIRMAN. Well, that is the other question I want to ask before yielding to other members. I hear anecdotal evidence—I hear directly from people who—companies, especially small but some big companies, who say, “We all made a business decision that it is not worth doing business with the Department of Defense anymore.”

Based on what you all can tell so far, is that a real problem that we have to confront?

Mr. WILLIAMS. I will speak to that, Mr. Chairman.

I happen to be a part of a sub-team that is looking specifically at the area of barriers to entry. And we have talked to a lot of companies that are interested in doing business with the Department but choose not to, companies that do business with the government but yet are challenged by the processes.

And so the answer is yes, this is a huge and significant challenge. The challenge gets into very simple things like how long it takes the government to make a decision simply about whether or not it wants to proceed with a requirement, the fact that the government goes out and announces its intent and companies put together proposal teams and things of that nature, and it takes then the government a long time to get back to them. And companies can't carry that.

If that is a problem for a large industry, imagine what it causes for the smaller companies who are often out there on the leading edge of technology advancements.

Dr. LAPLANTE. I would add, just as a small example, when I was the Air Force assistant secretary we pulled the data and found out it took us 18 months to go from initial RFP [request for proposal] to award of a sole source contract—18 months.

Now, if you remove the foreign military sales it still is about a year.

So if you are a small company and that is even from when the final RFP drops to when you are potentially going to get the money

for a sole source in a year, you know, you can just imagine how hard that is. And I know one of my other colleagues has direct experience.

Mr. DYER. Mr. Chairman, I will tell you a story from personal experience, if I may. I retired in 2003 as the commander of the Naval Air Systems Command down in southern Maryland. I was the Navy's senior acquisition uniformed person at that time.

I went to work in Boston building robots with the iRobot Corporation, first as the president of their defense unit and later as the corporate COO [chief operating officer] and then chief strategy officer.

iRobot was a company that spun out of MIT [Massachusetts Institute of Technology]. It is exactly the kind of company that I feel we need most: experts in autonomy, artificial intelligence, man-machine interface.

But in my trips to Wall Street representing the interest of the company, one of my analyst friends took me to lunch one day and said, "Joe, you have to get iRobot out of the defense business. It is killing your stock price."

And I countered by saying, "What about the importance of DARPA [Defense Advanced Research Projects Agency] and the investment in leading-edge technology? What about the stability that sometimes comes from the defense industry? Or what about this, or what about that? What about patriotism?"

And his response was, appreciating that the requirements for corporate officers is to attend to the interest of their investors, he says, "Joe, what is it about capitalism you don't understand?"

His point, sir, was that profits are limited by weighted guidelines. It is something of maximum of around 13 percent. The call on data rights and intellectual property, the crown jewels of the company—these things send you away.

There are just greener fields that companies like iRobot feel better represent the interest of the investors. And last year, sir, iRobot divested their defense business.

The CHAIRMAN. Thank you.

Mr. Carbajal.

Mr. CARBAJAL. Thank you, Mr. Chair.

And thank you, to the commissioners that are here today to share with us a little bit about their interim report.

My question is, every administration and virtually every Secretary of Defense since World War II has embarked on an acquisition reform effort, yet we still face significant challenges. What will this panel recommend that will be different to ensure a lasting impact that you have already started identifying? Because if not, this is going to be yet another exercise and 10 years from now we are going to be at the same place again.

So I think despite looking at the whole system, it is really identifying those particular recommendations that are going to help take a different approach.

Ms. LEE. Excellent point, and I think that is what we are trying to say in our interim report is there is an imperative, as has been discussed here. We have to be more agile, more responsive. We cannot continue in the mode that we are progressing.

So the environment is right. You in the Congress are interested. Your staff has been incredibly helpful and supportive. I think that is helping us from setting that up.

And then the other thing that our supplemental is, what we plan to give to you that is different than so many of the other excellent reports in front of us, are that level of detail. And that is why we did the supplement, to show you that we are going to actually give you marked-up language of the recommendation. Obviously the recommendation is still yours to decide on, but we are trying to give you data-driven, actionable recommendations so you can look at those.

We also have some very bold recommendations that will come out later that will impact some particular constituencies and there will be some hard decisions to make significant changes for us to move on and modernize this acquisition system.

Bill.

Dr. LAPLANTE. I would add a different—maybe a slightly different perspective, because the question you ask is the question all of us ask when we get asked to put our precious time into another acquisition reform study. I have a different view, which is—I have changed my mind over the years.

I will give you an example. I think reform—what reform is needed at one time is different depending on the age. I will back up to 2009 when the Weapons Acquisition Reform Act was put in place, WSARA, as some people call it.

That had some very good reforms in it. It required an independent cost estimate at the beginning of programs, for example. It codified how to do analysis of alternatives.

And actually, if you—one argument, if you look at the cost performance of the major weapon systems over the past 6, 7 years, I think a lot of us have seen and the data shows that the cost growth is actually lower than it has ever been. It did help some things.

While all that was going on, the world is changing very rapidly. And I think the problem today as I see it—and it is driven by this technology threat and the change in the technology—is the commercial world practices have moved totally beyond the industrial model that we said that the DOD uses.

So I will just give one example: software development. In DOD we spec out a software problem, a software system—a ground control station for satellites, for example. We get the requirements honed perfectly, then we translate them into a system spec, we issue an RFP, and then we give the award, and then we hold the contractor accountable to cost performance schedule. It is typically scheduled for 5 years and it will take 7 and it will go over budget. We all know that.

The commercial world developing software has left that waterfall model 20 years ago. The idea that Google develops software and then deploys it is wrong. They develop software every day. Facebook drops hundreds of releases every day.

The idea that you would even spec out in detail the requirements of something 5 years from now is laughed at by fast-moving commercial software developers. They say, “No, you never get it right. You gotta be able to go fast, go in short sprints, and if you make a mistake you get back on track.”

So if you look at the way our system is set up, it is set up for the old model. And so that is an example of why we need reform now is because the world has changed and we have to adjust to that.

Mr. DYER. Congressman, one of the things the panel is doing, I think to gain some new insight, one of our eight teams are looking not just at problem programs but taking a far-too-unique look at programs that succeed and asking why, and seeing if there are common themes of experience, training, approach, culture that can be applied across the DNA of other programs, and we can take a reverse look of saying, "This is what you should do," as opposed to perhaps a history where DOD has said primarily, "This is what you cannot do."

Mr. CARBAJAL. Thank you. My last question is the interim report recommends DOD spend its resources more efficiently and effectively in all types of acquisitions, including the procurement of low-dollar goods. Does the Department overpay for commercial off-the-shelf, also known as COTS, items?

Mr. WILLIAMS. Yes, Congressman. I would say that the panel has not looked at and taken on the job of looking at the pricing of commercial items, so we aren't prepared to offer an opinion on whether or not commercial items are overpriced.

What I think we are suggesting here is that often when we look at these reform efforts we are simply focused on large-dollar procurements. We are focused on big programs.

The problem in the system often relates to all these non-complex efforts in procurement and services. When you look at the equation, you know, 80 percent of the dollars are spent on 20 percent of the actions, but there are 80 percent of these actions that are really critical to the Department being successful, and we have to pay attention to those just as well.

In the report we talk a lot about clearing the underbrush. There is a whole lot of stuff in the underbrush that affects how we get work done, and so I think we are simply saying that in the area of commercial, in the area of services across the spectrum of everything that the Department acquires, we have to pay attention because each piece makes up the big picture.

Dr. LAPLANTE. We always have to remind people that services—Department buys services from everything from cutting the lawn to launching our most precious national security payloads into space. Department spends probably more on services still than on major weapons acquisition program.

Mr. CARBAJAL. Thank you very much. Mr. Chairman, I yield back.

The CHAIRMAN. It definitely spends more. Something like 53 percent of everything that is on contract is services, not weapons and equipment.

Mr. Cook.

Mr. COOK. Thank you very much, Mr. Chairman.

I want to thank the chairman for doing this. And this is going to be very, very tough to get done and I appreciate the panel working on this.

And it is a lot of frustration for me and a lot of other people, and I am a historian by trade, I guess, military by trade. And you go

back and you—the system we have right now, I swear to God we would have lost World War II.

We do not have the luxury of waiting that long to bring new weapons systems online. I was out at Fort Irwin the past week, which is in my district. Perhaps one of the greatest training areas of all.

And one of the days was live fire, but the first day was cybersecurity. I met with these young soldiers and they are talking about some of the things that they were doing off the shelf and they are making changes.

Now, remember, I am an infantry guy. I am just a dumb marine, and I really am, and they are talking about space-age stuff, and they are doing it right then and there.

And I am saying, “God, why can’t you be in charge of the whole system?” And I understand that is not feasible, and contracts and everything else.

And I asked them about it and they said, “Time,” and they said the same thing that you said. We don’t have the luxury.

You know, the changes are made. You know, when I was in Vietnam they were making changes. That was 50 years ago and it seems like it was taking forever. Even then some of the systems coming online were flawed, not correct, and took forever to get there.

And here we are now. We don’t have that luxury. I am going to be leaving here. I am going to have a brief on the T-14 and the T-90, the improvements to some of these systems today. It just gets so depressed.

So I think this is a great first step. We have gotta change this and we have gotta change it now, whether we go back in history, whether we look at how the Israelis change. Why do they change so quickly? Because they won’t survive as a country if they don’t.

So the stakes are enormous, and if we don’t get it right then, you know, my original reason for coming to Congress—and that was, you know, the military and veterans—I have failed. I have failed miserably.

Now, you guys and gal, you have a tremendous amount of expertise and I appreciate what you are doing. And I am going to be the junkyard dog just saying we gotta cut through the red tape, and we have gotta get it done, and we gotta get it done now. And we have no excuses anymore.

So I have vented, and I appreciate the chairman. I will drink some more coffee and go back to my office, and I yield back.

The CHAIRMAN. Venting appreciated.

Mr. Garamendi.

Mr. GARAMENDI. I want to thank you for the panel discussion and for, obviously, a very, very important issue.

It seems to me that there are at least—that in analyzing this acquisition you need to put into various categories the kind of acquisitions we are talking about. We just discussed a moment ago services and then major acquisition of airplanes, or whatever.

With regard to the latter, I recall a hearing we had in the naval subcommittee last—2 weeks ago in which the littoral combat ship came up. And the fundamental argument made by the Navy and by the defense industry was, “Well, we gotta continue to produce

another 20 of these ships that serve really no good purpose and, by the way, will probably be sunk at the very first shot that will be fired and don't have much utility, but we need to do it because we need to keep the defense base working."

Now, that is a policy question that we need to address here. So you got those kinds of issues.

When you get down to other issues, there are the public policy questions. I could probably mention the issue of greenhouse gas emissions and the consumption of fuel oil, or fuel—the Defense Department being the single largest consumer of petroleum products in the world. So should there be a policy question put on the Defense Department dealing with conservation, or moving away from fuel to green energy technologies?

How do those kind of policy issues come into play in the issue of defense acquisition strategy? Should we simply abandon these policy issues, which do, seem to me, provide some brake on the rapidity of a contract going forward or the continuation of a previous program?

What is your recommendation? You make recommendations here about policies that get in the way. Should some of those policies remain in the way?

Ms. LEE. I think that will obviously be an end decision for this body. We were going to—what our plan is to look at all of these and, as we all know, individually each one has a constituency, has a value, and probably a very good purpose. Cumulatively they are clogging the system.

So I think it is going to be a very difficult question to say, you know, what are the priorities? Our report says mission first. We will offer up some recommendations to you all to a very challenging decision is what is that balance?

Mr. WILLIAMS. I would offer, Congressman, that the critical question here is the question of mission and the purpose of the system. And I believe if we start there, we start with mission first, that the system that the Department has to use for acquisition is focused on ensuring it can accomplish its mission, and we evaluate these various policy questions along that continuum, and I think it will allow us to have a way to think these things through.

I don't think anyone has reached any conclusion as to what is good, what is bad, what is problematic, but to Ms. Lee's point, the accumulation of these things together put extreme pressure on the system and cause many, many hurdles for the acquisition community to have to go through to get to that mission result.

Dr. LAPLANTE. I will give an example of maybe one or two policies that make perfect sense from a certain aspect of public policy but actually can maybe have a collateral impact you may not understand. One is competition, the CICA [Competition in Contracting Act] thing, which is that—the assumption being that whenever you can, you do competition. Makes perfect sense and all that.

To the extent that, getting at what my colleague said in her opening, the fact that we are worried about protests so much during either the RFP release or the award, bend over backwards, do competition when there is an obvious quick solution ready to go by just going sole source because it hits—gets the mission, there is a

very big reluctance to do it because of, understandably, because of the pressure to do competition.

So again, you have to say, is it—what is better for the mission?

We do have waivers in the system that allow seniors to waive and say, “I am going to do sole source for national security.” My experience in recent years is they are very reluctant to use them because of the scrutiny it gets.

So that is an example where you can see both sides of the argument, and it is the cumulative effect of all of these policy issues.

Another one is small business. Small business is a very important thing for the country. We all get that. But that is something that plays a big role in our deliberations as we put acquisition strategies together because we know we are going to be looked at for our small business numbers.

And so those are two examples of good, well-understood policy things, but their impact on acquisition.

Mr. GARAMENDI. Thank you. Yield back.

The CHAIRMAN. Mr. Knight.

Mr. KNIGHT. Thank you, Mr. Chair. And I will echo Colonel Cook: I appreciate the chairman for doing this. This is long overdue.

So I am going to—I am not going to vent because I can’t do what Colonel Cook did, but I am going to bring up a few things.

So I firmly believe that the country is risk averse, and I think that that has stifled us in many of the things that we have tried to do. The F-22, F-23 program went through a 50-month culmination to get to a first flight program. I mean, it was a perfect example of how you get to stifling America’s growth.

And now we have the F-22 and we have gone through a great program, even though Congress cut that short way before I was here. It is a perfect example of what we shouldn’t do.

The Century Series fighter system was built in the 1950s—all of them in about 9 years. We put out the F-100 to the F-106 in about 9 years.

How we could do that and then we move to the fifth generation and it took 50 months to the first flight just boggles me.

But my questions are a little bit anecdotal because we all get to talk to Vietnam vets and we all get to talk to our vets and our warriors who are in the field.

I talked to some the other day who used an unmanned system that was on the ground and they were doing it for IEDs [improvised explosive devices]. And I looked at the controller they were using. They were using an Xbox controller. And I said, “Why are you using that?”

And they said, “It works better. It just works better.”

And I said, “Well, it is not as durable.”

And he said, “No, it is definitely not as durable, but you know what? I went over and I bought this thing for \$29, and if it breaks I buy another one for \$29.”

So those kinds of things, you know, how much we act with the people in the field who are actually doing the chore I think is most important.

I think Dr. LaPlante brought up a big part, and that is maybe SBIR [Small Business Innovation Research] and STTR [Small Bus-

ness Technology Transfer]. If we are going to get the cutting edge it might not be from the big companies. It will probably be from the smaller companies. And if we don't kind of push forward those types of programs, like STTR and SBIR, then we might not ever see them.

So, get to my questions here. Contracts across the board—and I have talked to many different companies that work either in the—in Navy contracts or Air Force contracts or so on and so forth, and they say that the contracts are not the same—the basic contract, not the full-blown, but kind of the basic DD214 base sheet.

Is that something that we can make across the board so that when these contracts come up—and maybe not a contract like, you know, a new bomber or a new fighter or something, but these contracts that are coming out with the Navy, that it looks like the Air Force one or it looks like the Army contract so that they know how to fill this out? They might not know how to fill out sections 2 through 4 million, but they know how to fill out the face sheet.

Ms. LEE. We have certainly heard from a good number of people that the complexity is daunting, especially for small businesses. So this kind of links to the policy question and the underbrush question as we are looking—in fact, in our report at the end there is a kind of a list of questions that we are asking ourselves and pursuing, but one of those is how do we simplify this so people aren't spending all their time figuring out how to do business with them?

And as Mr. Williams said, the barriers to entry team found from—I will let him speak on it, but some of the people said, “We just cannot afford, from a time standpoint, to invest the time that it requires to figure out how to do business with you guys when someone else will pick us up just like that and we can actually, you know, market our product or service.”

And so we recognize that somehow that ability to enter quickly and to simplify our process has got to be primary. And one of the questions we are asking—talk about buttons that might be hot here—is: Is competition in the 21st century aligned with the Competition in Contracting Act?

In 1984, competition was way different, and yet now how our environment works, every day you can look online and see prices change and products change and updates and technology available. Not in our system you can't.

Mr. WILLIAMS. Mr. Congressman, I would just offer that certainly consistency has its place, clearly across those smaller-dollar types of acquisitions. I think what we have to think through is balancing between perfect consistency and the flexibility that you want a contracting officer to have to go out and strike the deal that is available to them on that particular day to be able to achieve mission results.

So clearly there are two sides to that question, and I think as we think this through we have to look at what you achieve and how much you can achieve through that consistency. Because having come from the Defense Contract Management Agency, where we administer contracts across the industry, it is extremely important and valuable to us to not go from one contract issued by the Navy and another contract issued by the Air Force and they look completely different at the same contractor.

So that is important, but we also don't want to lose the opportunity to have the flexibility necessary based on the deal that is needed.

Mr. KNIGHT. And I appreciate it. My time has run out. Thank you, Mr. Chair. I yield back.

The CHAIRMAN. Mr. Veasey.

Mr. VEASEY. Thank you, Mr. Chairman.

I was hoping that you would be able to elaborate a little more on the defense industrial base company mergers you mentioned in your report on page 10 and how those are going to affect DOD acquisitions in the future.

Dr. LAPLANTE. I mean, I can say a few words.

You have seen all the charts that have—probably over the years that show the number of companies in the defense base and how they have collapsed. We are sort of at a point now, for example, where we are—we really have one major fighter line in the country, with another one we are keeping alive every year as a country. I mean, we sort of have one guy that builds fighters for us, largely. We are trying to keep another one in.

I mean, that is pretty—that is something to watch, right? How did we end up in that situation?

Another one is vertical lift. All these places you look and you see we are one merger or acquisition away from sort of having all our eggs—you know, that company does all our ships, that company does all our fighters, that one does all our tankers. And so at the big—even at the big prime it is a big concern that we have.

And I know it has been in the past couple of years there has been discussion about, you know, the way that M&A [mergers and acquisitions] is analyzed by the executive branch, they look very much more at a tactical issue: Does it directly cause, you know, something today, as opposed to look two steps ahead and say, "Well, maybe this acquisition today doesn't cause a problem, but the next one combined with this one, you have one—only one contractor to build this."

So it is something we are very concerned about but we, I think, note in the report that this is—we think this is going to continue. The pressure is going to continue.

Mr. WILLIAMS. I would only add that I think this gets back to the recognition that the entire defense industrial complex is completely different than it was, and so when we started off discussing the fact that we are dealing with a Cold War-era acquisition system, that system today doesn't reflect the fact or deal with the fact that we have 70 percent of major programs work often is in the subcontract and the supply chain, not at the prime. Our system still thinks of it as at the prime level, and tearing those barriers down and understanding that is very important in being able to be agile in the system.

Ms. LEE. And in our report we have dubbed that the "dynamic defense marketplace" to try to explain how these sands are all shifting and the work is done at different levels by—in a very different format.

Mr. DYER. Congressman, it is not just the companies that are merging and leaving the business; it is the lack of input of new

companies coming in willing to aggressively do business with us. It ties back to this question of contracts, of policies, of fairness.

In my last company we did not have a defense business unit. And I had the opportunity to build one from a green field. We were required to do major programs of record to have CMMI [Capability Maturity Model Integration] level three, the software management process, to have earned value management, to have AS 9100, to have all these process requirements, which I will tell you every one of them in and of themselves made us a better company. But as our chairman, Ms. Lee, says, the integral of all those together was stifling for a nontraditional company.

I kept track of a company that at that point in time was doing less than \$100 million a year, and the cost of laying in all those processes to do program of record business was between \$35 million and \$40 million. You just can't afford it.

Mr. VEASEY. Well, thank you very much.

And also your report recommends that the Department align its resources more carefully in this constrained budget environment that we are living in and we have all heard a lot about. And you include in your recommendation critical consideration of the Department's use of contracted services, and I was hoping that you could elaborate a little bit more on the potential inefficiencies in the Department's spending for contracted services.

Mr. WILLIAMS. Yes, I think this goes back to the point we were making earlier. First of all, recognizing the fact that, you know, dollars spent on services has gone beyond what we spend on products, and all too often we forget to think through the services process.

From a budgetary perspective, what we have to think through is also aligning the budget with the services and the contracted services that it requires. So as you go through a contract cycle and budgets change and ebb and flow, that doesn't line up well with the services that are needed if contractors are not sure that they are going to have the resources or the budget to continue that contract and they have to start thinking about how they lay people off.

And as you turn around then and switch back and say, "I still need that work," the contractors may have let those people go; they may not be available at the time. And so we have to ensure that the budgetary processes that we use in support of services support the labor needs that the contractors have to ensure that they have the right workforce in place.

It is those kinds of inefficiencies that challenge the service contracting community.

Mr. VEASEY. Thank you. Thank you, Mr. Chairman. Yield back.

The CHAIRMAN. Mr. Gaetz.

Mr. GAETZ. Thank you, Mr. Chairman.

I am looking at page 24 and 25 of your report where we speak to the mission and its interaction with some of the other social objectives that are occasionally injected into the acquisitions process, and I am hoping that members of the panel can elaborate on the extent to which this drains away from the focus on the necessary innovations and actions that the warfighter needs to be prepared when they are downrange.

Dr. LAPLANTE. Well, I would start by saying—just telling a personal anecdote. Right before I became the assistant secretary I spent a day with the acquisition university folks and they were briefing the 5000 and how acquisition works. And I would say, “Well, what about all the stuff we had to do during the wars to go around the system to deliver counter-IED capability, you know, where we had to basically throw that system out and go around it?”

They said, “Yes, that is because this is a peacetime system.”

So I think you are hitting the point, and this is the point that the panel is hitting by the mission focus. If you actually ask yourself to do the mission and we are essentially at war, what are the things that are nice-to-haves and what are the things that are essential, and are our priorities straight, including on these good-to-do social things?

And so I think one of the reasons that we are looking at this CICA the chairman brought up is because we are looking at that foundational precept that competition is, by nature, good.

Mr. GAETZ. Is it the position of anyone on the panel that having our providers and contract partners comply with one-dollar coins instead of paper currency enhances the mission for the warfighter?

Ms. LEE. Sir, we selected these couple of very simple, small examples to demonstrate the underbrush. This is a sampling of what is in there, and so what happens, talking about time and labor and complexity, is every single acquisition has to look at these kind of things and say, “Yes, that has gotta be in there.”

And then the contractor has to respond: Okay, have I done that? Do I have a program for accepting dollar coins? Do I have a program? What kind of review is done? What kind of reporting do I have to do?

We specifically selected these very small examples and then, also using our supplemental, are showing you exactly how we think it would have to be marked up to either eliminate the requirement for the Department of Defense or to make a decision to eliminate it government-wide. And we submit to you there are dozens if not hundreds like this, and we are going to submit that package to you and there is going to be some policy decisions in that.

Dr. LAPLANTE. Suffice to say, we did not select that example because we thought it was a great example of public policy.

Mr. GAETZ. Yes. Mr. Chairman, I—given the day, I think in my district I have the privilege to represent some of the most warfighters in the country in a congressional district, and I can’t say I have ever interacted with any that say that their readiness is enhanced or their safety is enhanced as a consequence of a contractor utilizing one-dollar coins.

In technology and in innovation we see in this country so many additives and attributes that have come from small and medium-sized companies sufficiently nimble to be able to innovate and meet needs in the corporate space and in any other spaces. When we have to have such draconian compliance with these sort of bizarre social objectives that have been woven into our acquisition process, do we crowd out some of the innovation opportunities that would be created by those who maybe don’t have a compliance department to write a texting-while-driving policy, or recycled-paper policy, or any of these other ridiculous examples that you have cited?

Mr. WILLIAMS. We absolutely do, Congressman. As we talk to particularly the smaller companies on the leading edge of technology, those are the challenges that they present. They don't have the capability to put together the oversight structures and compliance structures that are necessary to meet some of those requirements and it keeps them out of the business.

Dr. LAPLANTE. I will just add to—Admiral Dyer referred to this in his example with iRobot. The government is also really clumsy about IP, intellectual property, and small business. We don't really—and small startups. They should be scared of us.

Mr. GAETZ. Thank you, Chairman. I yield back.

The CHAIRMAN. Mr. Brown.

Mr. BROWN. Thank you, Mr. Chairman.

When we talk about mission first in the acquisition process, you know, I understand sort of, you know, how do we ensure that we are acquiring the goods and services in the most cost-effective and efficient and timely manner so that our service men and women are ready to fight tonight, tomorrow, and in the next decade, and the focus is on, you know, really efficient and effective acquisition to meet the needs of the warfighter.

I think that, you know, I mean, I would certainly argue that that is an important mission. I commend you for your focus in taking on this responsibility.

We have other missions that are larger and yet related. The gentleman from California, in his question, talked about energy conservation. That certainly is essential for our national security.

I think that small business inclusion, particularly given that small businesses often—offer up and develop some of the most innovative technological solutions for our warfighters, so ensuring that that secondary public policy that you mentioned on page 24 is promoted. It may be secondary, but I hope it is not a distant second because these are important public policies that go directly to our national security and supporting our warfighters.

So my question is—and you comment on that as—on that, but also, just in terms of small business inclusion, there are a number of areas where small businesses have challenges. You mentioned a few.

One was knowledge of the contracting process, but there is also the lack of monitoring in agencies, including the DOD, of subcontracting plans. There is often a lack of access by small businesses to contracting officials. There is contract bundling that often is an obstacle to small businesses, and a number of others.

Could you comment on what specifically you are looking at and what you may be anticipating, in terms of recommendations to increase small business inclusion in the DOD acquisition process?

Ms. LEE. Yes, sir. We certainly have heard from a good number of small businesses, and have invited them and will continue to do so, and in fact, are going to meet with the SBA [Small Business Administration] on some issues.

But what we have heard is time and simplicity, that we are torturous in our process, and for these small companies they just cannot hang on that long and spend time and effort and money and dollars and lose other opportunities. So one of the things that certainly is going to benefit small businesses is more respect for time.

The other thing is the simplicity. Not that they are not sophisticated, because they absolutely are, but having to hire a whole staff just to execute things that really don't deliver the mission is not efficient for them and is very difficult for them, and actually their competitors, larger business, can do that. So it probably puts them at a disadvantage.

So we think those are at least two things that are going to significantly help small businesses. We are looking at SBIR, STTR.

We are also looking at possibly some opportunities where small businesses with—would have some technology opportunities unique to the Department, and I know that the others may want to comment on that.

Mr. WILLIAMS. Yes, Congressman. I think what is really critical here is to think about how we can better utilize small businesses to achieve that mission, connecting them to the mission in terms of technology needs and advancements in the Department's war-fighting capabilities. So that is one of the things that we have really focused on, not just awarding dollars for dollars' sake, but ensuring that we connect small businesses to the mission.

We are paying attention, as Ms. Lee said, to the SBIR program, STTR program. We are very focused on ensuring that small businesses have access, that they know how to get in, that they know who to communicate, that they understand and can get to understanding those requirements that are coming down the line.

They tell us that they just struggle connecting the dot between what they offer and the Department of Defense, and so we are looking at that very closely.

Mr. BROWN. Just a quick follow-up, I apologize. But how about on contract bundling? Have you seen anything there? Is there any comments you have on whether we need to further unbundle contracts?

Mr. WILLIAMS. I haven't specifically seen any comments on that, and we haven't looked at it yet but that doesn't mean that we won't.

Dr. LAPLANTE. And I just want to add on to my colleague here. The report actually points out that, Congressman, a point you made about the connection that small business and technology is not a nice-to-have policy, but it actually, done right, is essential for our technological superiority. We can't be technically superior unless we tap into those folks.

So that is an example of something which the—where the policy itself can be very much aligned with what we are trying to do.

Mr. DYER. Congressman, just a comment on SBIRs. Many companies in Boston and Rockville, around the country, have gotten their start on SBIRs. I look at it as the government's venture fund.

And one of the interesting pieces of that: We are willing to accept failure in the SBIR arena. Companies can stretch far, reach for a brass ring; if they don't make it they still profit and they still get up and try again. That is a facet we don't really have in a lot of the rest of our acquisition business.

Mr. BROWN. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Hunter.

Mr. HUNTER. Thanks, Mr. Chairman. Thank you, panel, for being here. I guess two questions.

One, talk to us a little bit about putting somebody in charge of anything. It seems what we have done in Congress is said, “Because people screw up”—which people do, including us and everybody—“we are going to take the personal responsibility element out of acquisition and create so many steps and milestones that no one has to take responsibility for anything,” as opposed to saying, “This guy with his Ph.D. is great on space robots; we are going to put him in charge of putting us ahead of our peer competitors in space robots,” or any other example on those high-end weapon systems.

Talk about putting just somebody in charge, because that is—in the past 50 years that is one way that we have done a lot of our great stuff is by putting one person in charge and saying, “You just do it. And you can fail and try again and fail and try again, but we are going to put it on you to get it right.”

Dr. LAPLANTE. One of the things that I think is really clear that comes up all the time is we say we have a program manager, PEO [program executive officer], SAE [service acquisition executive] chain of command, but certainly there are so many people and forces that can influence things that are not in that chain of command that don’t have any accountability.

As my old colleague in—when I was in the Pentagon, Heidi Shyu—my former colleague—used to say as the acquisition executive for the Army, in industry the program manager is the bus driver to get from A to B and everybody on the bus is to help get them from A to B, whether human resources, engineering, contracting. When the bus goes in the ditch everybody gets out and puts the bus back on the road because it is everybody who is in it.

In the DOD those people all in the back of the bus have their own steering wheel, their own brake, they don’t have an accelerator, and when the bus goes in the ditch the SWAT team comes and shoots out the windows and kneecaps the bus driver. Why? Because there is money to take it.

So this idea of putting people in charge and holding them accountable—and more importantly, people who are not accountable should not be interfering—is very, very important to what we—what has to be done.

Mr. HUNTER. What specific recommendations—are you going to have specific recommendations? And how many layers can you cut out of the process in DOD if you put somebody in charge of let’s say big systems, big programs?

Ms. LEE. We are certainly looking at that as far as what is causing this, and we have seen in some cases that it appears to be functional authorities that perhaps are not appropriately placed and how—and that is where I think one of our teams, what does go right, is going to see some of the things of how that interaction is successful.

Mr. DYER. Congressman Hunter, your comment about someone in charge I think links back to the question earlier of, is it harder now or easier? It is harder. And the erosion of authority, power, by the program manager is perhaps a most important part of the equation.

Mr. HUNTER. Okay. The second question I have here with the last 2 minutes: A lot of these issues arise in the military.

For instance, the Army pistol, which you guys talk about, that—you know, what a joke: 10 years just to put out your requirements for a handgun is just stupid. The Distributed Common Ground System—billions and billions of dollars when they could have used commercial sources to do a lot of that.

Those are both Army programs. I am not going to pick on the Army, but those are—those—the Army acquisition program, and I am sure the other services, too, is what I would like to term a “self-licking ice cream cone.” They exist to write things for themselves so they can do more things for themselves to do more things for themselves, ad nauseam.

That happens in DOD too, but that—the Army pistol issue was not a DOD acquisition issue, it was an Army issue. The Distributed Common Ground System was not a DOD issue, it was an Army issue.

Are you guys going to make recommendations on the services? And are you going to be service-centric, meaning are you going to say, “Here are problems with the Air Force, here are problems with the Army, Navy”? Marine Corps just buys other people’s stuff so that is different for the most part. But are you going to make those recommendations, too?

Ms. LEE. Our focus is certainly on acquisition, so as they impact that, but we are not at this point doing a restructuring look at the Department. I think, in fact, that this committee has submitted some direction to the Department to make some changes themselves.

So what we are looking at is where that would touch and impact acquisition in our charter.

Mr. HUNTER. Okay. All right. Thank you all very much. Mr. Chairman, I yield back.

The CHAIRMAN. Ms. Hanabusa.

Ms. HANABUSA. Thank you, Mr. Chairman. And, Mr. Chairman, I do thank you for this hearing. It is unfortunate that I don’t believe people really recognize the significance of our acquisition process.

I have always felt that the problem with how we operate, especially in recent years, is that we actually set the policy through acquisition, and that it is very unfortunate because our acquisition is so delayed. That is why in your report, beginning on page 2 when you recount that in the last 50 years there have been more than 100 reports, studies on how DOD acquires goods and services, and then you do say—and you quote a 1986 Packard Report that talks about a commonsense approach. But, you know, these things have been around for a very long time and we haven’t moved forward.

We mentioned SBIR. It was this body, by the way—and I was privileged to sit on a panel which looked at, quote, the—really the difficulties in doing business with the defense industry, and it was from the small business perspective. And one of the issues that was raised there was SBIR was not authorized, and it was through the NDAA that it got reauthorized and I think it is up pretty soon.

We look at what Mr. Dyer talked about, which I have always been a fan of DARPA, but it all comes back to one area. As you look at this and you look forward, how are you going to interface the FAR [Federal Acquisition Regulation], which is really the gov-

erning document for everyone, and what we need, I believe, in terms of the flexibility of addressing the policy that we are going to set for the defense industry through acquisition?

How are you going to do that unless you are potentially looking at an exemption from many of the provisions of the FAR and developing a whole acquisition process that is relevant to the defense industry in order to give it the flexibility that we talk about?

Ms. Lee.

Ms. LEE. We have certainly looked at that. In fact, our listing of teams in the report, we have a team that is called "Reg to Statute Baseline," so we have a team of people that are actually going through, and it is a torturous meeting—anyone is welcome to attend—where they go through the FAR section by section and trace it back to the origin. We have found some very interesting things, some things that are in the 1947 vintage, et cetera, that remain in the regulation. And for each section they are making recommendations on what can be eliminated, streamlined.

And in some cases those policies—to your point exactly—they are riding on how we spend money in the acquisition system. But probably if they are that important a policy can be accomplished another way, not necessarily in this system.

So we are working through that, and that will be part of our report is this plethora of activities that are, in fact, influencing the way people do business.

Ms. HANABUSA. But if you don't wipe it out almost—I am not advocating for it; I am just saying that if you don't wipe it out, so people doing business with the defense industry can go to one set of guidelines that has the preemptive power over others, you are going to have—I think what Mr. LaPlante was talking about—this whole problem with small business—or was it Mr. Williams—small business trying to figure this out. And they have such a difficulty doing that.

It is not only the acquisition. It is the compliance part of it later. That is also very difficult.

So my problem in listening to how we are going to change the acquisition process is the whole gamut. And what I want to hear—and you have only got another year to do this—is how radical a change does this body need to expect? Because if we—if you give us something in a year that is extremely radical, we are not going to be able to make the change.

I love the concept of being able to do this in a DARPA type of format. I think that would be absolutely the greatest things we can do.

But the only way we get there is if you actually propose that we may have to eliminate or preempt the whole acquisition process that is defense-related from the rest of FAR.

Ms. LEE. That has certainly been discussed. We have actually had some people recommend starting from fresh baseline. What that does bring is some complexities because, as you know, the FAR applies government-wide so that would be—now you are a company that wants to do business with DOD but now there are new rules for both.

So we have certainly looked at that and we have had some recommendations. We have some possibilities on how to give you some

information in a more—more regular intervals, and I do think there will be some very difficult decisions to make.

Ms. HANABUSA. Thank you, Mr. Chair. My time is up. I yield back.

The CHAIRMAN. Thank you.

Mr. Gallagher.

Mr. GALLAGHER. Thank you, Mr. Chairman. Can I dig into that a little more, or related topic? Excuse me.

I want to thank you all for your work and joining us here today. I was especially impressed by the urgency of your conclusion. You wrote, “The time for superficial conversation and insubstantial changes to regulations and statutes has passed. The Section 809 Panel has no interest in putting patches on a broken system. We intend to take a big bite into real change rather than just nibble around the edges. To do otherwise is to put our military’s mission and our Nation’s safety and security at risk.”

I couldn’t agree more, and I applaud you for saying it in such clear language. And I look forward to working with my colleagues on the committee and under the chairman’s leadership to advance big and bold reforms.

In recent years we have seen both the Defense Business Board and a lot of think tank experts call for zero-basing the defense acquisition system. This procedure would essentially hold that all acquisition regulations are guilty until proven innocent that their benefits outweigh their costs.

And I know you are still in the interim stages of your investigation, but can you talk a little bit more about that and how seriously you are looking at zero-basing? And in your professional estimation, would a—such a wholesale change be practically possible?

Ms. LEE. I think anything is possible. It is do we have the will and commitment? And one of the things that happens as we dig through, you know, the Federal—there is this belief by some that say, “Oh, you know, the Department did that to themselves.”

And what we are finding is there is a spectrum here. That is why we are chasing back every regulation. And it is very detailed, as where is the source? Where is the origin?

And as you see in our supplemental, on those little, tiny examples, even those little examples we had to go all the way back to a statute or an executive order to say, “In order to change it in the regulation this source document must also be changed.” And so we are providing that information so that it actually can be acted upon.

Some of our prior reports would say, “Go make this happen,” but without the due diligence to make it happen it is very difficult.

So yes, we have talked about baselining. It is not only the Federal Acquisition Regulation; for the Department of Defense it is also the 5000 regulation, which, as you know again, is governing to our particularly major weapon systems acquisitions, but that is one of our findings.

We seem to like to use that huge, one-size-fits-all on everything and that is part of the problem. No decision is made yet, but we have discussed that perhaps we have segmented buys, these—you know, where these long-term platforms do require a great deal of diligence, a great deal of commitment, but some of this other tech-

nology we should be doing like this. And when you apply this same process to that, neither one benefits appropriately.

Dr. LAPLANTE. I would just add to the—our chair’s comment, to her credit, the chair—and—is that the way the panel is working is it is working simultaneously with the big concept ideas, the be bold part. But we know being bold and vague doesn’t help too much. So while we are being bold at the concept level and reevaluating fundamental assumptions going back decades, we also have this team that our chairwoman said is actually going to prepare to go back and do line-by-line through the regulations to make the changes or recommendations and go back to the sources.

So we give to you-all—do that work for you. So it is the simultaneously—you have to really do both.

Mr. DYER. Mr. Congressman, I will preface this by saying we don’t know the answer yet, but one of the areas of research is do successful programs succeed because they are walks, because they are experts in the FAR and how to get through the wickets? Or are they just more courageous in their culture in using the freedoms that are allowed within an existing system? Which works best?

And I think that will inform the question of zero-basing versus more freedom or more see room.

Mr. GALLAGHER. Okay. Well, by the time I ask my next question and you answer I will have exceeded my time, so in deference to the chairman I won’t do that.

I would just say that—maybe because I am new and not yet jaded, but I think you have a lot of allies here when it comes to embracing bold reform, and so I encourage you to continue down that path and hopefully we can muster up the will power you referenced to be a partner in that.

And so, Mr. Chairman, I yield.

The CHAIRMAN. Ms. Shea-Porter.

Ms. SHEA-PORTER. Thank you. And thank you, Mr. Chairman, for having this hearing. It is incredibly important.

First I wanted to make a comment.

Mr. Dyer, I was very disturbed but I heard before from a CEO [chief executive officer] the kind of statement that you made when they said, “What is it about capitalism that you don’t understand?” And I was thinking, well, we wouldn’t have capitalism if we didn’t have this great democracy.

And I am wondering where—as I asked my friend who is a CEO, and I was talking to him about parts and outsourcing, et cetera, and the concerns, and he said, “Well, I have to answer to stockholders.”

And I said to him, “Well, do you have an office of patriotism?”

And so you touched on that. So how deep a problem is this? Have we, like, lost our sense that while the profit is very important—obviously, people need to have profit—have we lost our sense of also responsibility and the patriotism? I mean, you are standing here as patriots and saying, you know, we need to clean this up, and I agree with you. But I have had 6 years on this committee and this is a fairly familiar conversation that we are having right now.

So I just wanted to put that out there and see if anybody wanted to comment on that. Do we need to have a discussion, a revisit, a review of, you know, who we are and why we are doing this?

Mr. DYER. Well, it is an important question, but it is an issue of erosion of dominance and timing. I think American companies—high-tech companies—if they believe we are in a genuine extremis, if in a World War II kind of a situation, as Congressman Russell mentioned, I am absolutely confident they will lay aside everything else and come to the support of the Nation in a very patriotic sense.

The problem, though, is the time constant of being prepared today for an erosion of dominance and the time we will have to harness that patriotism. Companies that are on their way to being publicly traded companies benefit by operating as a public company before they go there. We would benefit by operating as a warfighting acquisition community before we have to do it.

Mr. WILLIAMS. Congresswoman—

Ms. LEE. Go ahead—

Well, I would also like to just mention one of the things in our report that is a sensitive subject is the balance of oversight. You notice that I use a term that makes everybody uncomfortable, which is the—we need to decriminalize commerce.

We many times go into agreements expecting that there is something nefarious about a company who actually wants to be treated fairly, is concerned about their reputation, wants to make a fair product and profit, but yet if they make one little mistake or they don't sign up—I mean, some recent decisions where every certification is subject to treble damages, companies sit back and say, "Wait. I don't know if I can do this because of the reputational risk and the very onerous application of remedy for something that might be—that certainly is unintentional and may be monitored."

So I think that is a contributor and certainly I think—

Ms. SHEA-PORTER. That is a fair comment. And maybe we need to have this discussion and bring in these companies and sit and talk about all of this and what the needs are in a different setting.

And I have one last question: We—our procurement technical assistance program. I am excited about these young new companies with their emerging technology, et cetera, but I know it is difficult. Are we utilizing this? Are they utilizing this enough? Are they aware of it? Are we making sure they are aware of it?

Mr. WILLIAMS. Congresswoman, we are looking exactly at that question. In fact, as we think about our small business issues and things of that matter—that nature, we want to understand just exactly what you are asking. So we have got a group of folks who are going to go out and spend some time with PTACs [Procurement Technical Assistance Centers] and understanding how much involved and what they are doing to connect small businesses to the Department.

Ms. SHEA-PORTER. Right. So because safety and our security is a responsibility for all of us, and so thank you very much for the work that you are doing. And I yield back.

The CHAIRMAN. Mr. Bridenstine.

Mr. BRIDENSTINE. Thank you, Mr. Chairman. And thank you, to our panel, for the great work you are doing on behalf of our country.

I wanted to share with you one of my concerns in the acquisition process. It starts when requirements are generated, and then we

look through all the different ways to fill those requirements, and in many cases there is a commercial service that could be purchased but it only meets 95 percent of the requirements, and so since it doesn't meet 100 percent of the requirements we end up immediately moving to a program where the government is purchasing, owning, and operating an entire system to meet really what is only 5 percent that commercial off-the-shelf can't provide as a service. And, of course, that adds costs, complexity, time, effort, and challenges.

And I see this especially in space-based communications. There is a lot of opportunity for us to lease capacity from commercial operators to change the way we do acquisitions of space-based communications.

But you also see it—and I know, Dr. LaPlante, you and I have talked in the past about avionics modernization in aircraft, and I am not going to bring up the C-130 at all today.

But I will tell you, you know, we see it when we need to do a modernization of a cockpit and there are commercial off-the-shelf capabilities and then there is this MILSPEC and we have to meet a very specific military specification that, you know, has all these requirements for heat and vibration and all these hardened kind of capabilities. And then you look at the aircraft that this avionics modernization is going to go into and it is a trainer, a T-1, for example, which is not going to be flying into combat at all.

But we see these kind of programs where there is a 95 percent solution. And sometimes we add requirements that aren't necessary, and other times if we just included commercial off-the-shelf in the process ahead of time they could save us a ton of money and a ton of time and they could do things—I know one of the things I advocate for is for the protected tactical waveform, but that is one example of a lot of different opportunities, if we can involve commercial off-the-shelf ahead of time we can ultimately save time and money.

And I would like to hear your feedback on these things.

Dr. LAPLANTE. I will start by saying I think you are hitting a key point. There is a type of analysis—it is going to sound very bureaucratic, but called cost capability analysis. It is really monetizing requirements, basically saying—to your point about, “This is going to cost you to get 95 percent; to get to 100 percent is going to double the cost. Okay, do you really want to do that?”

That analysis, what I just—monetizing requirements generally does not happen. If it does happen it is not done robustly because we tend to have these serial processes where the requirements get finished, they get stamped, they get released, and then the acquisition people roll up their sleeves and start working.

No. They should have gone back and forth on this monetization.

The other piece, I think, which you would appreciate: It should be transparent. It should be public as best as possible, including the industry, how much these requirements are costing. Because then people will say, “Really? You are really going to double the cost of that just for that last 5 percent?” And I think that piece is not done.

And there are pilots being done around. We did one in the Air Force when I was there on EPAWSS [Eagle Passive Active Warn-

ing Survivability System] for F-15. I recommend you look at it. We had one lieutenant or captain in the Air Force probably saved—he saved us a ton of money by just going back to ACC [Air Combat Command] and saying, “Look how much more this is costing for this requirement.” And they said, “Oh, okay. Never mind.”

So this is really important.

Mr. BRIDENSTINE. And in many cases what you find in these programs where you are trying to finish that last 5 percent, we come to the end of the useful life of one satellite program and now in order to maintain that extra 5 percent, whether it is protection or some other kind of capability that is necessary for the military but not necessarily for—necessary for commercial, we enter into an entirely new military, you know, government-purchased, government-owned, government-operated system when it is not necessary if we would just include commercial in what we were trying to accomplish to begin with.

Some of the folks that I have talked to have described it as the “tyranny of the program of record,” where you finish one program of record and you go on to the next program of record without looking at what are all the options available to us. And I know that is what the analysis of alternatives kind of process is all about, but I don’t think that always that is as utilized as it ought to be, as you articulated just now.

So with that, Mr. Chairman, I thank you for the time. I yield back.

The CHAIRMAN. Thank you. Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman. And thank you, to all the witnesses, for being here and for the report, which, again, really is a serious analysis of the challenge that we face.

I represent southeastern Connecticut, which a few years ago we celebrated the 60th anniversary of the launch of the *Nautilus*, and the story of Hyman Rickover, Admiral Rickover, in terms of how he basically went around the Navy and the Pentagon to bring to fruition. It was a 5-year gap in time from the first lightbulb that was powered by nuclear power to the launch of the *Nautilus*.

Inside the Navy they were telling him it would take 75 years before they would ever see a nuclear-powered vessel and, again, he actually went to Congress to find ways to get around the, you know, the Pentagon sort of bureaucracy.

And, you know, looking at the path forward at the end of your report in terms of just, you know, ideas that you are looking at in terms of thinking bold and moving forward, how can Congress sort of help with that?

I mean, other than, you know, obviously, I am sure the chairman who is so passionate about this is going to do what he can to authorize, but, you know, obviously that story, which is probably going to never be repeated again—maybe not—but, you know, Congress really was a very big sort of player in terms of an advance that I think has really stood the test of time. I mean, our Navy still, I think, you know, surpasses in terms of capability because of that incredible genius and determination, you know, that took place 60-some-plus years ago.

So I don't know if you have any sort of comments about, you know, ways this branch of government can sort of, you know, kind of help sort of goose the process.

Mr. WILLIAMS. Yes, Congressman. I think your question speaks to as we put together a set of bold recommendations, how do we make sure that they are fully implemented to achieve the success that we collectively believe is important? And I think there is a series of things that have to go on.

Obviously within the Department there has to be a phenomenal change in management activity established and we have to inculcate this kind of thinking philosophically into our training programs.

I think the Congress has to provide the sort of stick-to-itiveness from sort of an independent perspective, you know, of even thought, you know, there needs to be a continual, ongoing, independent authority that looks at, are we actually implementing the way that the Congress believes these kinds of recommendations should be implemented? Because typically what seems to happen is as we go through administrations and changes of cycles people lose priorities and they refocus and we start to get away from things that we collectively believed were important before we even put them in place or—and can understand whether or not they make a difference.

So I think there are some efforts that can put—be put together to help us get down the road and make these things effective.

Mr. DYER. Congressman, there are similar stories today of tremendous success at great speed, but they are from Amazon and from Facebook and from Google. America knows how to do this. We just need to make it attractive to do it for the common good.

Dr. LAPLANTE. And I would have to say, I just credit this committee and the chairman of this committee for your steady attention on this. It is making a big, big difference. It is. It is a hard slog, you know, it is a hard slog.

The other thing I really commend doing—and I think this committee has done this over the years—stick to root cause. Treat the underlying disease, not the symptoms. That is one thing we are always asking ourselves.

But again, I think to Admiral Dyer's point, you guys all know you go out to the Valley and you sit down with Facebook, Google, and the companies, and you look at what they are doing and you say, "We can still do this stuff. It is just we gotta be doing it in the government."

The CHAIRMAN. Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman. I would like to thank the witnesses for joining us today.

Dr. LaPlante, I want to begin with you. I recently had a meeting with the CEO of one of the most successful defense contractors in the world and I asked him what goes into a successful contract. And he outlined three items: requirement stability, financial stability, and execution.

And I wanted to get your perspective. Obviously through the acquisition process in the Air Force you have seen a lot through the years. Give me your perspective: What do we do to address the first

item he points out, which is requirement stability? How do we push out requirement creep?

And you have spoken a little bit about that but I want to get a little more specific in your ideas about how that can happen.

Dr. LAPLANTE. Yes. Actually, I think my experience in the last 3 years when I was in the Pentagon, for the big weapon systems programs I didn't see requirements creep. You know, the cliché is that the four-star comes running in and pounds on your desk and says, "Oh, never mind. I don't want the fighter to do this; I want it to do that." That doesn't happen.

In fact, if you look at the bomber, what is now called the B-21, those requirements—they were classified requirements, mostly—were signed out by Robert Gates, Secretary of Defense, in 2011 and they remained completely unchanged to this day. And that was really important for this industry because what industry will tell you is, finalize your requirements, get it to us early, don't change them, and give us stability in funding and we will execute to it.

The only addition I would make, which is something that I am still struggling with and I know the panel is struggling with, is the commercial companies that are moving fast don't pretend that they are going to know all the requirements when they start something fast.

Mr. WITTMAN. Right.

Dr. LAPLANTE. So I think there are some activities with technology that you have to have a much more give-and-take on requirements as you build it, sort of the discussion we were just having with Congressman Bridenstine.

But I think for the big weapons platforms it is exactly right. What industry hates is they hate the fact that you are modifying the requirements a month before you drop the RFP. They say, "Wait a second. I can't invest."

So that is really hard. And it takes discipline not to change requirements.

In fact, in the tanker—the tanker is a fixed-price contract—my job and the job of the Air Force was never change the requirement. Not once. And so far they have managed to do that. So it is very important.

Mr. WITTMAN. Is there more we can do up front with certain elements in the industry in the RDT&E [research, development, test, and evaluation] to say, "Give us your thoughts and ideas about what we can accomplish"?

And obviously within the Pentagon there needs to be a baseline about what the needs are, but as Mr. Bridenstine spoke about too, it is a matter of, you know, what can you do quickly and what can you do most cost-effectively not just in the acquisition process but also the life cycle?

And if you can take an off-the-shelf technology, many times, you know, value, life-cycle cost, all are much, much better in that realm than something that is driven to 100 percent requirement.

Dr. LAPLANTE. Right. I believe very strongly that you have to do the kind of work that we were discussing with Congressman Bridenstine very early before you get the big acquisition. You go back and forth and say, "What can be done commercially? What can be done? Can we go back and forth?"

That has to be transparent, as I said, with industry.

The interesting thing is in the Pentagon you are discouraged from doing that because you are interacting with industry while you are forming the requirements. And people used to ask me, "Well, isn't industry going to steer your—the requirements to their solution?" You know, I said, "Well, of course they are going to but let's at least be transparent about it. Let them be an advocate for their solution."

But that has all gotta be done at the very beginning. And then once you are done then you don't change the requirements.

Mr. WITTMAN. I agree.

Mr. Williams, let me ask a little bit different track question. Give me your perspective on the use of incremental funding, especially for larger programs where we expend dollars over a number of years and being able to leverage the most out of the dollars that we allocate in any one year. Give me your perspective on that.

Mr. WILLIAMS. It is absolutely critical. I mean, that gives us the funding flexibility that we need as we look across the years. I mean, this question of how we think about requirements and the changes that need to occur across the technology space as it goes forward requires that we are able to fund contracts based on the need as it exists and as it changes.

We all too often get stuck in a requirements set, particularly in the high-tech community where things are changing rapidly, and the nature of the funding, the incremental approach would be critical to allowing us to do that in a more flexible way.

Mr. WITTMAN. Very good. Admiral Dyer, any thoughts about requirements creep or incremental funding?

Mr. DYER. I am often asked, after having spent a long career in defense acquisition and then in my corporate world, "What are the differences?"

You have, I think, touched one of the primary differences that I observe, and that is the ability to—for commercial industry to sit down with suppliers, to have a discussion about what technology can bring to the need that the company has. And that is an intense dialogue that arrives at an understanding of requirements and contract much earlier and much faster than we do it in government.

Why is it hard for us in government? I always suck wind through my teeth when I say this, but we are so worried about the appearance of fairness that sometimes we act not in the best interest of the Nation.

Mr. WITTMAN. Very good. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. Mr. Wilson,

Mr. WILSON. Thank you, Mr. Chairman. And, Chair Lee and fellow commissioners, thank you very much for your thoughtful report—interim report. We appreciate your dedication and hard work.

And, Madam Chair, led by Chairman Mac Thornberry the House Armed Services Committee has been concerned about the cumbersome and time-consuming acquisition process that has hindered the Department's ability to get innovative technology to the war-fighter quickly enough to make a difference. In your view, is the Department competitive in getting the best technology to the war-

fighter in the theater, and do you have any recommendations to expedite?

Ms. LEE. That certainly is a thrust of our report.

My concern, as we have heard from many of the members here, is we do have a very powerful military. We don't want to in any way, shape, or form belittle what has been accomplished. But what we are saying is the environment has changed so substantially that that era and that approach needs to be modernized to address the emerging and changing threat and the changing dynamic marketplace.

I think time is critical, and we have got to figure out a way to do these things much more quickly.

Mr. WILSON. And I wish you well because in my National Guard service we work with communications, the SINCGAR [Single Channel Ground and Airborne Radio] system. And it certainly occurred to me, as—even as a JAG [Judge Advocate General] officer, that we could do better, and with more advanced technology. And so I look forward to your recommendations particularly on communications.

And, Secretary LaPlante, the report indicated the growing and changing global defense marketplace where companies are no longer dependent on the Department of Defense for contracts and parts for major systems are sometimes built all over the world. Specifically, the report references the F-35 is produced in part by eight foreign nations.

Is your view that all components should be manufactured in the United States, or is multinational manufacturing helpful while securing our technological advantage? And keeping in mind, too, that the F-35 multinational manufacturer creates an international market.

Dr. LAPLANTE. Yes, that is a—it is a great question.

I think it was just the other day that the first F-35 was built in Italy was just rolled out, if I remember right, and it is going to be produced, I believe, also in Japan. So yes, there is—the international aspect of the F-35 program is a huge strength of the program, frankly.

It is a huge strength for multiple reasons. One is we want our allies and partners to be buying the airplane because it is the best airplane in the world for that kind of plane, and we are going to fight with them. We certainly don't want them to go to other people.

I was going to the airshows; I know some of you go to these airshows. Was at the last one I went to as assistant secretary was Dubai. The Chinese push of their military equipment there was very strong. They had their replica of the F-35, the J-31; they had their version of the MQ-9.

You know, they were—so it is very clear we don't want other countries to buy their stuff; we want it to buy the F-35. So it is a strength of the F-35.

The question that you are getting at, which is the risk equation, which is the supply chain risk, and do we have an understanding of the supply chain and its global origins. I think where technology is going, without getting too technical here, the idea of having a root of trust in, for example, our hardware, regardless of where it is developed, is something that we as technologists have to give

everybody because we are at a point even in cellular communications just in this country where the root of trust of the cellular communications may be produced in China.

So it is a much bigger issue than just with the military, and I think the technical solution to it is understand the supply chain, understand how the root of trust is ensured, meaning how do we understand the sanctity of what has been done or not to that supply chain. That is not easy, but I think the answer of pulling everything back in and not having F-35s produced globally is not the right answer.

Mr. WILSON. And I appreciate particularly the concern of security of maintaining, that indeed what is produced is not copied by some other country that might come to mind.

And for Commissioners Williams and Dyer, your interim report indicates that DOD asked if it could dictate terms to the industry, driving many companies not to be a part of the defense market. Can you elaborate on what DOD can do to change this pattern?

Mr. WILLIAMS. Yes. I think we have to look particularly at the oversight structure that is involved in managing and supporting contracts. The whole issue of compliance centered around audit requirements, and pricing, and things of that nature is robust opportunity because when you think about the timeframe that it takes and the amount of resources that industry has to bring to bear to meet those compliance requirements, it often keeps them from wanting to do business or giving them the ability to do business with the Department.

That is one of the things we hear consistently as we talk to companies out there who want to do business but have chosen not to.

Mr. WILSON. Thank you very much.

Mr. DYER. Congressman Wilson, I should mention especially for you, sir, that the panel is well-led, and as you may or may not know, our chairperson, Ms. Lee, is from South Carolina. So I just wanted to point that out.

Mr. WILSON. That should have been brought up first. I can't believe it. I always count on the chairman to bring up important issues. Thank you very much.

[Laughter.]

Mr. DYER. Sir, in answer to your question, we have to facilitate a conversation between high-tech nontraditional industry and DOD. You and I recently have discussed the role that consortia may be able to provide in terms of bringing in refreshed R&D [research and development], to expand the base, and to find those kinds of successes that we see at Amazon, Google, et cetera, and bring them back into DOD.

The CHAIRMAN. Ms. Stefanik.

Ms. STEFANIK. Thank you, Mr. Chairman. Thank you, to our witnesses, for being here today.

In today's economy the pace of technological advancements is growing exponentially, and in the interim report it—you write, quote—"The acquisition process must be agile enough to respond to rapidly evolving threats and fast enough to develop and deliver new capabilities within the arc of emerging threats." And my particular interest is in the area of the cyber domain.

Could you discuss the reform measures you have identified that better achieve this agile system to respond to emerging threats specifically in the cyber domain?

Dr. LAPLANTE. I don't know if the commission has weighed in yet on cyber. I will give you some of my own views that are not—the commission hasn't done it, but the others can chime in.

Let's talk about the—what makes it hard for somebody who is trying to do damage to you with cyber. What makes it hard for them?

Couple things. One, if you are changing all the time—if I am putting out, you know, hundreds of versions of Google every 2 days, or Facebook, whatever, for whatever reason I am doing it, that has gotta be hard on an attacker, number one.

The other is heterogeneity, meaning things are different. We tend to, for economies of scale, make things the same.

I think those two design principles—speed, which is already happening anyway in the commercial world, constant development, constant change, constant pushing—literally software pushed out overnight, and then look at the design and heterogeneity. I think those key aspects of design will keep us ahead in cyber because the benefits we get from the Facebooks and the Googles and our mobile apps is great for society. It brings with it risks, but we have to manage it into our system.

And so I think that is a key point for cyber.

Ms. LEE. And I think what we also see in our report, there is a mismatch between that ability to constantly change when we want to well-meaning, you know, have this process where it is full and open, everybody can propose. That takes time and really impacts the ability to be flexible and make those changes.

So we are asking ourselves not specifically from cyber—although we have looked at from a technology standpoint—is there a better way to have a competitive underpinning but a much more flexible response?

Dr. LAPLANTE. That is part of another activity. I have been looking at this, and just to add to that, I think it is Google says that they change half their software every month. Now, what “change” means—maybe small change, big change. Cars are pushing software out overnight, okay?

So the idea that we could move into a system, could you imagine pushing out continuously software globally to the F-35 mission systems? People shudder at that.

On the other hand, for lots of reasons, including security, that may be where we need to go. That certainly is where the commercial world is going.

Ms. STEFANIK. Just to follow up, Dr. LaPlante, you talked about—and Ms. Lee—you spoke about how you are not specifically looking at cyber or haven't yet as part of—it wasn't included in this interim report. I think that is really important.

In my capacity as chairwoman of the Emerging Threats Subcommittee, Cyber Command falls under our jurisdiction, and acquisition reforms, we need to look critically on what our proposals are and how they would impact cyber because, as I said, the pace of development is much more rapid and we need to ensure that we are investing in our cyber readiness, in our cyber defenses.

So a year from now I am hopeful that you can have a specific response related to cyber.

Any comments? I would like to get your feedback on that.

Ms. LEE. We will certainly put it on our list here and see how to best go about that.

Ms. STEFANIK. Okay. Thank you, Ms. Lee.

Ms. LEE. Look forward to working with you on it.

Dr. LAPLANTE. I would also commend—there is some great work that is being done by the Defense Science Board on cyber, and they are—and I would also get this committee to look at that, including the resiliency of our weapon systems on all these issues. Whether this panel gets to it, I leave it to our chair.

But we appreciate the concern. Obviously cyber is at the top of all of our minds.

Ms. STEFANIK. Okay. Thank you. I yield back.

The CHAIRMAN. Mr. Russell.

Mr. RUSSELL. Thank you, Mr. Chairman. And thank you for this great report, but it is really on us collectively to do something about it.

I guess, you know, as I look at the threats, powerful nations with economies that have a totalitarian type of system, they can streamline acquisition very quickly. The only way we will be able to leverage and stay ahead is through our innovation.

And yet, we have seen 300—by your own report—300 primes now reduced to 5 mega-primes. We see an archaic system where small businesses that really aren't small anymore, leveraging our rules where they are a \$2 billion to \$3 billion company, and they are still taking small business incentives. I haven't figured out how they do that.

And as I look at the funding of concepts with no real delivery. You have small companies out there that are doing incredible innovation but, you know, a mega-prime will step in and, "Well, for \$200 million we will come up with a concept and a plan and we will get back to you," and often those dollars will get siphoned off.

Mid-sized companies, the few that remain, are investing their own venture capital and they are putting their investment and innovation in, and then when they come to the table with fantastic ways to leverage the future, we have the simplified acquisition program, which is no longer simplified, and then our FARs. You know, my own thinking is we need to throw out all of the FARs, just throw them all out, and then make the case for which ones need to go back in instead of the other way around, and I think we might be better served.

But with regard to incentives, I was caught in your report where you say, "Without changing this mentality of incentives we will never have reform occur." And I agree with that.

And on that note, the Defense Innovation Unit Experimental, that is something that we have seen some amazing things happen from. You know, I think of these innovative smaller companies that gave us the Predator, the OCAS [Obstacle Collision Avoidance] system, I mean, things that are totally changing in how we fight and deal with future threats.

Would you all speak to the DIUx program? Because there has, you know, been kind of the—it has been vogue to try to want to crush that, and I would like your opinion on that.

Dr. LAPLANTE. I will just say a few words about it. I don't know if the panel is—or the commission is looking specifically at DIUx. What the commission is looking at, which will hopefully answer your question, is things that DIUx is trying. And so anybody who is trying the following, we commend them because it is experimentation.

What they are doing is they are trying things like other transactional authority. Remember earlier we were talking about how hard it is to do contracting?

Mr. RUSSELL. Right.

Dr. LAPLANTE. Well, the DIUxes, both out in California and in Boston, and maybe the other one, too, is trying to get people on contract sometimes within weeks and using the authorities that they have. And just by doing that alone they are providing a huge value and learning the lessons for it.

So I would commend any activity—and I think the committee would—any activity that the Department has that is trying these experiments of using existing authorities to do things differently or faster.

And I could turn it over to my colleagues for other comments.

Mr. WILLIAMS. Congressman, we have spoken to DIUx a little bit, and they are doing some tremendous things and they are taking advantage of authorities that exist to allow them to move fast. OTs [Other Transactions] are one example.

The question that I think is important for all of us is why aren't we able to do that in other parts of the Department? You know, why do you have to have these sort of specialized groups to do that?

And I think that is the root question here because obviously one organization is limited in its capabilities and what it can do, and we need to think that through. I think DIUx, working with the services, you know, obtain funding to go acquire things that the services need, but you have to ask yourself, why do the services need to turn it over to DIUx? Why aren't they able to do that themselves?

Mr. RUSSELL. Yes. I couldn't agree more. And I think, you know, when we have a national emergency we see things like the Rapid Fielding Initiative, DIUx, these different programs that meet the emergency, where industry, as you have all commented on, in leveraging their off-the-shelf technologies, it is like, "Well, okay, how could we harden that?" Or better yet, how could we adapt our systems, you know?

And the warriors out there in the field, they figure out how to do that stuff all the time. And I guess, you know, I am heartened to hear you say that and I would hope, Mr. Chairman, that as we look into the future on contracting reform we don't kill the nascent systems that really help us get to that.

And then I am very interested, Ms. Lee, in some of these FAR eliminations, and I hope you will let us reach out to your office because we will have an axe in hand and drop amendments. So I hope to be contacting you.

Thank you, Mr. Chairman.

Ms. LEE. We look forward to that. Thank you.

The CHAIRMAN. Ms. Lee, we really hadn't talked about timing. I mentioned at the beginning that through no fault of the commission you all kind of got off to a slow start. What are you looking at now?

Ms. LEE. Mr. Chairman, thank you for acknowledging that. We did get a slow start and we very much appreciate the 2017 NDAA where you clarified that we are an independent panel and that, in fact, the panel had the authority to use 5 U.S.C. [United States Code] 3161, which we needed in order to hire our staff and also to accept industry volunteers, or volunteers. So that has been very fruitful.

However, we—even though we were sworn in in August of 2016 we couldn't hire any of our small staff until December of 2016, and so we got internet in March and had quite a celebration over that. So that is a very long way of saying we would like to have 2 full years to do our work, and so with a start in about the, you know, January timeframe, we would like very much to go to January of 2019 to give our report. I think that aligns with your calendar.

We are discussing some possibility of some interim supplemental reports, and then the other thing would be however long you would want us to be available after that to take your actions and to do additional work.

The CHAIRMAN. Well, we certainly want to work with you on it. Obviously we want to take advantage of this gathering of expertise that you have assembled on the commission. At the same time, I think we feel the same sense of urgency that you all have so eloquently expressed here today.

So you want to get it right but you also want to push out boldly, and so we want to work with you on timing. My personal opinion is that maybe some interim reports help because that gives us some meat to work with while you continue to work on the other items.

Ms. LEE. Thank you, Mr. Chairman. We would also really like—I would like to acknowledge the Army has been very helpful, forthcoming with detailees and help.

We are working with the other services and we are also working a little on the budget challenge. So those are the challenges that remain before us.

The CHAIRMAN. Well, I would just say in general that I am incredibly encouraged by the last 2 hours. I have heard the same things that you all have referenced, that, "Oh, just another study on acquisition. Everybody has tried. You are beating your head against the wall."

Number one, I don't think any of us can accept what we have today because we know we can't defend the country that way. But secondly, I am really impressed each of you bring particular expertise based on your experience in various places in the system, and you feel that urgency and can bring your expertise to bear with an urgency to get it fixed.

So, you know, I know we will never have a perfect system, but on the other hand, I am very encouraged. And you could tell from the questions on both sides of the aisle, there are members of this

committee that are just as determined as you all are to work to make this better. And I think together, with your work product, our continued efforts, we definitely can.

And so I want to thank you for what you have done so far, being here for the—today, the interim report, and especially for the work that you are going to do in the future.

Hearing stands adjourned.

[Whereupon, at 11:50 a.m., the committee was adjourned.]

A P P E N D I X

MAY 17, 2017

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MAY 17, 2017

**House Armed Services Committee
Ranking Member Adam Smith Opening Remarks**

**Full Committee Hearing on “Initial Findings of the Section 809 Panel:
Setting the Path for Streamlining and Improving Defense Acquisition”**

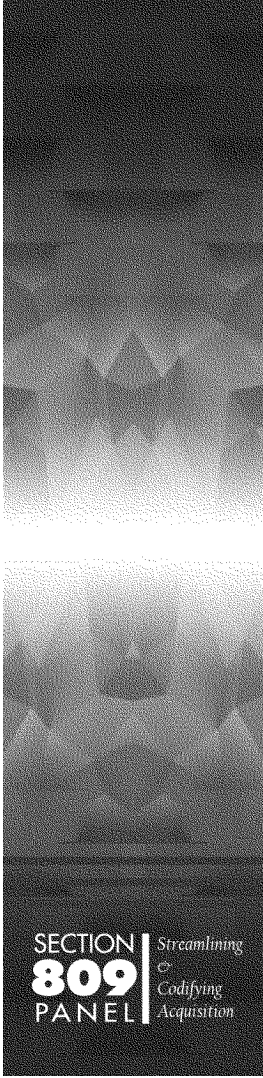
May 17, 2017

Today’s hearing on the interim report of the Advisory Panel on Streamlining and Codifying Acquisition Regulations, also known as the “Section 809 Panel,” provides the committee with a reminder of the importance of thoughtful improvements of the Department of Defense’s acquisition system. As the panel’s interim report notes, the world is catching up with us on research & development spending, we face at least two “peer competitor” nations in terms of many high-end military capabilities, and technology is changing at such a pace that the DOD is challenged to keep up, let alone lead, on these issues. While the DOD continues to procure generally excellent equipment, its process for doing so can be far better.

However, as we all seek to streamline the acquisition system, we should not lose sight of two things. First, we need to be very careful about adding any more process or bureaucracy to a system already drowning in both. The 809 Panel’s interim report makes it clear that additive legislation may not be the path to success. The second thing is the need to retain basic good-government policies, such as competition whenever possible, ensuring accurate cost estimates, and thorough testing of systems. While I strongly support efforts to cut away unproductive red tape, I am wary of going too far and ending up in a place where we are buying systems based on under-the-table deals that cost too much and aren’t tested to ensure they actually work as promised. The DOD has been there before and it resulted in the acquisition system we have now. We should not repeat those mistakes. What I hope the Section 809 Panel can do today and in the panel’s final report is help us sort through and cut away unnecessary things while preserving the critical “crown jewels” of effective government oversight along the way. Given the threats we face and the rapid pace of technology we can’t afford to get this wrong.

DOCUMENTS SUBMITTED FOR THE RECORD

MAY 17, 2017



**Advisory Panel on
Streamlining and Codifying
Acquisition Regulations**



Section 809 Panel Interim Report

May 2017

SECTION | *Streamlining*
809 | *Codifying*
PANEL | *Acquisition*

[**Note:** Intentionally blank report pages ii, 26, 36, and 50, as well as back cover pages, were not included in this reproduction of the Section 809 Panel Interim Report.]

Members of the Advisory Panel on Streamlining and
Codifying Acquisition Regulations



The Honorable Deidre A. Lee, Chair

Mr. David G. Ahern

Maj Gen Casey D. Blake, USAF

Mr. Elliott B. Branch

The Honorable Allan V. Burman

Mr. David A. Drabkin

VADM Joseph W. Dyer, USN (Ret.)

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Advisory Panel on Streamlining and Codifying Acquisition Regulations



Section 809 Panel Interim Report

May 2017

SECTION | Streamlining
809 |
PANEL | Codifying
Acquisition

**SECTION
809
PANEL**

The Section 809 Panel is pleased to submit the enclosed interim report.

The Department of Defense spends nearly \$300 billion annually acquiring systems, goods, and services in support of the nation's defense. A successful acquisition system is critical to providing warfighting and defense capability.

Section 809 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), as amended by Section 863(d) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328), established an independent Advisory Panel on Streamlining and Codifying Acquisition Regulations—the Section 809 Panel. By statute, the panel was formed to

- Review the acquisition regulations applicable to the Department of Defense with a view toward streamlining and improving the efficiency and effectiveness of the Defense acquisition process and maintain defense technology advantage and
- Make recommendations for the amendment or repeal of such regulations that the panel considers necessary to
 - establish and administer appropriate buyer and seller relationship in the procurement system,
 - improve the functioning of the acquisition system,
 - ensure the continuing financial and ethical integrity of defense procurement programs,
 - protect the best interests of the Department of Defense, and
 - eliminate any regulations that are unnecessary for the above purposes.

To date, the 18 panel commissioners have organized into working groups focused on key challenges facing decision-makers in Congress and DoD with respect to the defense acquisition system. Commissioners and panel professional staff are looking at all aspects of that system to enhance DoD's agility to acquire what it needs to meet threats posed by a more fluid geopolitical environment, promote cost savings without shortchanging readiness, and simplify an antiquated system wedded to practices that challenge the workforce and push away marketplace innovators.

Commissioners and panel staff have already met with more than 200 government and industry representatives to discuss new approaches to defense acquisition. Outreach includes not just meeting with acquisition leaders, practitioners, and marketplace representatives, but also communication with the larger interested public through an active web presence and direct in-person interaction.

Although the Section 809 Panel is just beginning its work, the focus of our efforts is to *put mission first* and recognize the *importance of timeliness* in the face of a rapidly evolving threat.

The Section 809 commissioners and professional staff look forward to hearing from you as we move toward developing comprehensive reform proposals with actionable recommendations for statutory and regulatory changes.

Sincerely,

A handwritten signature in cursive script, appearing to read "Deidre", followed by a horizontal line.

Deidre Lee
Chair, Section 809 Panel

Table of Contents

List of Figures	vi
List of Tables.....	vi
Acronym List.....	vi
EXECUTIVE SUMMARY	1
The Demand for Fundamental Change	2
The Interim Report	4
ADAPT AT THE SPEED OF A CHANGING WORLD.....	5
The Nature of the Strategic Threat	6
Technology and Innovation	7
LEVERAGE THE DYNAMIC DEFENSE MARKETPLACE	9
Changes to the Defense Industrial Base	10
An Evolving Marketplace	11
The Growing Global Marketplace	12
New Relationships	14
ALLOCATE RESOURCES EFFECTIVELY.....	15
Erosion of U.S. Defense Spending-Advantage	16
Effective Expenditures	19
SIMPLIFY ACQUISITION.....	21
Unnecessarily Complex System	22
Mission Must Come First	24
ENABLE THE WORKFORCE	27
Incentivize Effective Decision-Making	28
Authority and Accountability.....	30
Support the Workforce	31
THE PATH FORWARD.....	33
APPENDICES.....	37
Appendix A: Enabling Legislation.....	38
Appendix B: Panel Activities	40
Appendix C: Panel Teams	46
Appendix D: Communication with the Panel.....	48
Appendix E: Professional Staff	49

LIST OF FIGURES

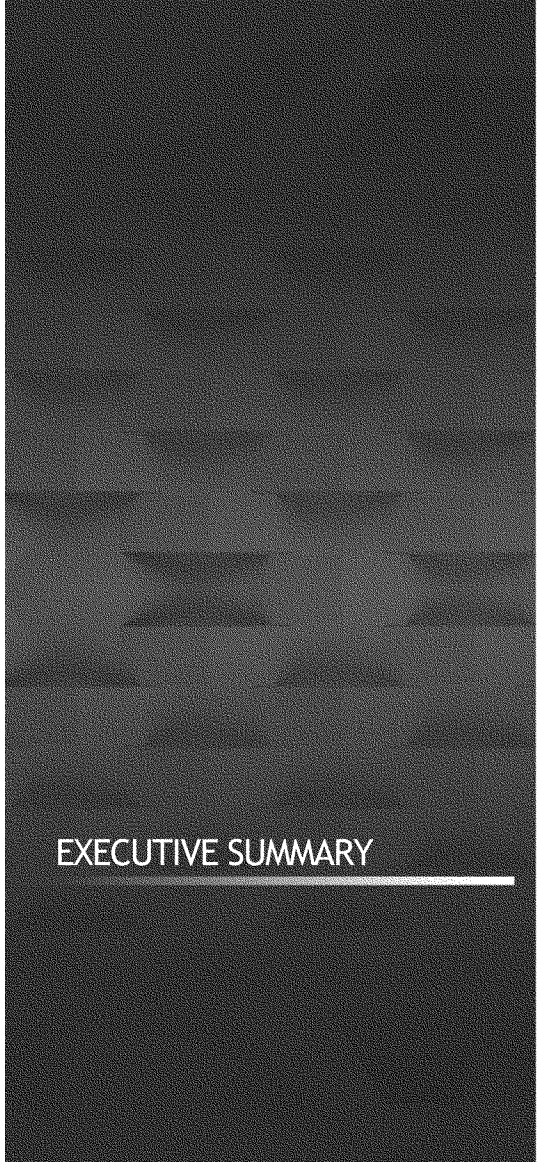
Figure 1. U.S. R&D Spending - 1961 to 2013 (FY2009 USD)	17
Figure 2. Gross Domestic Expenditures on R&D - 1995 to 2015	18
Figure 3. Acquisition Strategy Schedule - Actual	31

LIST OF TABLES

Table 1. FAR Part 52.301 FAR Matrix - Solicitation Provisions and Contract Clauses by Principal Type and Purpose of Contract	23
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ACRONYM LIST

ABCT	Armored Brigade Combat Team
DFARS	Defense Federal Acquisition Regulation Supplement
DoD	Department of Defense
ECSS	Expeditionary Combat Support System
ERK	Electronic Record Keeping
FAR	Federal Acquisition Regulation
FY	Fiscal Year
FYDP	Five Year Defense Plan
GAO	Government Accountability Office
JLTV	Joint Light Tactical Vehicle
MRAP	Mine-Resistant Ambush Protected
NDAA	National Defense Authorization Act
OECD	Organisation for Economic Cooperation and Development
OMB	Office of Management and Budget
R&D	Research and Development
RDT&E	Research, Development, Test, and Evaluation
RFP	Request for Proposals
SAP	Simplified Acquisition Procedures
USD	U.S. Dollars
UTC	United Technologies Corporation



EXECUTIVE SUMMARY

THE DEMAND FOR FUNDAMENTAL CHANGE

The Section 809 Panel was established by Congress in the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2016 to address a fundamental problem: The way the Department of Defense (DoD) buys what it needs to equip its warfighters is from another era, one in which the global strategic landscape was entirely different. Today the United States' ability to maintain technological, military, and economic superiority is being challenged because its adversaries are rapidly modernizing their militaries with an eye toward exploiting U.S. vulnerabilities and negating traditional U.S. advantages.¹ DoD has not fully adjusted to the pace of this environment, nor has it adjusted to a marketplace that bears no resemblance to that of just a few decades ago.

In short, both the strategic and marketplace realities, as described in this report, require a degree of agility that DoD is not currently able to deliver. The nation's strategic needs must drive the business model, not the other way around.

In the last 50 years, there have been more than 100 reports, studies, and analyses of how DoD acquires goods and services. From these reports, the lesson learned is clear: Tinkering and incremental approaches to acquisition reform have not provided the necessary results and are especially ineffective in today's rapidly changing environment. In fact, incremental approaches have exacerbated problems with the acquisition system by adding more layers of sign off, mountains of paperwork, and hundreds of additional regulations. DoD must

implement bold approaches and bold solutions to produce true reform.

The Section 809 Panel's Objectives

From its beginning, the Section 809 Panel's overarching objective has been to make recommendations that, if adopted, will enable DoD to more consistently buy what it needs in a timely and cost-effective manner—whether that be commercial items, information technology, services, weapon systems, or the full range of tools and equipment on which warfighters depend.

For the purposes of this report, the *acquisition system*—which is conditioned by statute, regulations, executive orders, directives, policies, and procedures—is the overall process by which DoD buys goods and services. The process includes requirements, budgeting, production, testing, deployment, and sustainment.

The acquisition system, when viewed as a whole, creates obstacles to getting the needed equipment and services because it makes DoD an unattractive customer to large and small firms with innovative, state-of-the-art solutions. The system creates additional impediments because suffocating bureaucratic requirements make the pace at which it proceeds simply unacceptable in today's rapidly changing technological environment. DoD must replace this system, designed for buying equipment for the Cold War, with one that takes advantage of technologies and methodologies available in the current marketplace. Essential equipment needed on the ground may be either unavailable to the department or egregiously

¹ John McCain, *Restoring American Power: Recommendations for the FY 2018–FY 2022 Defense Budget*, accessed January 27, 2017, https://www.mccain.senate.gov/public/_cache/files/25bff0ec-481e-466a-843f-68ba5619e6d8/restoring-american-power-7.pdf.

Executive Summary

SECTION
809
PANEL

tardy, leading to genuine threats to the nation's security. DoD does not have the luxury to wait.

These ideas are not new. The 1986 Packard Report made a similar point.

Excellence in defense management cannot be achieved by the numerous management layers, large staffs, and countless regulations in place today. It depends ... on reducing all of these by adhering closely to basic, common sense principles: giving a few capable people the authority and responsibility to do their job, maintaining short lines of communication, and holding people accountable for results.²

As compared to 1986, there are far more layers at DoD, to include even larger staffs, and too many regulations to count. The inescapable conclusion when viewing DoD acquisition as a whole, due to no one's intentions or actions in particular, is that *process* wins out over *results*. In addition, too frequently ancillary public policy objectives, often driven by statutes or executive orders, receive equal or greater priority than mission.

Data-Driven, Actionable Recommendations

The Section 809 Panel final report will provide specific, data-driven recommendations that, if implemented, will do the following:

- Enable DoD to be more adaptable in the face of a rapidly changing threat environment.
- Make DoD a more attractive customer in the new, dynamic defense marketplace.
- Enable DoD to use scarce resources allocated to procurement more efficiently.

- Simplify the acquisition process so goods and services can be purchased in a timely manner without unnecessary burden.
- Encourage and incentivize the workforce to make sound, mission-driven decisions.

The Section 809 Panel's recommendations will focus both on streamlining the process and putting forth new approaches that adopt techniques from the way private-sector business is conducted in the 21st century. These recommendations will form a method of buying that is simple, understandable, and easy to execute and that results in timely, cost-effective acquisition.

Section 809 Panel commissioners and staff already have spoken to high-level representatives from dozens of companies, including those that sell to DoD, those that do not but would like to, and even those that will not consider competing for contracts. The message is clear: A process that features excessive layers, tremendous amounts of paperwork, and timeframes that do not fit the way most firms do business is off-putting to firms in the marketplace. DoD must develop the ability to be a savvy customer in the real-world marketplace, so it is able to purchase the technology and equipment it needs.

Its enabling legislation requires the Section 809 Panel to report findings by August 2018. By that time, the panel will make recommendations that comprehensively strip away the regulatory underbrush that hampers the department's ability to maintain a competitive advantage in the face of the country's enemies. In addition, the panel will put forth

² President's Blue Ribbon Commission on Defense Management, *A Quest for Excellence, Final Report to the President*, accessed April 17, 2017, http://usacac.army.mil/cac2/CSI/docs/Gorman/06_Retired/01_Retired_1985_90/07_86_PackardCommission_FinalReport/01_PackardCommission_FinalReport.pdf.

recommendations, supported by specific statutory and regulatory implementing language, to change the way the department approaches the marketplace in its efforts to purchase the whole range of goods and services needed to equip its warfighters. As it stands, the process has left the acquisition workforce stymied in its good faith efforts to deliver the right goods in a timely manner. Although change is never easy, and at times it can be painful, the status quo is unacceptable.

THE INTERIM REPORT

This interim report sets forth the Section 809 Panel's framework for the need for acquisition reform. This framework, addressed in the five main sections of the report, will guide the panel's future work and recommendations.

Adapt at the Speed of a Changing World

The United States is operating in a global environment that is more fluid, more interconnected, and faster evolving than at any point in history. To adapt to this reality, the acquisition process must be agile enough to respond to rapidly evolving threats, and fast enough to develop and deliver new capabilities within the arc of emerging threats.

Leverage the Dynamic Defense Marketplace

The defense industrial base has changed, and to maintain technological advantage, DoD increasingly must leverage the commercial marketplace. To be successful in this broader marketplace requires a fundamental change in the DoD–commercial relationship. DoD must become an attractive customer with which commercial firms want to do business. This need requires DoD to be a more sophisticated

buyer that is responsive to market dynamics, company interests, and the greater economic landscape.

Allocate Resources Effectively

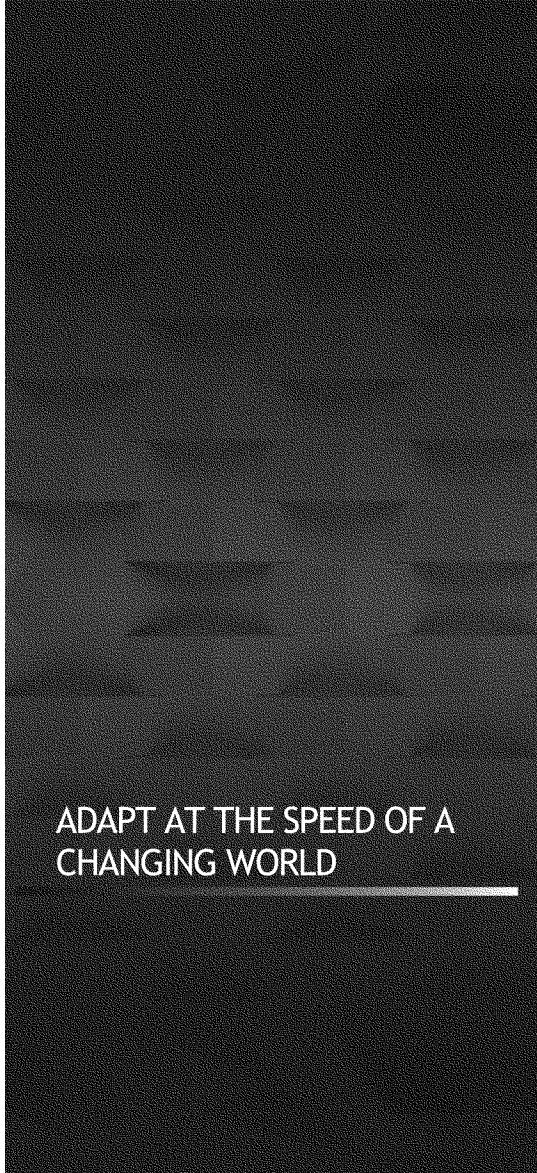
The U.S. military faces multiple threats posed by increasingly capable adversaries and uncertain domains of warfare. It also contends with constrained defense budgets. To more effectively and efficiently allocate resources, DoD must better align and coordinate how it budgets, sets requirements, and acquires what it needs, to include not only major weapon systems, but also the services and low-dollar items that make up more than half of DoD contract spending.

Simplify Acquisition

Some of the regulations and statutes governing defense acquisition are outdated or no longer applicable and should be amended or repealed to make the system more effective and efficient, and expand the number of companies willing to do business with DoD.

Enable the Workforce

The current acquisition laws and regulations are overly complex, difficult to understand and implement, and contain requirements that result in people making suboptimal decisions and being risk-averse. DoD needs an acquisition system that is simple, understandable, and executable by people operating in an environment that empowers and incentivizes them to make decisions that lead to positive outcomes.



The United States is operating in a global environment that is more fluid, more interconnected, and faster evolving than at any point in history. To adapt to this new reality, the acquisition process must be agile enough to respond to rapidly evolving threats and fast enough to develop and deliver new capabilities within the arc of emerging threats.

DoD needs an acquisition system that can shift and adapt as quickly as the strategic landscape. As former Chairman of the Joint Chiefs General Martin Dempsey wrote in the 2015 National Military Strategy, "Today's global security environment is the most unpredictable I have seen in 40 years of service."³ DoD's acquisition system must be capable of nimbly moving among, or simultaneously pursuing, fundamentally different capabilities on different timelines. For example, the system must accommodate, at the same time, delivering mine-resistant ambush protected (MRAP) vehicles to support ongoing operations, developing and acquiring cyber warfare capabilities, and fostering the cutting-edge capabilities of the future. The faster technology changes, the more flexible acquisition must be.

THE NATURE OF THE STRATEGIC THREAT

With respect to U.S. security, the geopolitical landscape has been generally stable. For the first few decades of the 20th century, the lens

through which the strategic threat was viewed focused on Europe. For nearly 50 years after World War II, the strategic threat emanated from a Cold War perspective, which was followed by a period after the 1991 Soviet collapse when U.S. military and economic dominance remained relatively unchallenged.

Currently, the emergence of peer competitors, midtier regional adversaries, and nonstate actors capable of threatening U.S. interests and lives has created an unstable geopolitical landscape.⁴ These adversaries are learning how to offset traditional U.S. military advantages. Russia and China have embarked on rapid modernization efforts and are aggressively challenging U.S. interests around the world and testing U.S. resolve, alliances, and military capabilities.⁵ At the same time, nonpeer adversaries are becoming more capable and lethal as advanced military hardware becomes more accessible and innovative technologies with military applications become more abundant, cheap, and available.

The United States must now contend with potential adversaries that are not just rising global powers but also are important trading partners. These adversaries threaten areas of vital strategic importance for the United States, as well as its allies and partners that have shared interest and values.⁶ The threats are more numerous, geographically diverse (or, in the case of nonstate actors or cyber warfare,

³ Joint Chiefs of Staff, *The National Military Strategy of the United States of America: The United States Military's Contribution to National Security*, accessed April 17, 2017, http://www.jcs.mil/Portals/36/Documents/Publications/2015_National_Military_Strategy.pdf.

⁴ General James Mattis, Senate Armed Services Committee Nomination Hearing Statement, accessed April 24, 2017, https://www.armed-services.senate.gov/imo/media/doc/Mattis_01-12-17.pdf.

⁵ Dmitri Trening, "The Revival of the Russian Military: How Moscow Reloaded," *Foreign Affairs*, May/June 2016, <https://www.foreignaffairs.com/articles/russia-fsu/2016-04-18/revival-russian-military>. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2016*, accessed April 17, 2017, <https://www.defense.gov/Portals/1/Documents/pubs/2016%20China%20Military%20Power%20Report.pdf>.

⁶ *The State of the World: Hearing before the U.S. House of Representatives Committee on Armed Services*, 115th Cong. (2017), (statement of David H. Petraeus), accessed April 17, 2017, <http://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=105509>.

Adapt at the Speed of a Changing World

SECTION
809
PANEL

potentially without a geographic location), and unpredictable.⁷ New threats emerge faster, and different threats require fundamentally different, and often multivariate, responses.⁸ All of these factors have combined to create a world where the geopolitical strategic environment is more fluid, complex, and unpredictable than ever.⁹

TECHNOLOGY AND INNOVATION

The technology of warfare had remained static for extended periods, punctuated by short bursts of innovation-driven development of new warfare technologies and capabilities, such as gunpowder, ironclad ships, combustion engines, airpower, and drones. The current acquisition system is predicated on a more stable and predictable context instead of today's dynamic environment with constantly changing and emerging technology.

For example, the 3½-inch floppy disk, introduced in 1987, held a mere 1.44 MB.¹⁰ Just 30 years later, it was replaced by the 1 TB flash drive, which can house more information than

728,177,000 floppy disks.¹¹ Like storage capacity, computing power is increasing quickly as well. The processing power of an iPhone 6 is 120,000,000 times faster than the computers used to put a man on the moon.¹² Technology innovation also enabled the U.S. military to go from its first use of the Predator unmanned autonomous vehicle for surveillance in battle in 1995 to the weaponized Predator by 2001.¹³

Technological innovation in the late 20th and early 21st centuries was a catalyst for the current speed of weapons development.¹⁴ DoD is now in a period during which the time a particular technology is a dominant force on the battlefield is getting increasingly shorter, disruptive technologies are emerging at a faster pace, and these technologies are more widely dispersed. DoD has benefited from disruptive technologies and been able to incorporate these innovations, from netcentric warfare to unmanned vehicles.¹⁵ To fully incorporate existing and future technologies requires organizational shifts that will allow DoD to

⁷ H.R. McMaster, "Harbingers of Future War: Implications for the Army with Lieutenant General H.R. McMaster" (presentation at Center for Strategic and International Studies, May 4, 2016), accessed April 17, 2017, <https://www.csis.org/events/harbingers-future-war-implications-army-lieutenant-general-hr-mcmaster>.

⁸ Department of Defense, *Quadrennial Defense Review 2014*, accessed April 17, 2017, http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

⁹ Council on Foreign Affairs, *Preventive Priorities Survey: 2017*, accessed February 3, 2017, <http://www.cfr.org/conflict-assessment/preventive-priorities-survey-2017/p38562>. Department of Defense, *Quadrennial Defense Review 2014*, accessed April 17, 2017, http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

¹⁰ "Floppy Disk: Background," McGill College, accessed April 18, 2017, http://cs.mcgill.ca/~rwest/wikispeedia/wpcd/wp/f/Floppy_disk.htm.

¹¹ "How Many Floppy Disks Can You Fit in a Terabyte?" Landmark Technologies, accessed April 18, 2017, <https://www.lmktec.co.uk/blog/how-many-floppy-disks-can-you-fit-terabyte>.

¹² "Your Smartphone is Millions of Times More Powerful Than All of NASA's Combined Computing in 1969," ZME Science, accessed March 16, 2017, <http://www.zmescience.com/research/technology/smartphone-power-compared-to-apollo-432/>.

¹³ John David Blom, *Unmanned Aerial Systems: A Historical Perspective* (Fort Leavenworth, KS: Combat Studies Institute Press, 2010), 93, 107.

¹⁴ Committee on Homeland and National Security of the National Science and Technology Council, *A 21st Century Science, Technology, and Innovation Strategy for America's National Security*, accessed April 17, 2017, http://www.defenseinnovationmarketplace.mil/resources/National_Security_ST_Strategy_2016_FINAL.PDF.

¹⁵ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

access and incorporate them faster than potential competitors.¹⁶

In a world with rapidly changing technology, time is a valuable resource that must not be taken for granted. It is difficult to predict what capabilities DoD will need 5 to 10 years from now—biotechnology, nanotechnology, artificial intelligence, robotics, or a new technology area not even known today. It also is unclear on what plane the military will conduct warfare—traditional battlefields, space, cyberspace, or some other domain.¹⁷ The current acquisition system lacks the agility needed to adapt to new paradigms.

Achieving technological dominance is not simply a matter of developing and acquiring the most advanced technology. Deputy Secretary of Defense Robert Work has emphasized that it also requires “operational and organizational constructs” that allow DoD to interact with new technologies and effectively integrate them into a strategic framework.¹⁸ As Chairman of the Joint Chiefs of Staff Gen. Joseph Dunford stated, “Keeping pace with the speed of war means changing the

way we approach challenges, build strategy, make decisions and develop leaders.”¹⁹ Systems and capabilities must be developed, deployed, and integrated into operations within the arc of the threat, not after the threat has passed or after DoD has spent billions of dollars on technologies or capabilities that already are obsolete or will be obsolete by the time they are deployed. The private sector now drives much of the technological innovation, which makes it difficult for DoD to keep pace.²⁰

Although making the acquisition system operate faster would help to a degree, it is not enough. The acquisition process, including requirements definitions and budgeting, must be flexible enough to deliver the needed capabilities. Instead of being so rigid and convoluted, the acquisition system should be shaped to fit the required capabilities. Such a process may require multiple acquisition pathways that can be tailored to specific requirements and timeframes, depending on whether the need is to prototype new systems; buy commercial off-the-shelf items; or modify off-the-shelf technologies into deployable, limited-production programs.²¹

¹⁶ Barry Watts, Center for Strategic and Budgetary Assessments, *The Maturing Revolution in Military Affairs*, accessed April 17, 2017, <http://csbaonline.org/uploads/documents/2011.06.02-Maturing-Revolution-In-Military-Affairs1.pdf>.

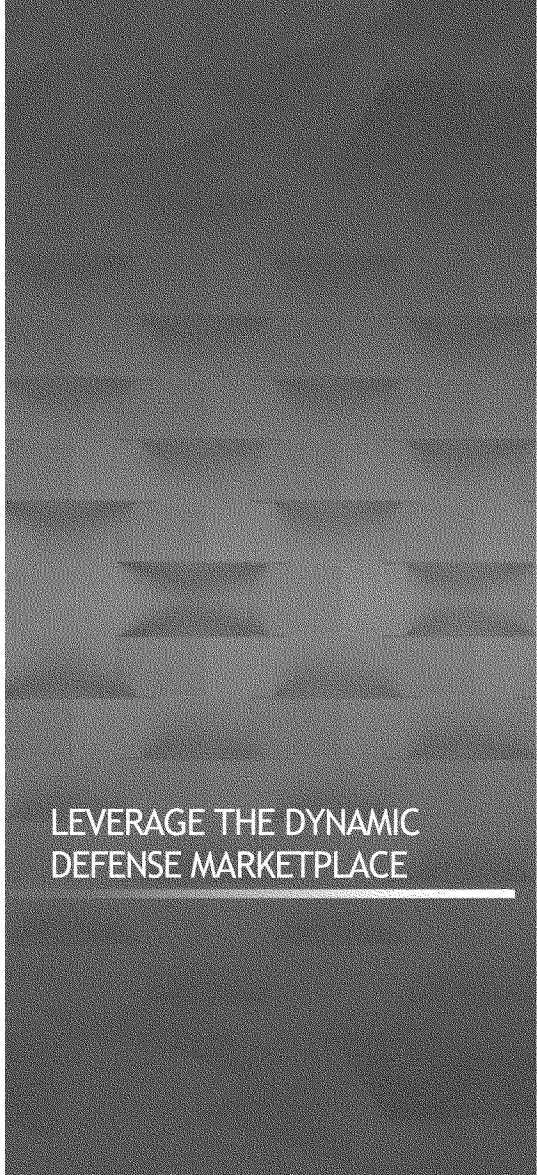
¹⁷ Department of Defense, *Quadrennial Defense Review 2014*, accessed April 17, 2017, http://archive.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

¹⁸ Sydney J. Freedberg, Jr., “Air Force Leading Way to 3rd Offset: Bob Work,” *Breaking Defense*, September 21, 2016, <http://breakingdefense.com/2016/09/air-force-ops-centers-lead-way-to-3rd-offset-bob-work/>.

¹⁹ Jim Garamone, “Dunford: Speed of Military Decision-Making Must Exceed Speed of War,” *DoD News*, January 31, 2017, <https://www.defense.gov/News/Article/Article/1066045/dunford-speed-of-military-decision-making-must-exceed-speed-of-war/>.

²⁰ Committee on Homeland and National Security of the National Science and Technology Council, *A 21st Century Science, Technology, and Innovation Strategy for America's National Security*, accessed April 17, 2017, http://www.defenseinnovationmarketplace.mil/resources/National_Security_ST_Strategy_2016_FINAL.PDF.

²¹ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.



The nature of the defense industrial base has changed, necessitating a fundamental change in the relationship between DoD and the commercial marketplace. For the purposes of the Section 809 Panel's work, this report will refer to the broader marketplace as the *dynamic defense marketplace*. To successfully leverage the dynamic defense marketplace, the department must become a savvy, attractive customer with which firms want to do business. This need requires DoD to be a more sophisticated buyer—one that understands and is responsive to market dynamics, company interests, and the greater economic landscape.

CHANGES TO THE DEFENSE INDUSTRIAL BASE

The defense acquisition system is primarily predicated on a post-World War II conception of the global economy, commercial marketplace, and management practices that no longer holds true.²² The era of the traditional defense industrial base is over. The number of firms exclusively manufacturing defense products in the United States is declining, and the firms that are defense-oriented are relying more on subcontractors.²³ DoD increasingly turns to and relies on a marketplace of boutique defense companies and nondefense firms

defined not by the industrial age but by the technologies, services, or unique capabilities they provide.²⁴

The traditional defense industrial base—manufacturing companies that primarily operate in the defense sector—has diminished substantially. According to DoD, the last major defense downturn in the late 1980s and early 1990s resulted in more than 300 prime contractors, platform providers, and subtier companies merging to form the five *mega-primes* of today: Boeing, Lockheed Martin, Northrop Grumman, Raytheon, and General Dynamics.²⁵

Defense industry senior executives believe defense mergers and acquisitions will accelerate through the end of the decade, with more consolidation still to come.²⁶ One factor driving this trend is that the defense sector is less robust than in the past. In the 1960s, the Fortune 100 included 15 defense firms that represented 30 percent of the revenue for the group.²⁷ In 2017, the Fortune 100 includes only four defense firms, representing barely 3 percent of the revenue for the group.²⁸

²² Defense Business Board, *Innovation: Attracting and Retaining the Best of the Private Sector*, accessed April 18, 2017, <http://dbb.defense.gov/Portals/35/Documents/Reports/2014/DBB-FY14-02-Innovation%20report%20%28final%29.pdf>.

²³ Andrew Hunter, Center for Strategic and International Studies, *Defense Acquisition Trends 2015: Acquisition in an Era of Budget Uncertainty*, accessed April 18, 2017, <https://defense360.csis.org/acquisition-and-beyond/>.

²⁴ Ben Fitzgerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

²⁵ Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, *Annual Industrial Capabilities: Report to Congress for 2015*, accessed April 18, 2017, <http://www.acq.osd.mil/mibp/resources/2015%20AIC%20RTC%2010-03-16%20-%20Public%20Unclassified.pdf>.

²⁶ "Defense Outlook 2017: A Global Survey of Defense-Industry Executives," John Dowdy and Elizabeth Oakes, McKinsey and Company - accessed April 18, 2017, <http://www.mckinsey.com/industries/aerospace-and-defense/our-insights/defense-outlook-2017-a-global-survey-of-defense-industry-executives>.

²⁷ Thomas Davis, "The Incredible Shrinking Defense Industrial Base," *SIGNAL Magazine*, June 16, 2015, <http://www.afcea.org/content/?q=Blog-incredible-shrinking-defense-industrial-base>.

²⁸ "Fortune 500 List," Fortune.com, accessed April 24, 2017, <http://beta.fortune.com/fortune500/list>.

Leverage the Dynamic Defense Marketplace

SECTION
809
PANEL

One of these companies, Boeing, receives less than half of its revenue from DoD.²⁹ Many companies that previously focused primarily on the defense market are now diversifying their client base, turning to nondefense clients for revenue.³⁰

AN EVOLVING MARKETPLACE

The dynamic defense marketplace is vastly different from the defense-centric marketplace of the past in which DoD could set the rules of acquisition. To effectively benefit from and compete in the dynamic defense marketplace, DoD must understand where it fits into the current business environment and adapt to this new reality. DoD needs to be a more sophisticated buyer, one that understands market dynamics, interests of companies (including cash flow, profit motive, and opportunity costs), and the broader economy.

One of the challenges presented by DoD's increasing reliance on the commercial market is

its limited influence in that market. DoD no longer dominates many sectors that it once did. For example, although DoD previously accounted for more than 90 percent of all U.S. semiconductor purchases, by 1990, purchases throughout the entire U.S. government represented less than 2 percent of the global market.³¹ Today, that market share has dropped to less than 0.5 percent of all semiconductors made in the world.³² DoD-financed R&D is playing a less important role in innovation and development, which further diminishes DoD's influence. In 1960, federal defense-related R&D accounted for an estimated 49 percent of all R&D expenditures in the United States, and 35 percent of G-7 expenditures.³³ By 2013, federal defense-related spending was just 16 percent of U.S. R&D expenditures and 9 percent of those within the G-7.³⁴

Given DoD's diminishing influence in the current marketplace, many companies have little incentive to accommodate the long lead

²⁹ "Boeing: Products & Business Segments," AeroWeb, accessed April 24, 2017, <http://www.fi-aeroweb.com/Boeing.html>.

³⁰ Thomas Davis, "The Incredible Shrinking Defense Industrial Base," *SIGNAL Magazine*, June 16, 2015, <http://www.afcea.org/content/?q=Blog-incredible-shrinking-defense-industrial-base>.

³¹ Falan Yinug, Semiconductor Industry Association (SIA), email to Section 809 Panel, March 6, 2017.

³² *Ibid.*

³³ In 1960, U.S. federal R&D spending, as reported by OMB in unadjusted dollars, was \$5.9 billion for defense and \$1.4 billion for nondefense; see OMB, *Table 9.7, Summary of Outlays for the Conduct of Research and Development: 1949–2017*, accessed April 24, 2017, <https://obamawhitehouse.archives.gov/sites/default/files/omb/budget/fy2017/assets/hist09r7.xls>. In 1960, estimated U.S. nonfederal R&D spending, as reported by the National Science Board in unadjusted dollars, was \$4.8 billion; see "Appendix Table 4-6: U.S. R&D Expenditures, by Source of Funds and Performing Sector: 1953-2013," National Science Foundation, *National Science Board, Science & Engineering Indicators 2016*, accessed April 24, 2017, <https://www.nsf.gov/statistics/2016/nsb20161/uploads/177/at04-06.pdf>. Non-U.S. G-7 spending in 1960 is extrapolated from Graham R. Mitchell, *The Global Context for U.S. Technology Policy*, U.S. Department of Commerce, accessed April 18, 2017, <https://usa.usembassy.de/etexts/tech/nas.pdf>. The non-U.S. G-7 countries at the time included Canada, the United Kingdom, France, Italy, Japan, and West Germany (now Germany). According to the report, the United States accounted for 70.6 percent of R&D expenditures from these countries—which, extrapolating based on the OMB and NSB figures cited above, produces an unadjusted dollar total of about \$5.0 billion.

³⁴ In 2013, U.S. federal R&D spending, as reported in unadjusted dollars, was \$71.1 billion for defense and \$61.4 billion for nondefense. See OMB, *Table 9.7, Summary of Outlays for the Conduct of Research and Development: 1949–2017*, accessed April 24, 2017, <https://obamawhitehouse.archives.gov/sites/default/files/omb/budget/fy2017/assets/hist09r7.xls>. The estimated U.S. nonfederal R&D spending in 2013 is extrapolated from data published by the Organisation for Economic Cooperation and Development, which reported \$433.2 billion in U.S. R&D spending in 2013—indicating \$300.8 billion in nonfederal R&D spending. See "Main Science and Technology Indicators, Gross Domestic Spending on R&D - Total, Million U.S. Dollars, 1981 – 2021," OECD, accessed April 24, 2017, <http://stats.oecd.org>. The 2013 data on R&D spending by non-U.S. G-7 countries is also provided in the OECD database: \$24.6 billion for Canada, \$54.0 billion for France, \$94.8 billion for Germany, \$26.1 billion for Italy, \$153.5 billion for Japan, and \$39.0 billion for the UK.

times, restrictive contract terms, and onerous regulations associated with government contracting. The market for small arms illustrates this point well. In the United States alone, small arms companies produce more handguns in one month than the Army will buy in the next 25 years.³⁵

In 2005, the U.S. military set out to choose a new handgun to replace the decades-old M9 Beretta pistol.³⁶ After 10 years of developing and rewriting requirements, the Army issued a request for proposal (RFP) to industry in the fall of 2015. Even after 10 years, the Army did not identify key requirements, such as caliber or the specific ammunition for the new handgun.³⁷ The Army's first draft RFP exceeded 350 pages, not counting 23 attachments.³⁸ The paperwork alone added an estimated \$15 million or 20 percent to procurement cost.³⁹ Some in industry balked at the process and complexity for a simple handgun purchase. For

example, Ruger, a leading handgun manufacturer, chose not to compete due to the administrative costs to comply with the requirements.⁴⁰

THE GROWING GLOBAL MARKETPLACE

DoD increasingly relies on companies operating in a fluid global economic ecosystem, marked by mergers, acquisitions, spinoffs, joint ventures, outsourcing, and combinations. Boutique firms, with both corporate and government clients, may bid on defense contracts one year and not the next.⁴¹ Boeing and Lockheed Martin competed fiercely on the F-35 Joint Strike Fighter program, yet partnered on the Long Range Strike-Bomber program, and Bell Helicopter partnered with Boeing on the V-22 Osprey helicopter, yet competed against Boeing for the Army's Future Vertical Lift program of helicopter modernization.⁴²

³⁵ United States Department of Justice, Bureau of Alcohol, Tobacco, Firearms, and Explosives, *Firearms Commerce in the United States: Annual Statistical Update 2014*, accessed April 24, 2017, <https://www.atf.gov/file/3336/download>.

³⁶ Commerce Business Daily, *Joint Combat Pistol Solicitation*, accessed April 24, 2017, <http://www.cbd-net.com/index.php/search/show/893436>. Loren Data's FBO Daily, *Joint Combat Pistol (JPC) System*, accessed April 24, 2017, <http://www.fbodaily.com/archive/2005/12-December/04-Dec-2005/FBO-00943889.htm>. Federal Business Opportunities, *Joint Combat Pistol (JPC) System*, accessed April 24, 2017, https://www.fbo.gov/index?s=opportunity&mode=form&id=9f67b094636a104ae0bd1068f6ca672a&tab=core&_cview=1.

³⁷ Rowan Scarborough, "Army Misfires on Pistol Upgrade Effort, Confuses Gun Makers with Complex Requirements," *Washington Times*, October 28, 2015, <http://www.washingtontimes.com/news/2015/oct/28/army-misfires-on-pistol-upgrade-effort-confuses-gu/>.

³⁸ *Ibid.* Former Secretary of Defense Robert Gates, when asked about the difficulty in buying a new handgun, commented how senior leaders of the military should be asked, "why has it taken you guys 10 years? This is absurd... Why is it a 350-page RFP? It's a handgun, for God's sake." *The Future of Defense Reform: Hearings before the U.S. Senate Committee on Armed Services, Session 1, 114th Cong.*, (2015), accessed <https://www.gpo.gov/fdsys/pkg/CHRG-114shrg20923/pdf/CHRG-114shrg20923.pdf>.

³⁹ Rowan Scarborough, "Army Misfires on Pistol Upgrade Effort, Confuses Gun Makers with Complex Requirements," *Washington Times*, October 28, 2015, <http://www.washingtontimes.com/news/2015/oct/28/army-misfires-on-pistol-upgrade-effort-confuses-gu/>.

⁴⁰ Jahner, Kyle, "McCain slams Army's wasteful plan for a new service pistol," *Army Times*, October 29, 2015, <https://www.armytimes.com/story/military/careers/army/2015/10/29/mccain-army-trade-blows-over-handgun-replacement-program/74834518/>.

⁴¹ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

⁴² Alex Lockie, "Boeing Smells Blood in the Water and is Coming for Lockheed Martin's F-35 Business," *Business Insider*, March 31, 2017, <http://www.businessinsider.com/boeing-vs-lockheed-martin-f-18-advanced-super-hornet-f-35c-navy-2017-3>. Andrew Clevenger and Lara Seligman, "Boeing Protests Northrop's Long-Range Strike Bomber Contract," *Defense News*, November 6, 2015, <http://www.defensenews.com/story/defense/2015/11/08/boeing-protests-northrops-long-range-strike-bomber-contract/75225206/>.

Ryan Mass, "Bell-Boeing Contracted for V-22 Sustainment and Upgrade Planning," *UPI*, February 15, 2017, <http://www.upi.com/Defense-News/2017/02/15/Bell-Boeing-contracted-for-V-22-sustainment-and-upgrade-planning/6321487191850/> and Jen Judson, "Joint Multi-

Leverage the Dynamic Defense Marketplace

SECTION
809
PANEL

A number of these companies, and their employees, are not dependent on DoD for future revenue or growth. They flow in and out of the defense-contracting world at multiple tiers and in different combinations. This fluid ecosystem of companies is the hallmark of the new globalized economy in which the defense industrial base is not, in fact, a stable base of defense-oriented industrial companies. It is instead a constantly shifting group of companies that align and realign for temporary periods to deliver integrated capabilities.⁴³

During the wars in Iraq and Afghanistan, DoD relied extensively on contractors to provide such critical wartime support as force protection, fuel delivery and storage, transportation of troops and equipment, translation services, and construction and maintenance of facilities. Contractors performing these vital services, most of whom were foreign, sometimes outnumbered the U.S. military personnel in Iraq and Afghanistan.⁴⁴

The globalized nature of the current defense industry also extends to manufacturing and supporting weapons systems. The F-35 Joint Strike Fighter, the U.S. military's latest fifth-generation fighter, is being built in Texas,

Japan, and Italy.⁴⁵ The F-35 supply chain consists of more than 300,000 parts manufactured by 1,400 suppliers around the world.⁴⁶ Among the nations that produce F-35 parts, eight foreign nations have at least 10 major suppliers for F-35 production.⁴⁷ The F-35 is not an isolated example. Today, nearly every major U.S. military weapon system contains foreign parts.⁴⁸

The global and integrated nature of the dynamic defense marketplace, in which DoD now does business, necessitates that DoD no longer rely solely on purely U.S.-based companies, or unilaterally dictate to, or control decisions by, its suppliers. Consider the example of Sikorsky Aircraft Corporation, which manufactures the military's UH-60 helicopter (and many of its derivatives and modified aircraft), as well as helicopters to transport the president of the United States. Sikorsky had been a long-time subsidiary to United Technologies Corporation (UTC) until 2015 when UTC, at the time one of the top 10 defense companies in the world,⁴⁹ sold Sikorsky, a helicopter manufacturer.⁵⁰ The \$9 billion purchase of Sikorsky by Lockheed Martin required regulatory approval from multiple national and international jurisdictions

Role Demonstrators in Race to Starting Line," *Defense News*, April 28, 2016, <http://www.defensenews.com/story/defense/show-daily/aaaa/2016/04/28/joint-multi-role-demonstrators-race-starting-line/83611932/>.

⁴³ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>.

⁴⁴ Commission on Wartime Contracting in Iraq and Afghanistan, *Transforming Wartime Contracting: Controlling Costs, Reducing Risks*, accessed April 18, 2017, https://cybercemetery.unt.edu/archive/cwc/20110929213820/http://www.wartimecontracting.gov/docs/CWC_FinalReport-lowres.pdf.

⁴⁵ "Building the F-35: Combining Teamwork and Technology," Lockheed Martin, accessed April 18, 2017, <https://www.f35.com/about/life-cycle/production>.

⁴⁶ *Ibid.*

⁴⁷ Lockheed Martin Government Relations, email to Section 809 Panel, March 11, 2017.

⁴⁸ Jacques Gansler, "Acquisition Challenges to Provide More For Less," AFCEA Defense Acquisition Modernization Symposium (August 5, 2014), accessed April 18, 2017, <http://www.afcea.org/events/modernization/14/documents/GanslerAcquisitionChanges.pdf>.

⁴⁹ "Top 100 for 2016," *Defense News*, accessed April 18, 2017, <http://people.defensenews.com/top-100/>.

⁵⁰ Lewis Krauskopf, "With Sikorsky Sale Done, United Technologies Eyes Acquisitions," *Reuters*, July 20, 2015, <http://www.reuters.com/article/sikorsky-ma-unitedtechnologies-idUSL1N10019H20150720>.

including Japan, South Korea, and even China.⁵¹

NEW RELATIONSHIPS

To maintain technological dominance, DoD must expand beyond the traditional defense industrial base and its own internal R&D efforts. The consolidating defense industrial base, DoD's limited influence in the commercial marketplace and in R&D, and the changes to the global economy require DoD to actively tap the commercial marketplace. Leveraging this marketplace, however, is not easy when, in many instances, DoD needs the commercial market more than the commercial market needs DoD. According to Paul Francis, a former managing director at Government Accountability Office (GAO),⁵²

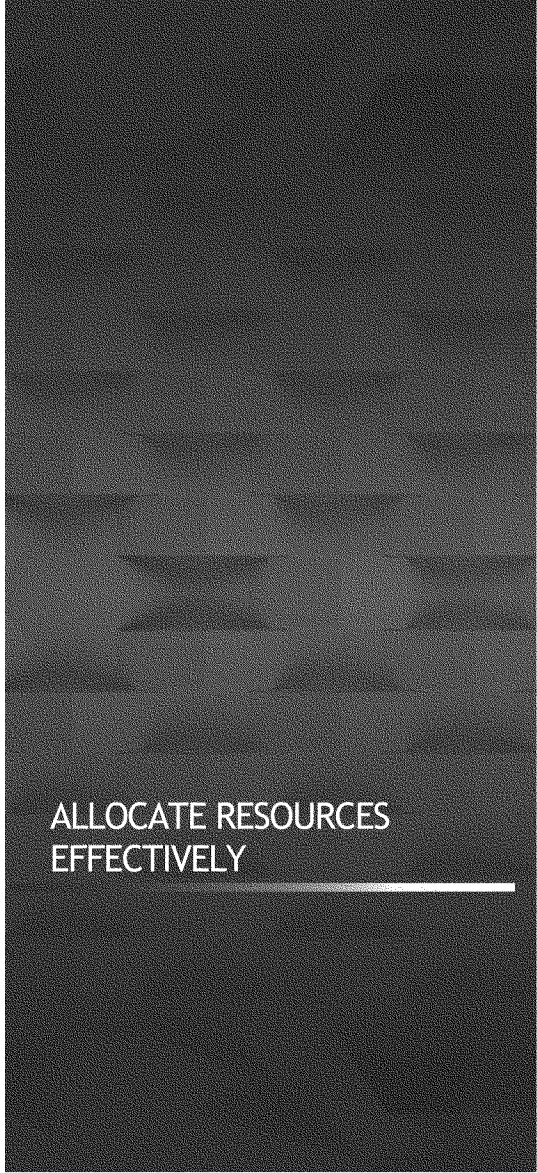
Commercial investment in R&D now dwarfs DoD's by several factors. DoD still needs to sponsor defense-unique R&D. But the real gain will be the extent to which it can take advantage of the vast R&D going on in the private sector. The answer is not to spend our way out of it. DoD has to find a way to adapt to new relationships with the commercial sector.

DoD and Congress have not fully adjusted to this reality. Too often DoD acts as if it can dictate terms to industry, driving many companies to opt out of the defense market.⁵³ Company representatives have told the Section 809 Panel that their organizations have decided not to do business with DoD because of overly complex federal laws and DoD-specific regulations. DoD should adapt its acquisition processes—which are conditioned by statute, regulations, executive orders, directives, policies, and procedures—to industry approaches, rather than expecting companies to accommodate DoD.

⁵¹ Andrea Shalal, "Lockheed Says U.S. Approves Its \$9 Billion Takeover of Sikorsky," Reuters, September 24, 2015, <http://www.reuters.com/article/us-sikorsky-m-a-lockheed-idUSKCNORQ1FN20150924>.

⁵² Paul Francis, former managing director, Government Accountability Office, email to Section 809 Panel, April 6, 2017.

⁵³ Ben FitzGerald, Alexandra Sander, and Jacqueline Parziale, Center for a New American Security, *Future Foundry: A New Strategic Approach to Military-Technical Advantage*, accessed April 17, 2017, <https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report-FutureFoundry-final.pdf>. Andrew Hunter, Center for Strategic and International Studies, *Defense Acquisition Trends 2015: Acquisition in an Era of Budget Uncertainty*, accessed April 18, 2017, <https://defense360.csis.org/acquisition-and-beyond/>.



The U.S. military faces multiple threats posed by increasingly capable adversaries and uncertain domains of warfare. It also contends with constrained defense budgets.⁵⁴ DoD cannot afford to be tied to processes that waste limited resources that could be invested in capabilities, readiness, force structure, or other requirements.⁵⁵ To more effectively and efficiently allocate resources, DoD must better align and coordinate how it budgets, sets requirements, and acquires what it needs, to include not only major weapons systems, but also the services and low-dollar items that make up more than half of DoD contract spending.⁵⁶

EROSION OF U.S. DEFENSE SPENDING-ADVANTAGE

The United States has the largest military budget in the world, but other countries are closing the gap. From 2000 to 2015, adjusted for inflation, DoD spending increased about 40 percent.⁵⁷ During that period, the military budget of China reportedly quintupled.⁵⁸

In the same period, Russia and Saudi Arabia (which have military budgets on par with one another) both about tripled their military spending.⁵⁹ According to SIPRI's data (all in 2014 USD), Russian military spending increased from \$29 billion in 2000 to \$91 billion in 2015—more than a 200 percent increase. Saudi

⁵⁴ John McCain, *Restoring American Power: Recommendations for FY 2018-2022 Defense Budget*, accessed January 27, 2017, https://www.mccain.senate.gov/public/_cache/files/25bfff0ec-481e-466a-843f-68ba5619e6d8/restoring-american-power-7.pdf.

⁵⁵ Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, *United States Department of Defense Fiscal Year 2015 Budget Request Overview, March 2014*, accessed April 19, 2017, http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/fy2015_Budget_Request_Overview_Book.pdf. John McCain, *America's Most Wasted: Indefensible \$13 Billion Spent on Incapable Ships, Bad-Behaving Pentagon Employees, African Rats & More*, accessed April 19, 2017, https://www.mccain.senate.gov/public/_cache/files/9f435670-9a18-4362-9ff0-294540a13cb7/america-most-wasted-indefensible-12-19-16.pdf.

⁵⁶ Based on Section 809 Panel analysis of FY 2016 Federal Procurement Data System data, using product and service code definitions: As of April 21, 2017, service and R&D contract obligations for FY 2016 were reportedly \$149.6 billion, or 50.2 percent of all contract obligations. "Federal Procurement Data System – Next Generation," General Services Administration, accessed April 21, 2017, <https://www.fpds.gov>. General Services Administration, *Federal Procurement Data System Product and Service Codes Manual, August 2015 Edition*, accessed April 21, 2017, https://www.fpds.gov/downloads/top_requests/PSC_Manual_FY2016_Oct1_2015.pdf. Also see Congressional Research Service, "Defense Acquisitions: How and Where DOD Spends and Reports Its Contracting Dollars," accessed April 21, 2017, <https://fas.org/sgp/crs/natsec/R44010.pdf>, and Center for Strategic and International Studies, *Defense Acquisition Trends, 2016: The End of the Contracting Drawdown*, accessed April 21, 2017, https://csis-prod.s3.amazonaws.com/s3fs-public/publication/170309_Ellman_AcquisitionTrends2016_Web.pdf?EOHx.4yzTSKOdaa9FMLs3KSTHUSr1O5Q.

⁵⁷ National defense outlays for FY2015, as calculated by OMB, were \$590 billion (\$607 billion in FY2017 USD). Outlays for FY2000 were \$294 billion (\$434 billion in FY2017 USD). See national defense outlays at "Office of Management and Budget Historical Tables, Table 3.2—Outlays by Function and Subfunction: 1962–2021," National Archives and Records Administration, accessed March 3, 2017, <https://obamawhitehouse.archives.gov/omb/budget/Historicals>. See inflation adjustments at Department of Defense, *National Defense Budget Estimates for FY2017, Table 5-1: Department of Defense and Selected Economy-Wide Indices* ("Total Department of Defense" deflators used for calculations), accessed March 3, 2017, <http://comptroller.defense.gov/Budget-Materials>.

⁵⁸ "SIPRI Military Expenditure Database," Stockholm International Peace Research Institute, accessed March 3, 2017, <https://www.sipri.org/databases/milex>. Officially, the Chinese military spending figure for 2015 (including both central government and local governments) was about \$140 billion. The Department of Defense's 2016 report on China-related military developments provides an estimated figure of \$180 billion, and an estimate from the Stockholm International Peace Research Institute (SIPRI) puts the figure at \$214 billion. The 400 percent increase between 2000 to 2015 is based on SIPRI's reported figures (all in constant 2014 USD) of \$43 billion in 2000 and \$214 billion in 2015—an increase of 396 percent.

⁵⁹ "SIPRI Military Expenditure Database," Stockholm International Peace Research Institute, accessed March 3, 2017, <https://www.sipri.org/databases/milex>.

Allocate Resources Effectively

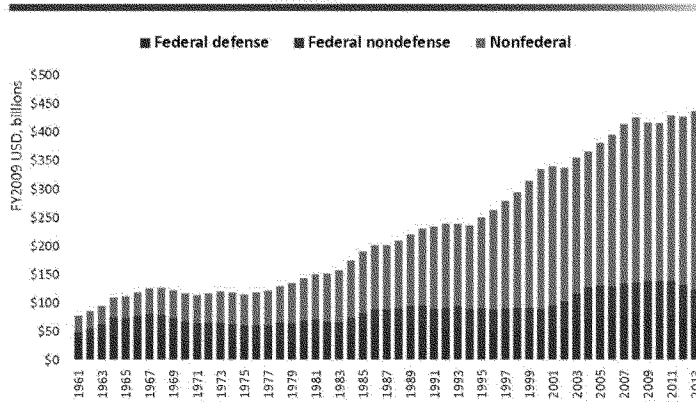
SECTION
809
PANEL

spending increased from \$30 billion to \$85 billion—about a 180 percent increase.⁶⁰

Trends within the U.S. defense budget are squeezing funding available for acquisition, R&D, and force structure.⁶¹ In its FY 2017 budget submission, DoD emphasized efforts to protect the investments in research, development, test, and evaluation (RDT&E) to ensure the U.S. maintains its technological edge.⁶² The Center for Strategic and Budgetary Assessments (CSBA) projects, however, that

over the course of the Five Year Defense Plan (FYDP), there will be a 7.1 percent decrease of RDT&E spending from FY 2017 to FY 2021.⁶³

Although DoD R&D spending growth is slowing, R&D investments by private industry and foreign nations are increasing substantially. Between 1960 and 2013 defense spending on R&D doubled (adjusted for inflation), yet nondefense U.S. government R&D spending



Source: Federal spending from Office of Management and Budget, Table 9.7—Summary of Outlays for the Conduct of Research and Development: 1949–2017, <https://obamawhitehouse.archives.gov/omb/budget/Historical>. Nonfederal spending based on “All Performers” R&D spending minus “Federal Total” R&D spending, from National Science Board, Science & Engineering Indicators 2016, Appendix Table 4-6, <https://www.nsf.gov/statistics/2016/nsb20161/uploads/1/7/at04-06.pdf>.

Figure 1. U.S. R&D Spending – 1961 to 2013 (FY2009 USD)

⁶⁰ *Ibid.*

⁶¹ Department of Defense, *Defense Budget Priorities and Choices*, Fiscal Year 2014, Accessed April 24, 2017, <http://archive.defense.gov/pubs/DefenseBudgetPrioritiesChoicesFiscalYear2014.pdf>.

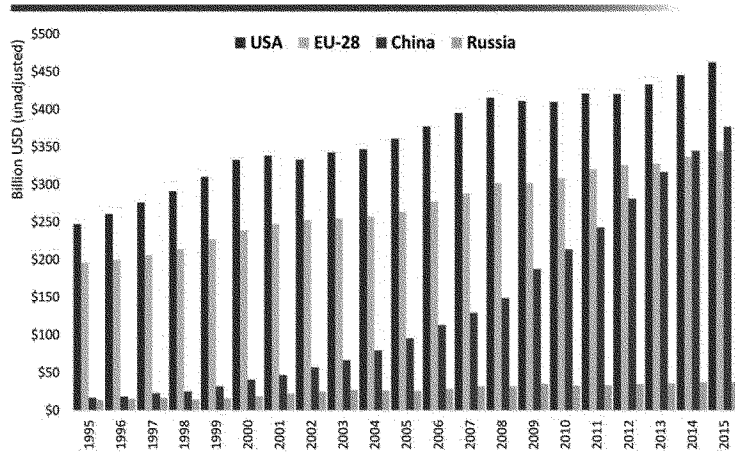
⁶² Department of Defense, *Defense Budget Overview February 2016*, accessed April 24, 2017, http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2017/fy2017_Budget_Request_Overview_Book.pdf.

⁶³ Katherine Blakely, *Analysis of the FY2017 Defense Budget and Trends in Defense Spending*, Center for Strategic and Budgetary Assessments, accessed April 24, 2017, http://csbaonline.org/uploads/documents/CSBA6196-2017-Budget-Analysis_PRINT.pdf, 34.

increased more than sevenfold.⁶⁴ This combined federal spending has been dwarfed by an elevenfold increase in all other U.S. spending on R&D (which includes the private sector, universities, and nonprofit organizations).⁶⁵

U.S. R&D investment growth rates have fallen behind those of peer competitors. China has increased its R&D expenditures at a rapid pace to become the second-largest funder of R&D

among nations.⁶⁶ Between 1995 and 2015, U.S. annual R&D investment increased in unadjusted-dollar terms by an estimated 87 percent.⁶⁷ During the same period, R&D investment (both privately and publicly funded) increased in Russia by about 160 percent and in China by more than 2,000 percent.⁶⁸ The United States remains the world's single largest funder of R&D, spending 23 percent more than the next highest funder



Source: Chart generated using information from "Gross domestic spending on R&D," Organisation for Economic Cooperation and Development, <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>, accessed March 13, 2017.

Figure 2. Gross Domestic Expenditures on R&D – 1995 to 2015

⁶⁴ "Office of Management and Budget Historical Table 9.7, "Summary of Outlays for the Conduct of Research and Development: 1949–2017," National Archives and Records Administration, accessed April 24, 2017, <https://obamawhitehouse.archives.gov/omb/budget/Historicals>.

⁶⁵ Nonfederal spending data from National Science Foundation, *National Science Board, Science & Engineering Indicators 2016, Appendix Table 4-6: Science & Engineering Indicators 2016*, accessed April 24, 2017, <https://www.nsf.gov/statistics/2016/nsb20161/uploads/1/7/at04-06.pdf>.

⁶⁶ "Gross Domestic Spending on R&D," Organisation for Economic Cooperation and Development, accessed April 17, 2017, <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>.

⁶⁷ *Ibid.*

⁶⁸ *Ibid.* For similar conclusions, see "Science & Engineering Statistics 2016," National Science Foundation, accessed April 17, 2017, <https://www.nsf.gov/statistics/2016/nsb20161/#/data>.

Allocate Resources Effectively

SECTION
809
PANEL

(China) in 2015; however, the Organisation for Economic Cooperation and Development (OECD) has predicted China's R&D spending will exceed that of the United States around 2019.⁶⁹

DoD cannot rely on outspending competitors and industry in R&D. Other countries are closing the technology gap by acquiring and adapting products available in world markets, conducting industrial espionage and intellectual property theft, and pursuing focused R&D. If DoD is to maintain a technological and readiness edge, it must more efficiently and effectively deploy its resources. Every dollar counts.

EFFECTIVE EXPENDITURES

DoD could garner more from its funds if it functioned in a flexible system that allowed more effective resource allocation. An opportunity cost arises each time DoD makes a spending choice that could have been invested in developing other capabilities, delivering more units, or funding other critical requirements. In some cases, DoD spent billions

on major programs it never fielded.⁷⁰ One example is the Air Force's Expeditionary Combat Support System (ECSS) information technology (IT) system, for which a billion dollars were spent, with no useful results, before the program was cancelled.⁷¹ The issue is not cancelling a program. Poor programs may need to be cancelled, but in such cases, the decision should happen earlier and before spending so much money.

Requirements, budgeting, and acquisition strategies that are not aligned and coordinated can cost billions of dollars. The Army is planning to acquire 180 Armored Multi-Purpose Vehicles, 45 M1 Abrams and 92 M2 Bradleys annually for the Armored Brigade Combat Team (ABCT) program over the next few decades.⁷² Under current contractual production rates, the combined annual baseline per-unit cost within the ABCT program is \$19.5 million. If the Army acquired vehicles at the rate of two brigades annually, however, the production efficiencies would save approximately \$11 billion during the life of the program.⁷³

⁶⁹ "China headed to overtake EU, US in science & technology spending, OECD says," Organisation for Economic Co-operation and Development, accessed February 24, 2017, <http://www.oecd.org/newsroom/china-headed-to-overtake-eu-us-in-science-technology-spending.htm>. Organisation for Economic Co-operation and Development, *OECD Science, Technology, and Industry Outlook 2014*, accessed April 24, 2017, http://www.keepeek.com/Digital-Asset-Management/oecd/science-and-technology/oecd-science-technology-and-industry-outlook-2014_sti_outlook-2014-en#page4.

⁷⁰ Patrick Clowney, Jason Dever, and Steven Stuban, "Department of Defense Acquisition Program Terminations: Analysis of 11 Program Management Factors," *Defense Acquisition Research Journal*, 23, no. 3 (2016): 298-328.

⁷¹ The Air Force's Expeditionary Combat Support System (ECSS), a program to develop an integrated enterprise resource planning solution to manage global logistics, was cancelled after spending \$1.1 billion over 8 years (from 2004 to 2012), without ever being deployed. Chris Kanaracus, "Air Force scraps massive ERP project after racking up \$1B in costs," *Computerworld*, Nov 14, 2012, accessed April 24, 2017, <http://www.computerworld.com/article/2493041/it-careers/air-force-scraps-massive-erp-project-after-racking-up-1b-in-costs.html>. According to an Army report, between 1996 and 2010, the Army directed more than \$1 billion each year to programs that were eventually canceled. For a 6-year period (2004-2010) 35-42 percent of the Army's annual development test and evaluation funding was spent on canceled programs; 2010 Army Acquisition Review, *Army Strong: Equipped, Trained, and Ready: Final Report of the 2010 Army Acquisition Review*, accessed April 24, 2017, <http://breakingdefense.sites.breakingmedia.com/wp-content/uploads/sites/3/2011/07/213465.pdf>.

⁷² U.S. Army Program Executive Office – Ground Combat Systems, email to Section 809 Panel, March 29, 2017.

⁷³ *Ibid.* Under current program guidelines, the annual baseline costs for the ABCT program are \$3.5 million for AMPVs, \$13 million for M1s and about \$3 million for Bradleys. Under a two-brigade purchasing system, annual baseline costs would decline for each vehicle to

When alignment and coordination occur, DoD may see cost savings. For example, the Joint Light Tactical Vehicle (JLTV) is a joint Army and Marine Corps program that provides vehicles capable of performing multiple mission roles. According to the Army, the program's innovative acquisition approach resulted in a total cost savings of \$11.3 billion and cost avoidance of \$17 billion.⁷⁴ The JLTV acquisition strategy was built around

- consistent engagement with industry, other potential DoD customers (e.g., Air Force, Navy, Special Operations Command), and potential foreign military sales customers;
- a source selection approach that incorporated a tiered evaluation of proposals that allowed for negotiations based on potential contractors' ability to meet key systems attributes; and
- an evolutionary process that allowed for timely delivery as capabilities matured.⁷⁵

This flexible approach enabled DoD to be a more sophisticated buyer and to gain more capabilities within budget constraints.

CASE STUDY: Saving Money by Updating Legislation

Fuel Storage

By law,^{*} DoD can award contracts for "storage facilities for, or the storage, handling, or distribution of, liquid fuels or natural gas" for a maximum of 5 years, with option years of no more than 20 years in total. The 20-year contract life was originally established in 1956, when storage technology and environmental requirements were different. Modern fuel storage infrastructure is capable of operating for up to 30 years without any operational interruption.[⊕]

The 20-year contract limit in 10 U.S.C. § 2922 no longer reflects the reality of the fuel infrastructure system. Extending the maximum Section 2922 timeframe from 20 years to 30 years for both new and existing contracts would address this problem in a more cost-effective manner. This approach could achieve substantial savings in the near term. [⊞] Congress should extend the maximum length of Section 2922 fuel storage contracts to 30 years and authorize the 30-year maximum to be applied to existing contracts.

^{*} Liquid Fuels and Natural Gas: Contracts for Storage, Handling, or Distribution, 10 U.S.C. § 2922.

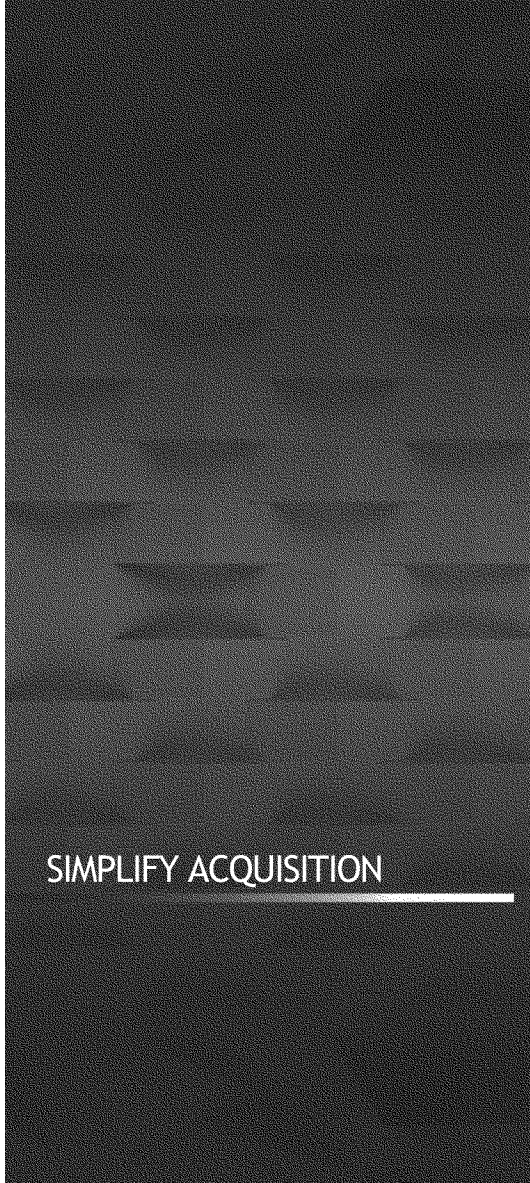
[⊕] Regulatory Recommendation: Update to DoD 4140.25-M, Volume II, "DoD Management of Bulk Petroleum Products, Natural Gas, and Coal," Chapter 8: Management of Storage and Distribution Facilities, June 22, 1994, accessed April 27, 2017, <http://www.dtic.mil/whs/directives/corres/pdf/414025-m-vol2-chapter8.pdf>.

[⊞] Defense Logistics Agency Energy, response to questions posed by Section 809 Panel, March 16, 2017.

\$3.2 million for AMPVs, \$8.8 million for M1s and about \$1.9 million for Bradleys. Acquisition targets are currently presumed to be 2,897 AMPVs, 1,700 M1s and 2,668 Bradleys during the life of the ABCT program.

⁷⁴ "Dollars & Sense," *Army AL&T*, 117, April-June 2012, 117, accessed April 17, 2017, http://asc.army.mil/web/wp-content/uploads/2013/04/army_al_t_magazine_Final_April-June2012.pdf.

⁷⁵ Joint Program Office Joint Light Tactical Vehicle, *Joint Light Tactical Vehicle (JLTV) Acquisition Strategy Report for Milestone C, Version V5.A5*, accessed April 17, 2017, <https://www.dodtechpedia.mil> (requires DoD Common Access Card login).



Some of the regulations and statutes governing defense acquisition are outdated or no longer applicable. Others resulted from past acquisition reforms intended to improve the system. Successive waves of acquisition reform have added rules and regulations that produced the unintended consequence of adding to the existing mass of regulations and statutes.⁷⁶ The complexity of the system of regulations adds cost, and potentially creates a barrier to entry for firms contemplating engaging in business with DoD.⁷⁷ Some industry representatives have stated that amending or repealing such regulations and statutes could save money, improve the system, and expand the number of companies willing to do business with the federal government.⁷⁸

UNNECESSARILY COMPLEX SYSTEM

Federal contracting is governed by the Federal Acquisition Regulation (FAR) and, specific to defense, the Defense Federal Acquisition Regulation Supplement (DFARS). These requirements govern such issues as

- how DoD solicits, negotiates, awards, and administers contracts;

- what costs DoD will reimburse and how contractors must account for those costs to be reimbursed;
- the type of accounting systems used by contractors; and
- how contractors must comply with such rules as maintaining a drug-free workplace, and other public policy goals.⁷⁹

Many have posited that the sheer number and complexity of the statutes, regulations, executive orders, directives, policies, and procedures impede the acquisition process, reducing speed and efficiency by adding time, complexity, and cost to the process.⁸⁰

The Section 800 Panel⁸¹ sought to address such inefficiencies, with goals of reducing administrative costs, improving opportunity for small businesses, promoting efficiencies and economy in contracting, and avoiding unnecessary burdens for agencies and contractors for acquiring small-dollar requirements.⁸² One of the Section 800 Panel's recommendations increased the threshold for Simplified Acquisition Procedures (SAP). As the Simplified Acquisition Threshold continued to increase, the procurements that could use SAP increased in complexity.

⁷⁶ Business Executives for National Security, *Getting to Best: Reforming the Defense Acquisition Enterprise, A Business Imperative for Change from the Task Force on Defense Acquisition Law and Oversight*, July 2009, accessed April 17, 2017, <https://www.bens.org/document.doc?id=44>.

⁷⁷ Office of the Under Secretary of Defense, Acquisition, Technology, and Logistics, *Eliminating Requirements Imposed on Industry Where Costs Exceed Benefits*, Washington, DC, 2015, accessed April 17, 2017, <http://www.acq.osd.mil/fo/docs/Eliminating-Requirements-Imposed-on-Industry-Study-Report-2015.pdf>.

⁷⁸ Brian O'Keefe, "The Red Tape Conundrum: How the Wrong Kind of Regulation Is Strangling Business—And What To Do About It," *Fortune*, November 1, 2016, <http://fortune.com/red-tape-business-regulations/>.

⁷⁹ *Federal Government Contract Overview*, Find Law for Legal Professionals, accessed April 17, 2017, <http://corporate.findlaw.com/library/federal-government-contract-overview.html>.

⁸⁰ William Lucyshyn, "The New Acquisition Reform Effort: Back to the Future," *Defense News*, December 6, 2016, accessed April 27, 2017, <http://www.defensenews.com/articles/the-new-acquisition-reform-effort-back-to-the-future>.

⁸¹ The Section 800 Panel, formally known as the DOD Acquisition Law Advisory Panel, was established pursuant to Section 800 of the 1991 National Defense Authorization Act.

⁸² DOD Acquisition Law Advisory Panel, *Streamlining Defense Acquisition Law, Executive, Summary: Report of the DOD Acquisition Law Advisory Panel*, accessed April 24, 2017, <http://www.dtic.mil/get-tr-doc/pdf?AD=ADA264919>.

Simplify Acquisition

SECTION
809
PANEL

According to the FAR Clause Matrix, 431 clauses may apply to SAP contract solicitations—more than time and materials contracts, which are generally considered more risky to the government.⁸³ Contracting officers must review and determine the applicability of 344 *required if applicable* and 76 *optional* clauses based on their understanding of the requirements. As one contracting officer told the Section 809 Panel, it is time to “put ‘simplified’ back in simplified procurements.”⁸⁴

Burdensome document requirements slow the system and create hurdles for program management offices. For example, before getting to the final RFP for information technology services, buyers must complete 12 mandatory documents, requiring hundreds of pages of research and many hours of contractor consultation.⁸⁵

Table 1. FAR Part 52.301 FAR Matrix – Solicitation Provisions and Contract Clauses by Principal Type and Purpose of Contract

Principal Type and Purpose of Contract	Required	Req. if Applicable	Optional	Total
Indefinite Delivery	17	447	35	499
Fixed-Price Supply	21	418	42	481
Leasing of Motor Vehicles	18	404	43	465
Fixed-Price Service	19	384	31	434
Simplified Acquisition Procedures (excl. Micro-Purchase)	11	344	76	431
Fixed-Price Construction	22	369	30	421
Transportation	16	360	22	398
Communication Services	15	348	23	386
Dismantling, Demolition, or Removal of Improvements	17	344	22	383
Time and Material/Labor Hours	19	336	22	377
Cost-Reimbursement Supply	24	323	29	376
Fixed-Price Research and Development	16	327	32	375
Cost Reimbursement Service	22	330	23	375
Cost Reimbursement Construction	26	318	22	366
Cost Reimbursement Research and Development	20	318	23	361
Architect-Engineering	15	297	22	334
Facilities	16	296	22	334
Utility Services	23	273	22	318
Commercial Items	13	116	9	138

Source: “FAR 52.301, Solicitation Provisions and Contract Clauses,” https://www.acquisition.gov/far/html/52_301Matrix.html.

⁸³ Federal Acquisition Regulation 52.301, “Solicitation provisions and contract clauses (Matrix),” accessed April 17, 2017, https://www.acquisition.gov/far/html/52_301Matrix.html.

⁸⁴ Army contracting officers, round table conversation with Section 809 Panel professional staff, November 14, 2016.

⁸⁵ U. S. Army, “Acquisition Strategy Schedule Analysis and Lessons Learned,” provided to Section 809 Panel professional staff via email, January 18, 2017.

MISSION MUST COME FIRST

When a commercial company is buying goods and services for its business, it focuses the deal on *what* it is buying. When DoD buys, it must focus not only on *what*, but also *how* it will buy goods and services and *how* the seller will operate.

A number of statutes and regulations promote public policy goals. Some of the public policies promoted in the FAR or defense-specific regulations are intended to support the mission of DoD. Examples of such regulations include those aimed at preserving a domestic supply of critical defense articles and those aimed at promoting DoD's access to innovative technologies developed by small businesses.

Other public policy requirements do not directly support DoD's mission, but focus on how contractors operate. Taken individually, these statutes and regulations promote laudable public policies, while imposing marginal cost. Taken together, however, these requirements add substantial cost, as well as complexity, bureaucracy, and time, to the acquisition process—cost that DoD may no longer be able to afford when weighed against the public benefits.

Public policy requirements must be assessed to determine whether the costs, including time, outweigh the benefits to industry, government, and, in some cases, the regulations' intended beneficiaries. To support such an effort, the FAR should be amended to emphasize that the primary goal of the acquisition process is to support the agency mission, and that promoting public policy objectives is a secondary goal of the process.

CASE STUDY: Simplifying Acquisition**Recycled Paper**

The 1998 NDAA put in place the 30 percent postconsumer-waste requirement for DoD. The FY 2017 NDAA repealed the requirement in statute, yet Executive Order (EO) 13693* and the related FAR parts and clause still stand. These regulations constitute an unnecessary contract clause requirement. Paper-use reduction has been achieved, with paper in landfills having decreased by 50 percent since 2003,[†] through administrative changes such as increased use of electronic documentation, electronic recordkeeping, and mandated use of double-sided copying.[‡] Executive Order 13693 should be revised. The guidance at FAR 4.3, Paper Documents, FAR 11.303, Special Requirements for Printing and Writing Paper, and the clause at FAR 52.204-4, Printed or Copied Double-Sided on Postconsumer Fiber Content Paper, should be changed, which would eliminate an unnecessary contract clause requirement.

* Executive Order 13693, Sec 3(i)(v), March 19, 2015.

† "Paper Recovery & Landfill," Paper Recycles, accessed April 24, 2017, <http://www.paperrecycles.org/statistics/paper-recovery-landfill>.

‡ According to the National Archives website page "Why Federal Agencies Need to Move Towards Electronic Recordkeeping" at <https://www.archives.gov/records-mgmt/policy/prod1afn.html>, electronic recordkeeping (ERK) "provides long-term cost savings (reducing the need for parallel recordkeeping systems, i.e., paper and electronic). While there are costs associated with implementing and maintaining electronic recordkeeping, ERK can reduce or avoid costs for many areas associated with paper filing, including the costs for storage space, materials (e.g., paper, folders, cabinets), and labor."

Simplify Acquisition

SECTION
809
PANEL

CASE STUDY: Simplifying Acquisition

Texting While Driving

On October 1, 2009, President Barack Obama issued EO 13513, Federal Leadership on Reducing Text Messaging While Driving, which includes language to encourage contractors to employ practices and policies to ban texting while driving and resulted in the addition to the FAR of Subpart 23.11, Encouraging Contractor Policies to Ban Text Messaging While Driving. FAR Clause 52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving, also includes this language, which must be in all solicitations and contracts and in all subcontracts exceeding the micro-purchase threshold. This requirement is no longer needed due to changes in state laws and DoD installation rules. DoD has issued directives to prohibit the use of cell phones while driving (with the exception of hands-free use) on all military installations.* Installation rules and regulations governing cell phone use are posted at installation entry points.† Furthermore, 46 states, D.C., Puerto Rico, Guam, and the U.S. Virgin Islands ban text messaging for all drivers.‡ The FAR language should be revised to remove the contract clause requirement.

* DoD Traffic Safety Program, DODI 6055.04 (2013), enclosure 3 paragraph 6(d)(2).

† Insurance Institute for Highway Safety Highway Loss Data Institute, Cellphones and Texting, accessed April 18, 2017, <http://www.iihs.org/iihs/topics/laws/cellphonelaws>.

‡ "DoD to Restrict Cell Phone Use on Military Bases," Department of Defense, accessed April 18, 2017, <http://archive.defense.gov/news/newsarticle.aspx?id=14689>.

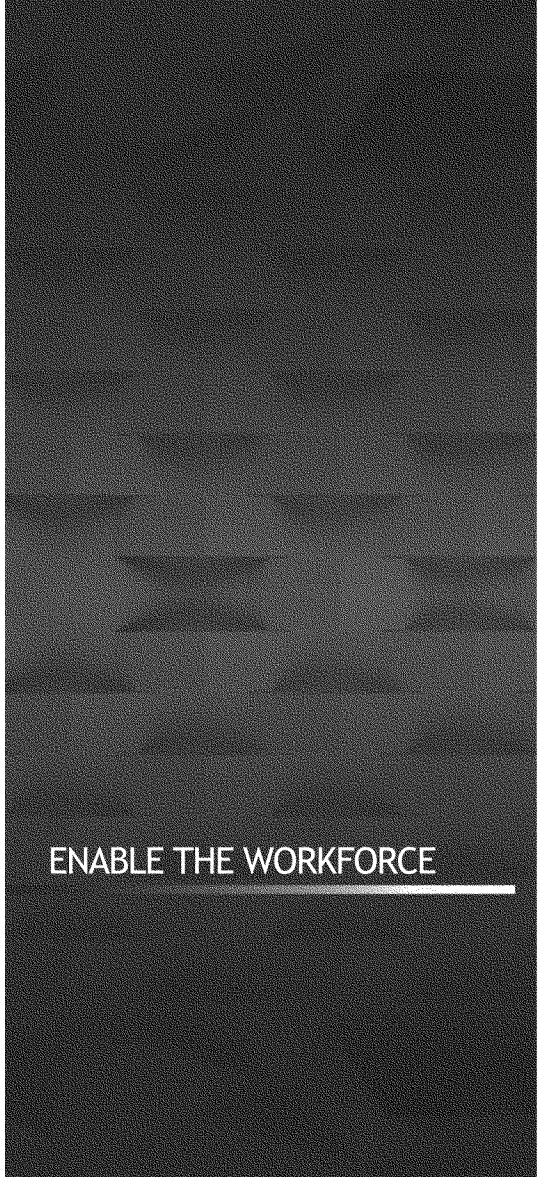
• Federal Acquisition Regulation 42.302(a)(39) states that a duty of the Administrative Contracting Officer is to ensure contractor compliance with contractual safety requirements. The texting while driving clause is one of those requirements.

CASE STUDY: Simplifying Acquisition

\$1 Coins

The Presidential \$1 Coin Act of 2005 requires that business operations performed on federal government premises provide for accepting and dispensing of existing and proposed dollar coins. The \$1 coin requirement in law, as implemented through the FAR, does not appear to have achieved the desired result. According to GAO, there is a lack of widespread acceptance of the coin by the public and adequate supply to meet the demand for 40 years.* Congress should amend the statutory requirement at 31 U.S.C. § 5112(p)(1). The FAR should be amended accordingly, which will remove a contract clause requirement.

* Government Accountability Office, *Coin Inventory Management Needs Better Performance Information*, GAO-14-110, accessed April 24, 2017, <http://www.gao.gov/assets/660/658599.pdf>.



ENABLE THE WORKFORCE

DoD needs an acquisition system that is simple, understandable, and executable by people operating in an environment that empowers and incentivizes them to make good decisions.

Defense acquisition is a human activity dependent on the judgments, considerations, interests, and decisions of people operating in the real world. Regardless of how impressive policy initiatives look on paper, or how effective the acquisition system is in theory, the ultimate effectiveness and efficiency of defense acquisition depends on and is determined by the people who are responsible for all phases of acquisition.⁸⁶

People respond to prevailing norms and the culture in which they operate. Teams that are highly motivated, given a clear vision, properly empowered, and provided the right tools and training can achieve tremendous results.⁸⁷ A workforce that is sent conflicting messages, incentivized to make decisions that lead to suboptimal outcomes, mired in bureaucracy, and overburdened by complex and stifling

regulations will succumb to the mixed messages they receive.⁸⁸

Current statutes and regulations are overly complex and difficult to understand and implement, promote risk-averse behavior, and encourage decisions that produce suboptimal results. Former Secretary of Defense Robert Gates goes further by stating, “Fundamental to bureaucratic culture is risk avoidance: It is almost always safer for the public bureaucrat—and too often the business bureaucrat as well—to say no than yes. In a public environment of exposés, recrimination, faultfinding, and investigations both by officials and by the media, not acting is usually safer than acting—especially if the action involves something new or different.”⁸⁹

INCENTIVIZE EFFECTIVE DECISION-MAKING

Often, the incentives in the acquisition process encourage people to make decisions that result in suboptimal outcomes.⁹⁰ Without changing the incentives, appreciable improvement in

⁸⁶ Blue Ribbon Defense Panel, Department of Defense, *Report to the President and the Secretary of Defense on the Department*, 94, accessed April 24, 2017, file:///D:/User/My%20Documents/Downloads/AD0766055.pdf. A 2014 compilation of expert views on acquisition reform published by the Senate Committee on Homeland Security and Governmental Affairs (Permanent Subcommittee on Investigations) identified four themes, two of which deal exclusively with the acquisition workforce. According to the report “Nearly half of the experts feel that cultural change is required while over two-thirds believe improving incentives for the acquisition workforce is necessary for reform...Two-thirds of the contributors feel that training and recruiting of the acquisition workforce must be improved.” See U.S. Congress, Senate Committee on Homeland Security and Governmental Affairs, Permanent Subcommittee on Investigations, *Defense Acquisition Reform: Where Do We Go From Here?*, *A Compendium of Views by Leading Experts*, 2nd sess., 113th Cong., (2014) (staff-prepared report), accessed April 24, 2017, file:///D:/User/My%20Documents/Downloads/REPORT%20-%20DEFENSE%20ACQUISITION%20REFORM-A%20Compendium%20of%20Views%20(10-2-14)1.pdf.

⁸⁷ Chris McGoff, “The Primes,” (Hoboken: John Wiley and Sons, 2012).

⁸⁸ Len Schlesinger and Charlie Kiefer, “When Your Boss Gives You Conflicting Messages,” *Harvard Business Review*, November 27, 2014, <https://hbr.org/2014/11/when-your-boss-gives-you-conflicting-messages>.

⁸⁹ Robert M. Gates, *A Passion for Leadership: Lessons on Change and Reform from Fifty Years of Public Service*, (New York: Alfred Knopf, 2016), 16.

⁹⁰ J. Ronald Fox, *Defense Acquisition Reform 1960-2009: An Elusive Goal* (Washington, D.C.: Center of Military History, 2011), 197–199. Department of Defense, *Defense Acquisition Performance Assessment Report*, 5, accessed April 24, 2017, http://www.afei.org/research/Documents/DoD%20Documents/DAPA-Report-web_Jan2006.pdf. See Business Executives for National Security, *Getting to Best: Reforming the Defense Acquisition Enterprise: A Business Imperative for Change from the Task Force on Defense Acquisition Law and Oversight*, 3, accessed April 24, 2017, <https://www.bens.org/document.doc?id=44>.

Enable the Workforce

SECTION
809
PANEL

defense acquisition is unlikely to occur.⁹¹ The thousands of decisions made every day by people at the operational level play a critical role in determining acquisition outcomes. These critical decisions extend beyond the acquisition workforce to those who are part of the greater acquisition process, such as individuals responsible for requirements, budgets, and human resources.⁹²

Processes such as developing requirements, contracting, making investments, or obligating money are often driven not by a sound business case, but by arbitrary deadlines and outside pressures. As one program manager noted, the general rule of thumb is not to plan to sign new contracts in the first 3 months of a fiscal year (to guard against effects of continuing resolutions) or the last 3 months of a fiscal year (to guard against unexpected delays beyond the control of the program that may result in expiration of funds or DoD pulling back money for failing to meet obligation benchmarks).

Agencies that find themselves with funds at the end of the fiscal year may then rush to spend

these funds. The greatest amount of spending occurs in the last month of the fiscal year, with an especially prominent spike in the final week. In the last week of FY 2016, for instance, DoD contract obligations were about 3.5 times greater than the annual weekly average.⁹³ This so-called *use it or lose it* mentality—which could be associated with spending categories (*colors of money*) in appropriations law, OMB apportionment processes, or internal DoD decision-making—represents inefficient allocation of limited DoD resources.⁹⁴

Both written rules and performance norms incentivize making decisions that lead to suboptimal outcomes. Senior defense officials, both past and current, acknowledge that program advocates have strong incentives to underestimate program acquisition costs.

Contractors sometimes use unrealistically low cost estimates to win contracts; program representatives use low estimates to argue for approval of the system against competing systems.⁹⁵ Such optimism in cost, schedule, and performance often leads to cost overruns,

⁹¹ J. Ronald Fox, *Defense Acquisition Reform 1960-2009: An Elusive Goal* (Washington, D.C.: Center of Military History, 2011), 190. This point was reiterated in Secretary Frank Kendall's guidance on implementing the Better Buying Power initiatives, which stated "Policies and processes are of little use without acquisition professionals who are experienced, trained, and empowered to apply them effectively. At the end of the day, qualified people are essential to successful outcomes and professionalism, particularly in acquisition leaders, drives results more than any policy change." Implementation Directive for Better Buying Power 2.0 - Achieving Greater Efficiency and Productivity in Defense Spending, Memorandum from Office of the Under Secretary of Defense (2013).

⁹² Robert F. Hale, Center for Strategic and Budgetary Assessments, *Promoting Efficiency in the Department of Defense: Keep Trying, Be Realistic*, 20, accessed April 24, 2017, <http://csbaonline.org/uploads/documents/2002.01.25-DoD-Efficiency.pdf>.

⁹³ Based on Section 809 Panel professional staff analysis of daily DoD data from Federal Procurement Data System, <https://fpds.gov>.

⁹⁴ Former DoD Comptroller Robert Hale wrote in September 2016 that "year-end spending pays for lower-quality and lower-priority projects." See Robert Hale, "Why DoD's Year-End Spending Needs to Change," *Breaking Defense*, September 23, 2016, <http://breakingdefense.com/2016/09/why-dods-year-end-spending-needs-to-change>. A 2013 study found that for recent U.S. government information technology contracting projects, there was a statistically significant correlation between funding obligated at the very end of the fiscal year and comparatively low quality of project outcomes. See Jeffrey B. Liebman and Neale Mahoney, National Bureau of Economic Research, *Do Expiring Budgets Lead to Wasteful Spending? Evidence from Federal Procurement*, accessed April 24, 2017, <http://www.nber.org/papers/w19481.pdf>.

⁹⁵ This state of affairs has existed for decades. In 1981, Frank C. Carlucci, deputy secretary of defense at the time, testified that low cost estimates "are fueled by optimistic contractor proposals to win competitions and program managers who want to see their programs funded." Almost 30 years later, John Young, then-under secretary of defense for acquisition, technology, and logistics echoed this sentiment, stating "The enterprise will often pressure acquisition teams and industry to provide low, optimistic estimates to help start programs." See: *House of Representatives Armed Services Committee: Hearings, Sess. 1, 97th Cong., 1st Sess., Volume 11, 1981*. Op. Cit.

schedule slips, and capability gaps or shortfalls.⁹⁶ One example is the Navy's Littoral Combat Ship. GAO found, "Ships were not delivered quickly to the fleet at low cost. Rather cost, schedule, and capability expectations degraded over time. In contrast, a sound business case would have balanced needed resources—time, money, and technical knowledge—to transform a concept into the desired product."⁹⁷ Incentives are needed that promote more candor in presenting programs to Congress and senior leaders in DoD.

AUTHORITY AND ACCOUNTABILITY

Authority and accountability are critical elements in building an effective workforce. According to the Packard Report, "We must give acquisition personnel more authority to do their jobs. If we make it possible for people to do the right thing the first time and allow them to use their common sense, then we believe that the Department can get by with far fewer people."⁹⁸ Without authority, even the most skilled and incentivized professionals cannot effectively run and manage acquisition.

Many regulations can remove or dilute authority and accountability. Regulations that dictate contract type can deprive acquisition personnel of the discretion needed to get the best deal for the government. Additionally, the management structure and decision-making process within DoD are too bureaucratic and encumbered by numerous layers of review. Successive reviews do not necessarily add substantive value, but they do add time to the process and add to the number of people who can say *no* or influence a program, including people who do not have a stake in the outcome of the acquisition. Because nobody holds actual authority to manage a program, there is no one to hold accountable. The Quadrennial Defense Review Independent Panel concluded, "The fundamental reason for the continued underperformance in acquisition activities is *fragmentation of authority and accountability for performance.*"⁹⁹

The process for reviewing and approving an acquisition strategy can exceed the time it takes to create the strategy. In one instance, the time to review, adjudicate, and approve the acquisition strategy for an Army enterprise

p. 883, 1086 John J. Young, Jr., *Reasons for Cost Changes for Selected Major Defense Acquisition Programs (MDAPs)*, Memorandum, January 30, 2009.

⁹⁶ See: *House of Representatives Armed Services Committee: Hearings, Sess. 1, 97th Cong.* John J. Young, Jr., *Reasons for Cost Changes for Selected Major Defense Acquisition Programs (MDAPs)*, Memorandum, January 30, 2009. The Navy estimated the cost of the CVN-78 at \$10.5 billion—an optimistically low number that matched the budget cap set by Congress rather than reflecting the more realistic estimate provided by the shipbuilder, which was 22 percent higher. The Navy now estimates the procurement costs at \$12.9 billion. See Paul L. Francis, Government Accountability Office, *Ford Class Aircraft Carrier: Poor Outcomes Are the Predictable Consequences of the Prevalent Acquisition Culture*, accessed April 24, 2017, <http://www.gao.gov/assets/680/672877.pdf>. Ronald O'Rourke, Congressional Research Service, *Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress*, accessed April 24, 2017, <https://fas.org/spp/crs/weapons/RS20643.pdf>.

⁹⁷ Paul L. Francis, Government Accountability Office, *Littoral Combat Ship and Frigate: Congress Face with Critical Acquisition Decisions*, accessed April 14, 2017, <http://www.gao.gov/assets/690/681333.pdf>.

⁹⁸ The Packard Report, for example, stated "We must give acquisition personnel more authority to do their jobs. If we make it possible for people to do the right thing the first time and allow them to use their common sense, then we believe that the Department can get by with far fewer people." President's Blue Ribbon Commission on Defense Management, 1986 Packard Commission Report on Defense Management, accessed April 24, 2017, <http://www.documentcloud.org/documents/2695411-Packard-Commission.html>.

⁹⁹ U.S. Institute for Peace, *The QDR in Perspective: Meeting America's National Security Needs in the 21st Century: The Final Report of the Quadrennial Defense Review Independent Panel*, 85, accessed April 24, 2017, <https://www.usip.org/sites/default/files/qdr/qdrreport.pdf>.

Enable the Workforce SECTION 809 PANEL

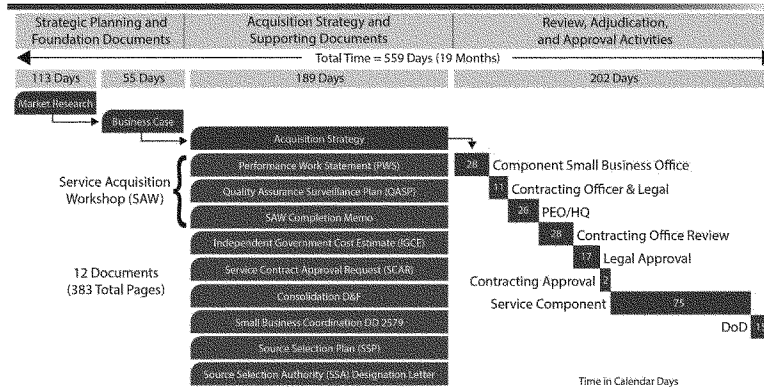
resource planning program took more than 6 months—longer than the time it took to create all 383 pages that comprised the acquisition strategy and required supporting documents (see Figure 3). In another example, the process of getting to the full deployment decision for the Army’s global combat support system required a total of 33 documents, amounting to 1,076 pages for the main documents and 17,604 pages for annex documents—a final product that was more than 14 times the length of Tolstoy’s *War and Peace*, but not as well written. Altogether, this documentation took 1,853 calendar days (more than 5 years) to complete.¹⁰⁰

The acquisition process must be simple, understandable, and executable to support a culture that promotes good outcomes. Such a culture includes ensuring that people are given

clear authority to make decisions and are held responsible for the consequences of the decisions they make.

SUPPORT THE WORKFORCE

One of the most important ingredients to achieve acquisition reform is a transformation in the culture of DoD and Congress. Rules and regulations alone, however, can no more foster the right culture than legislation can force good management. The workforce of today understands the message that has been sent to it through multiple layers of bureaucratic review, budget cuts, hiring freezes, salary freezes, furloughs, continuing resolutions, damning congressional hearings, and press releases and speeches castigating government workers as overpaid and underperforming.



Source: U.S. Army PEO/AESIP, "Acquisition Strategy Schedule Analysis and Lessons Learned," Army-produced PowerPoint presentation, August 2014.

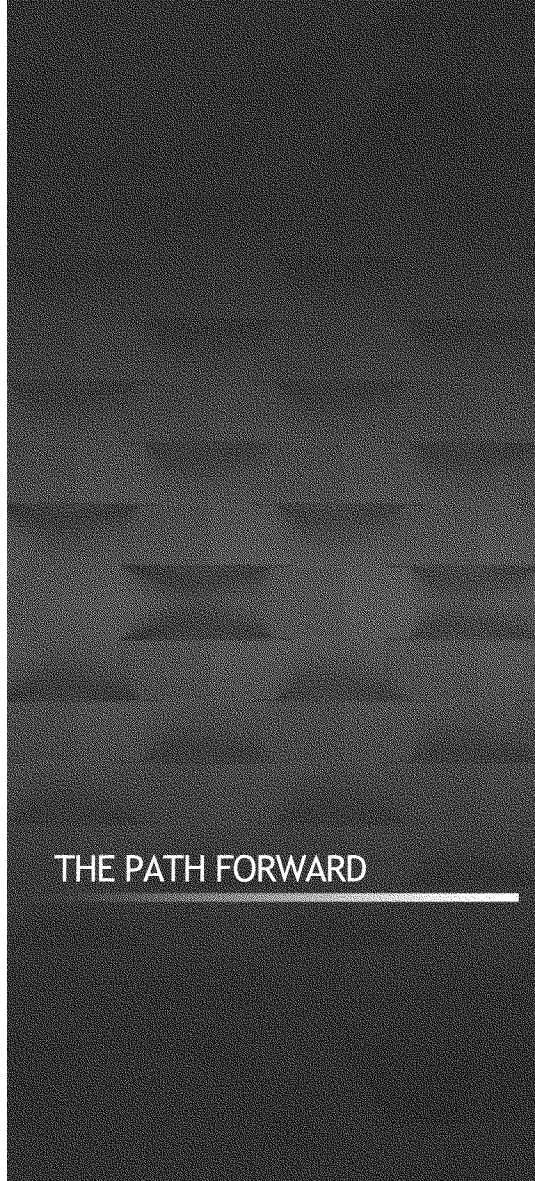
Figure 3. Acquisition Strategy Schedule - Actual

¹⁰⁰ U. S. Army (n.d.), "Army Acquisition, Logistics, and Technology Documentation Deep Dive," Army-produced PowerPoint presentation.

All these events exact a toll on the morale of the acquisition workforce. At some point people, motivated by their desire to serve the country and the men and women defending it, feel frustrated in their efforts to make a difference and do not feel empowered with respect to work processes.¹⁰¹ The workforce deserves a better system.

Working for government should be lauded, not denigrated. The United States and the people who dedicate their careers to serving it deserve better. Congress and the administration must take a leadership role in challenging people to aspire to public service, making government service a career that attracts the best and brightest the country has to offer.

¹⁰¹ Office of Personnel Management, *2016 Federal Employee Viewpoint Survey*, accessed April 19, 2017, <https://www.fedview.opm.gov/>.



Although the current acquisition system has produced success, it cannot consistently deliver what DoD needs given the speed of change in the new dynamic defense marketplace. As the Section 809 Panel explores ways to forge a modern acquisition system, it will put forth recommendations that will address the root causes of systemic acquisition problems, rather than just their symptoms.

DoD's focus must be on mission readiness and performance results. The current acquisition system is designed to achieve too many competing ancillary *good* policies, sacrificing innovation¹⁰² and technological dominance yet adding complexity, cost, and time. We are asking BOLD questions that will guide us in the path forward:

- What are the characteristics that make programs successful, and how can these best practices be replicated?
- What is the effect of the clarity and quality of the requirements description in the buying process?
- Is there a *right* balance between performance results and policy initiatives? What is the cost/value of social policies, and can they be achieved through other means?
- What complexities can be eliminated from buying?
- Does fiscal fluidity affect buying?
- What barriers discourage new ideas and discourage new entrants from transacting with DoD?

- What can be done to systematically eliminate outdated, unclear, or peripheral requirements in DoD regulations, policies and practices, as well as federal law?
- Is competition in the 21st century aligned with the Competition in Contracting Act?
- How does DoD better access the commercial market as a savvy buyer?
- How well does the protest process serve government and industry?
- What is the role of small business, and what is the most effective way to support small businesses in the United States?
- What data are needed, what are collected, and how are they used?
- Which oversight/approval requirements bring value, and which ones take away value?
- How can DoD accelerate decision-making to buy quicker?

The Section 809 Panel is committed to proposing recommendations to make the acquisition system more responsive, innovative, and cost effective. The time for superficial conversation and insubstantial changes to regulations and statutes has passed. The global threat is rapidly changing, the relevance of the unique defense industrial base is waning, the processes for acquisition are no longer efficient or effective, and implementing these processes is left to a workforce that is mired in constricted thinking and risk aversion.

¹⁰² Frank Kendall, *Getting Defense Acquisition Right* (Fort Belvoir, VA: Defense Acquisition University Press, 2017).

The Path Forward

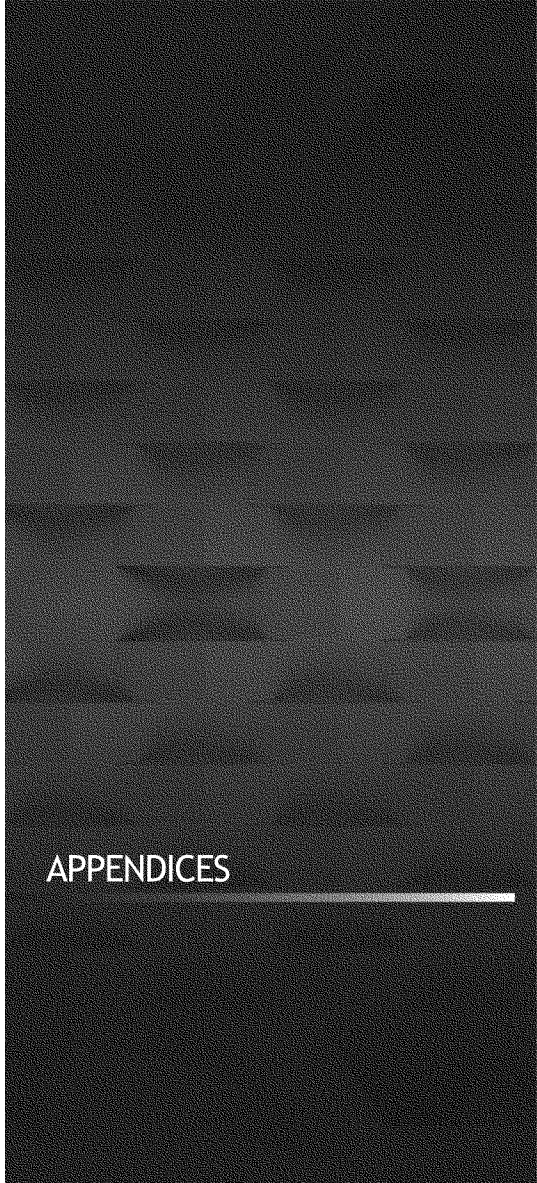
SECTION
809
PANEL

The Section 809 Panel has no interest in putting patches on a broken system. Our recommendations will be crafted to create a new way of doing business that will be flexible enough to respond to current and future needs. In addition, it will incentivize innovation, creativity, and risk-taking, shaping a flexible

acquisition workforce that delivers the desired outcomes. We intend to take a big bite into real change, rather than just nibble around the edges. To do otherwise is to put our military's mission and our nation's safety and security at risk.

Think BOLD

Section 809 Panel *Streamlining & Codifying Acquisition*



APPENDICES

APPENDIX A: ENABLING LEGISLATION

Section 809 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), as amended by section 863(d) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328), provides:

SEC. 809. ADVISORY PANEL ON STREAMLINING AND CODIFYING ACQUISITION REGULATIONS.

(a) **ESTABLISHMENT.**—The Secretary of Defense shall establish an independent advisory panel on streamlining acquisition regulations. The panel shall be supported by the Defense Acquisition University and the National Defense University, including administrative support.

(b) **MEMBERSHIP.**—The panel shall be composed of at least nine individuals who are recognized experts in acquisition and procurement policy. In making appointments to the advisory panel, the Under Secretary shall ensure that the members of the panel reflect diverse experiences in the public and private sectors.

(c) **DUTIES.**—The panel shall—

(1) review the acquisition regulations applicable to the Department of Defense with a view toward streamlining and improving the efficiency and effectiveness of the defense acquisition process and maintaining defense technology advantage; and

(2) make any recommendations for the amendment or repeal of such regulations that the panel considers necessary, as a result of such review, to—

(A) establish and administer appropriate buyer and seller relationships in the procurement system;

(B) improve the functioning of the acquisition system;

(C) ensure the continuing financial and ethical integrity of defense procurement programs;

(D) protect the best interests of the Department of Defense; and

(E) eliminate any regulations that are unnecessary for the purposes described in subparagraphs (A) through (D).

(d) **ADMINISTRATIVE MATTERS.**—

(1) **IN GENERAL.**—The Secretary of Defense shall provide the advisory panel established pursuant to subsection (a) with timely access to appropriate information, data, resources, analysis, and logistics support so that the advisory panel may conduct a thorough and independent assessment as required under such subsection.

(2) **INAPPLICABILITY OF FACA.**—The requirements of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the advisory panel established pursuant to subsection (a).

(3) **AUTHORITIES.**—The panel shall have the authorities provided in section 3161 of title 5, United States Code.

(e) **REPORT.**—

(1) **PANEL REPORT.**—Not later than two years after the date on which the Secretary of Defense establishes the advisory panel, the panel shall transmit a final report to the Secretary.

(2) ELEMENTS.—The final report shall contain a detailed statement of the findings and conclusions of the panel, including—

(A) a history of each current acquisition regulation and a recommendation as to whether the regulation and related law (if applicable) should be retained, modified, or repealed; and

(B) such additional recommendations for legislation as the panel considers appropriate.

(3) INTERIM REPORTS.—(A) Not later than 6 months and 18 months after the date of the enactment of this Act [Nov. 25, 2015], the Secretary of Defense shall submit a report to or brief the congressional defense committees on the interim findings of the panel with respect to the elements set forth in paragraph (2).

(B) The panel shall provide regular updates to the Secretary of Defense for purposes of providing the interim reports required under this paragraph.

(4) FINAL REPORT.—Not later than 30 days after receiving the final report of the advisory panel, the Secretary of Defense shall transmit the final report, together with such comments as the Secretary determines appropriate, to the congressional defense committees.

(f) DEFENSE ACQUISITION WORKFORCE DEVELOPMENT FUND SUPPORT.—The Secretary of Defense may use amounts available in the Department of Defense Acquisition Workforce Development Fund established under section 1705 of title 10, United States Code, to support activities of the advisory panel under this section.

APPENDIX B: PANEL ACTIVITIES

Monthly Full-Panel Meetings

September 20-21, 2016	
Identifying the "Big Rocks" to Improving Defense Acquisition and Maintaining Defense Technology Advantage	<ul style="list-style-type: none"> ▪ BG David Ehrhart, USAF (Ret.), Lockheed Martin Corp. ▪ Susan Warshaw Ebner, ABA Public Contract Law
AIA Perspectives	<ul style="list-style-type: none"> ▪ Jason Timm, Aerospace Industries Association
Updating the Regulatory Source Code	<ul style="list-style-type: none"> ▪ Andrew Hunter, Center for Strategic and International Studies
Acquisition Transformation Project, Acquisition of the Future (AOF)	<ul style="list-style-type: none"> ▪ Ann-Marie Johnson, ASI Government ▪ Dina Jeffers, Deputy Secretary of the Army, Procurement ▪ Kymm McCabe, Deloitte Consulting
OFPP Priorities and Category Management	<ul style="list-style-type: none"> ▪ Anne Rung, OFPP, OMB
Perspectives on Acquisition Reform, Lessons Learned from Research	<ul style="list-style-type: none"> ▪ Dan Chenok, IBM Center for Business of Government
Acquisition Reform to Enable Military Effectiveness	<ul style="list-style-type: none"> ▪ Lou Kratz, Lockheed Martin Corp.
Industry Roundtable (cohosted by U.S. Chamber of Commerce and Professional Services Council)	<ul style="list-style-type: none"> ▪ Christian Zur, U.S. Chamber of Commerce ▪ Scott Amey, Project on Government Oversight ▪ Brian Collins, Business Executives for National Security (BENS) ▪ Susan Maybaumwisniewski, BENS ▪ Mandy Smithberger, Center for Defense Information ▪ Roger Waldron, Coalition for Government Procurement
November 15-16, 2016	
Expert Presentations to the Panel	<ul style="list-style-type: none"> ▪ Chris Gunderson, U.S. Air Force ▪ Louis Kratz, Lockheed Martin Corp. ▪ Wendy Ginsberg, Congressional Research Service
December 14, 2016	
Expert Presentations to the Panel	<ul style="list-style-type: none"> ▪ Soraya Correa, U.S. Department of Homeland Security ▪ Paul Francis, Government Accountability Office
January 24-25, 2017	
Major Defense Acquisition Programs	<ul style="list-style-type: none"> ▪ Lt Gen Christopher C. Bogdan, F-35 Executive Officer ▪ VADM David Johnson, Principal Military Deputy ▪ Frank Kendall, Former USD, AT&L ▪ Gary Bliss, OUSD (AT&L)

Appendices

SECTION
809
PANEL

February 21-22, 2017

Geopolitical Threat Environment	<ul style="list-style-type: none"> ▪ Heather Conley, Center for Strategic and International Studies (CSIS) ▪ Melissa Dalton, CSIS ▪ Ben FitzGerald, Center for a New American Security (CNAS) ▪ Lt Gen Anthony Ierardi, Joint Chiefs of Staff, J8
Acquisition of Services in DoD	<ul style="list-style-type: none"> ▪ Ken Brennan, Defense Procurement and Acquisition Policy (DPAP) ▪ James Meade, Naval Air Systems Command (NAVAIR) ▪ Dan Helfrich, Deloitte Consulting LLP

March 21-22, 2017

Commercial Buying	<ul style="list-style-type: none"> ▪ James Steggall, AIA ▪ Janice Muskopf, AFMC ▪ Joseph Fengler, AIA ▪ Jon Etherton, Etherton & Associates ▪ Paul Milenkowic, ACC-NJ, Picatinny Arsenal ▪ Bill McNally, NASA ▪ Tyler Merkeley, HHS, BARDA ▪ Tim Applegate, DARPA ▪ Scott Ulrey, DARPA
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April 25-26, 2017

Expert Panel: The Effects of Socio-Economic Policies on Defense Acquisitions	<ul style="list-style-type: none"> ▪ James Galvin, PhD, DoD Small Business Programs ▪ Kenneth Dodds, U.S. Small Business Administration ▪ Donna Huneycutt, Wittenberg Weiner Consulting ▪ Burt Ford, Lockheed Martin Corp.
Building a National Security Marketplace for Rapid Technology Discovery and Acquisition	<ul style="list-style-type: none"> ▪ Tim Greeff, NSTXL
Imagining a Post-Barriers World	<ul style="list-style-type: none"> ▪ Meagan Metzger, DCode42

Semi-Monthly Stakeholder Meetings

January 12, 2017

Think Holistically and Broadly About the Panel Mandate	<ul style="list-style-type: none"> ▪ Stan Soloway, Celero Strategies
State of Defense IT Acquisition Reform	<ul style="list-style-type: none"> ▪ John Weiler, IT Acquisition Advisory Council (IT-AAC) ▪ Marvin Langston, Langston Associates, LLC
PSC Research on DoD Task Order Awards Made Under IDIQ Contracts	<ul style="list-style-type: none"> ▪ Alan Chvotkin, Professional Services Council (PSC) ▪ Matthew Taylor, Professional Services Council (PSC)
IDIQ Discussion	<ul style="list-style-type: none"> ▪ Jeff Koses, GSA, Office of Government-wide Policy ▪ Roger Waldron, Coalition for Government Procurement

SECTION 809 PANEL	Section 809 Panel Interim Report
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January 26, 2017	
Commercial Subcontract Flowdown; Simplified Acquisition Procedures	▪ Ron Smith, Ronald Smith Contracts
Acquisition Reform and Successful Programs	▪ Jeff Wieringa, Navy International Programs Office (NIPO)
February 23, 2017	
Security Cooperation Reforms and the Impact of FY17 NDAA	▪ VADM Joseph Rixey, Defense Security Cooperation Agency
DoD's Use of Project Structure	▪ Mike Morgan, Project Management Institute ▪ Charles Mahon, Project Management Institute ▪ John Driessnack, Project Management Institute
Successful Acquisition and Fielding of Software in the DoD: Impediments and Improvements	▪ Matt Chandler, Palantir Technologies
Acquisition Workforce Study	▪ Rene Thomas-Rizzo, Human Capital Initiatives, OUSD (AT&L)
March 9, 2017	
Technology: How to Use and Buy More Effectively	▪ Jennifer Napper, ACT-IAC ▪ Lou Kerestesy, ACT-IAC ▪ Kenneth Allen, ACT-IAC
Doing Business with DoD: Small Business Perspective	▪ Bryson Bort, Grimm
Strategies for Contracting Digital Services	▪ David Zvenyach, GSA, 18F
March 23, 2017	
Challenges Related to Government Practices for Commercial Items and Services Acquisitions	▪ Danielle Berti, Johnson & Johnson ▪ Stephanie Gilson, Johnson & Johnson
The State of Public Procurement Metrics	▪ Raj Sharma, Public Spend Forum
Organizational Culture and the Panel's Mission	▪ Lou Kerestesy, Gov Innovation
Acquisition of the Future (AOF) Model	▪ Stan Soloway, Celero Strategies ▪ Kymm McCabe, Deloitte
DoD Acquisition	▪ Mike Morgan, Project Management Institute ▪ Charles Mahon, Project Management Institute ▪ John Driessnack, Project Management Institute
April 13, 2017	
Software Concerns in DoD Acquisition: The Opportunity Presented by Agile Development	▪ Eileen Wrubel, Software Engineering Institute, CMU ▪ Alyssa Le Sage, Software Engineering Institute, CMU
Cloud and IT Acquisition Policy: Recommendations and Next Steps	▪ Richard Beutel, Cyrrus Analytics
Optimizing Acquisition: Procurement Transformation and Category Management	▪ David Shields, ASI Government ▪ Anne Laurent, ASI Government

Appendices

SECTION
809
PANEL

April 27, 2017

Regulations and Laws that Add Unnecessary Bureaucratic Obstacles to DoD Acquisitions	▪ Barbara Kinosky, Esq., Centre Law and Consulting
The Highly Regulated Federal Purchasing System: Implications and Alternatives	▪ Richard Dunn, Strategic Institute for Innovation in Government Contracting ▪ David Rothzeid, DIUx
Commercial Buying	▪ Shay Assad, Defense Procurement and Acquisition Policy

Team Meetings/Interviews

- (ISC)²
- Aerospace Industries Association
- AFCEA
- Air Force Materiel Command
- Allen Federal Business Partners
- Amazon Business, Public Policy, and Web Services
- ANG Budget Division Chief
- Anser
- Army Tank and Automotive Command (TACOM)
- ASN (RDA), DASN Unmanned
- Ausco, Inc.
- BAE
- Bain Capital
- BMNT Partners
- Boeing
- Booz Allen Hamilton
- Buchanan & Edwards
- Coalition for Government Procurement
- Cpacket Networks
- Cyber Security Strategies, LLC
- Cymmetria
- DARPA, Contracts Management Office
- DAU
- DCode42
- Defense Contract Management Agency
- Defense Logistics Agency
- Deloitte
- Department of Commerce
- Department of Energy
- DFJ Venture
- DHHS, Biomedical Advanced Research and Development Authority (BARDA)
- DIUx
- DoD Military and Industrial Base Policy

- DSMC
- Etherton & Associates
- ForgeRock
- GAO, Acquisitions and Sourcing Management Office
- General Dynamics
- GSE Dynamics
- Hack4Defense
- Harvard Kennedy School of Bus
- HeartFlow
- Heritage Foundation
- HQDA/DASA P
- InfoReliance
- Information Systems Security Association
- Integrated Dual Use Commercial Companies (IDCC)
- Invensense
- ITAPS
- JLT Speciality USA
- Johnson & Johnson, Government Business Compliance
- Leidos
- Lockheed Martin
- Microsoft
- MITRE
- NASA Contracts and Grants Policy and Office of Procurement
- NDU/USCG
- NGC
- NOAA
- NRI Secure Technologies
- NSTXL
- Nyotron
- OASN(FM&C), FMB
- OFPP
- OPNAV, N9
- OSD-Comptroller
- Phillips Screw Company
- Precision Gear
- Prevalent
- Procurement Technical Assistance Center – Maryland and Virginia
- QCWare
- Raytheon
- Sandia National Laboratories
- Section 813 Panel
- Senator Collins Staff
- Sevattec

Appendices

SECTION
809
PANEL

- SSS
- Symantec
- Telefonica
- U.S. Army Contracting Command
- U.S. Army Corps of Engineers
- United Technologies
- University of Illinois at Urbana-Champaign; School of Information Sciences
- USD(AT&L), DPAP
- Varonis
- WING Venture Capital
- Wittenberg-Weiner Consulting
- Yaniv Strategies

APPENDIX C: PANEL TEAMS

**FAR to Statute Baseline**

Team 1 is reviewing the acquisition regulations and statutes applicable to DoD to develop recommended changes or deletions that support timely acquisition of systems, services, and solutions supporting DoD mission. This effort includes a focus on recommendations to maintain the DoD's technological advantage and enhance access to emerging technologies.

**Streamlined Procurement Process**

Team 2 is researching options for substantially streamlining noncomplex acquisitions of less than \$15 million. Although the current acquisition system generally treats \$1 million contracts the same as \$1 billion contracts, the team is considering ways to enable DoD to meet its acquisition needs for smaller contracts.

**Commercial Buying**

Team 3 is focused on simplifying DoD's commercial buying practices to enable the department to have greater access to companies not currently selling to the department, and to be more adaptable and agile in its acquisition process.

**Barriers to Entry**

Team 4 is focused on removing regulatory, cultural, or bureaucratic barriers to entry to the DoD marketplace in an effort to attract companies interested in conducting business with DoD that have not done so previously. The team seeks ways to restructure DoD's business models support and maintain and increase technological dominance.

**Characteristics of Successful Programs**

Team 5 is identifying the attributes and qualities common to successful programs, with an eye toward techniques, tools, and practices that can be widely employed. The team will make recommendations for best practices, regulations, and statutes.

Appendices

SECTION
809
PANEL



IT Acquisition

Team 6 is investigating how to best streamline the information technology (IT) acquisition process as DoD modernizes its use of IT, with a specific focus on defense business systems and IT services. The ultimate goal is to increase use of commercial best practices and business processes, delivering capability faster and keeping DoD's technology current and supportable.



Budget

Team 7 is considering the broader budgeting process in DoD—how you get money and how you spend it. The team aims to arrive at recommendations that will optimize budgeting policy and processes to maintain military technological superiority through the efficient flow of resources in the acquisition system.



Streamlining Regulations

Team 8 is identifying defense acquisition regulations that are no longer necessary. The team is packaging together comprehensive ideas that would substantially streamline the acquisition process.



Cost Accounting Standards

Team 9 is reviewing the administrative and accounting requirements of cost accounting standards (CAS), along with exemptions from CAS and thresholds for applying CAS to contracts. The team will make recommendations aimed at eliminating unnecessary or outdated requirements, increasing clarity, reducing administrative costs, and providing a consistent and fair basis of accounting for CAS-covered contracts.

APPENDIX D: COMMUNICATION WITH THE PANEL**Website**

The Section 809 Panel seeks feedback from the diverse group of stakeholders that have interest in issues related to defense acquisition, including DoD officials, members of the DoD acquisition workforce at all levels, service members, industry officials from both large and small businesses, and U.S. citizens.

The panel offers two avenues for offering feedback on its website at <https://section809panel.org>. Stakeholders can submit general comments and questions about the Section 809 Panel by choosing the *General Comments* option under the *Contact Us* tab. Stakeholders who would like to suggest recommendations for the panel can do so by choosing the *Recommendations* option under the *Contact Us* tab.

Members of the public and media may attend open sessions at Section 809 Panel meetings. Information about upcoming meetings is available on the panel's website.

News Clips

The Section 809 Panel publishes a daily news clips publication that highlights current articles related to defense acquisition. Each business day the panel publishes the clips to its web site. Those interested in having the daily clips emailed to them should contact Katie Cook at katie.cook@dau.mil.

Social Media

For information related specifically to the panel, stakeholders can follow the Section 809 Panel on Twitter (@Section809Panel) or LinkedIn (Section 809 Panel).

Public Information

Organizations interested in hosting panel members for speaking engagements and media outlets interested in publishing or broadcasting items about the commission should contact Shayne Martin at shayne.martin@dau.mil.

Appendices SECTION
809
PANEL

APPENDIX E: PROFESSIONAL STAFF

Executive Staff

Moshe Schwartz Executive Director		
Col. Marvin Baugh, USAF Chief of Staff	John Haskell, PhD Research Director	Wendy LaRue, PhD Communications Director

Legal Staff

Robert Cover Legislative Drafter	Herb Fenster Outside Counsel	Sandy Hoe Outside Counsel
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Professional Staff

Lawrence Asch	Katie Cook	COL Harry Culclasure, USA	Shirley Franko
Darren Harvey	Jeremy Hayes	Dina Jeffers	Michelle Johnson, PhD
Maj. Sam Kidd, USAF	Jarrett Lane	CDR Michele LaPorte, USN	Michael Madsen
Shayne Martin	Jennifer McKinney	Martha Milan	Gabriel Nelson
Hannah Oh	Ryan Polk	Melissa Rider	Joshua Schneider
Jeanette Snyder	Jennifer Taylor	Nicolas Tsiopanas	

