HEARING TO CONSIDER THE NOMINATION OF:

PATRICK M. SHANAHAN,

TO BE DEPUTY SECRETARY OF DEFENSE

Tuesday, June 20, 2017

U.S. Senate
Committee on Armed Services
Washington, D.C.

The committee met, pursuant to notice, at 9:41 a.m. in Room SD-G50, Dirksen Senate Office Building, Hon. John McCain, chairman of the committee, presiding.

OPENING STATEMENT OF HON. JOHN MCCAIN, U.S. SENATOR FROM ARIZONA

Chairman McCain: Good morning.

The committee meets this morning to consider the nomination of Patrick Shanahan to be Deputy Secretary of Defense of the United States.

Mr. Shanahan, we thank you for joining us today and for your willingness to serve our Nation at an important time.

We welcome your family and friends. As is our tradition, we invite you to introduce them at the beginning of your testimony.

It is important that this committee and other appropriate committees of the Congress be able to receive testimony, briefings, and other communications of information. So it is the standard for this committee to ask certain questions in order to exercise its legislative and oversight responsibilities.

Have you adhered to applicable laws and regulations governing conflicts of interest?

Mr. Shanahan: I have.

Chairman McCain: Will you ensure that your staff complies with deadlines established for requested communications, including questions for the record in hearings?

Mr. Shanahan: I will.
Chairman McCain: Will you cooperate in providing witnesses and briefers in response to congressional requests?

Mr. Shanahan: I will.

Chairman McCain: Will those witnesses be protected from reprisals for their testimony or briefings?

Mr. Shanahan: Yes.

Chairman McCain: Do you agree, if confirmed, to appear and testify upon request before this committee?

Mr. Shanahan: Yes.

Chairman McCain: Do you agree to provide documents, including copies of electronic forms of communication, in a timely manner when requested by a duly constituted committee or to consult with the committee regarding the basis for any good faith delay or denial in providing such documents?

Mr. Shanahan: Yes.

Chairman McCain: Have you assumed any duties or undertaken any action which would appear to presume the outcome of the confirmation process?

Mr. Shanahan: No.

Chairman McCain: In the interest of time, I will submit my opening statement for the record. I know that will come as a terrible blow to the other members of the committee. I can see how upset they are in missing that, and maybe with a little luck, Senator Reed will do the same.
[Laughter.]

[The prepared statement of Chairman McCain follows:]

[COMMITTEE INSERT]
STATEMENT OF HON. JACK REED, U.S. SENATOR FROM RHODE ISLAND

Senator Reed: It is your lucky day, Mr. Chairman. I just want to welcome Mr. Shanahan and Senator Cantwell. I had a chance to speak to Mr. Shanahan and I have every confidence in his abilities. Thank you.

If I may, also Senator Shaheen wanted to be here. She is delayed in this terrible weather. She might not make it here today.

And with that, I would ask permission to submit my statement.

[The prepared statement of Senator Reed follows:]

[COMMITTEE INSERT]
Chairman McCain: Since a quorum is now present, I ask the committee to consider a list of 995 pending military nominations. All of these nominations have been before the committee the required length of time. Is there a motion to favorably report these 995 military nominations to the Senate?

Senator Reed: So moved.

Chairman McCain: Is there a second?

Senator Kaine: Second.

Chairman McCain: All in favor, say aye.

[Chorus of ayes.]

Chairman McCain: The motion carries.

Welcome, Mr. Shanahan. You are deprived of the important opening statements of Senator Reed and myself.

But before we allow you to speak, Senator Cantwell is here, and I apologize, Senator Cantwell, for not recognizing you to take time from your very busy schedule to introduce Mr. Shanahan. Senator Cantwell, welcome.
Senator Cantwell: Thank you, Mr. Chairman. Chairman McCain, Ranking Member Reed, and distinguished members of this committee, I am proud to introduce an extremely qualified candidate, Patrick Shanahan, to serve as the Deputy Secretary of the Department of Defense.

I too want to welcome his family. They are here, and I am sure he will make that appropriate introduction.

Mr. Shanahan has a unique experience leading major reforms of large, highly complex programs at the Boeing Company, such as the 737 MAX and the 787 Dreamliner. These aircraft have cutting-edge technology, keeping them ahead of the global competition.

His entire career has been about solving problems no one else can solve, and these skills would be invaluable at DOD. He drives change by building teams that think outside the box and then convince others to think in doing things new ways. Mr. Shanahan has driven reforms in talent management, affordability, technology, and supply chain, and he has had an impressive 31-year career at the Boeing Company, last serving as Senior Vice President of Supply Chain Operations. His hands-on leadership inspires those around him to strive to achieve results on time and on budget. And Mr. Shanahan, managing the Boeing Company’s
highly complex operations in Renton and Everett, Washington and Charleston, South Carolina, has served as the head of the commercial airplane program. His attention to detail, while operating some of the largest manufacturing operations in the world, will prove invaluable at DOD.

He is also fearless. He understands what our country is up against when it comes to the Russians and the Chinese and the North Koreans and it will not faze him. He focuses on big, game-changing innovation and science and technology and will not be deterred by the bureaucracy of DOD.

Mr. Shanahan also knows how the Department of Defense operates and has served as Vice President and General Manager of the Boeing Missile Defense System and was responsible for the U.S. Army aviation programs and site activities in Philadelphia and in Mesa, Arizona as Vice President and General Manager for Rotorcraft Systems. So he has been able to achieve positive results throughout his career.

He understands the need for fiscal responsibility and for innovation of the Department. DOD is the largest employer in the world with almost 3 million people and the largest military budget in the world, and he has the management skills from the private sector to guide DOD successfully into the future. I am confident that he will be an effective leader in this position for our country.
Thank you, Mr. Chairman. And I am going to excuse myself but again thank the committee for this opportunity to introduce Mr. Shanahan.

Chairman McCain: We thank you, Senator Cantwell. And we fully understand you have other duties in the Senate, and thank you for taking the time to introduce Mr. Shanahan.

Mr. Shanahan?
STATEMENT OF PATRICK M. SHANAHAN, TO BE DEPUTY
SECRETARY OF DEFENSE

Mr. Shanahan: Thank you, Senator Cantwell, for your very kind words, thoughtful introduction, and enduring support.

Before I begin, my thoughts and prayers go out this morning to the families of the seven sailors killed in the tragic accident on the USS Fitzgerald.

Chairman McCain, Ranking Member Reed, and members of this committee, I greatly appreciate the welcome and time you have afforded me this morning.

I am grateful to the President and Secretary Mattis for nominating me to the position of Deputy Secretary of Defense.

I would like to acknowledge my three children, who have accompanied me here today, Kayla, Will, and Jack, who are seated behind me.

I also want to take a moment to recognize and honor my parents, Jo-Anne and Michael Shanahan. I am the oldest of three boys. My father, Michael Shanahan, instilled in my brothers and I, from as early as I can remember, service before self.

My father was an Army veteran who served in Vietnam. He taught his boys to love their country and value its freedoms. My father served in law enforcement for over 25
years. He taught us to treat people fairly, respect law and order, and the importance of protecting the community.

My father co-founded a food bank in 1982 that is ongoing. To date, it has distributed over 200 million pounds of food to the needy. He showed us that with initiative and outreach, good ideas can scale to make a big difference.

At age 52, my father was afflicted with Parkinson’s. He battled that savage disease for 17 years before passing. And I never once heard him complain. My father modeled for us what it means to have grit, that is, the ability to maintain an indomitable spirit and persevere no matter what the challenge. I so wish he were here today. I know exactly what he would say to me. He would say, Patrick, don’t screw this up.

My mother, Jo-Anne, could not be here. She is here in spirit. My mother always supported me unconditionally. She taught my brothers and I to support others unconditionally. What I appreciate most about her that I would like to share is she taught me to truly believe in myself and that I could do anything I set my mind to. She taught my brothers and I that it is not the size of your muscles that matter. It is the size of your heart. She taught me to be a better parent, and that is a gift I can never repay. Her words for me today where, you will do fine.
I am here to earn your support. I aspire to join a strong and capable DOD team. I aspire to help them dominate and win. I aspire to help usher in a new age of innovation and effectiveness in the Department.

I believe I have prepared myself to contribute as Deputy Secretary of Defense. I bring over 3 decades of leadership honed in America’s largest manufacturing exporter. I have led large, geographically dispersed organizations focused on developing and fielding complex engineered products. I have experience converting technological innovation into operational capability.

I bring with me a formula for leadership that has a record of delivering affordable, high-performing business systems and operations under adverse conditions. Leadership casts a long shadow, and strong leadership can create teams that achieve ambitious change at scale.

I believe my skill set strongly complements that of Secretary Mattis. He is a master strategist with deep military and foreign policy experience. As Deputy Secretary of Defense and Secretary Mattis’ Chief Operating Officer, I bring strong execution skills with a background in technology development and business management, areas this committee in particular has identified for reforms.

If confirmed, I will work tirelessly with Congress and the Department to deliver on our commitments to our men and
women in uniform and their families, to defend the Nation, and to be relentless stewards of the taxpayers’ money.

I appreciate the time you have afforded me today to answer questions.

[The prepared statement of Mr. Shanahan follows:]
Chairman McCain: Thank you, Mr. Shanahan.

In your questions that were submitted to you, one of the questions was about providing the Ukrainians with lethal defense weaponry with which to defend themselves. Inexplicably, you responded by saying you would have to look at the issue. It is not satisfactory, Mr. Shanahan. Would you wish to abridge or amend your statement concerning what --

Mr. Shanahan: Chairman --

Chairman McCain: Go ahead.

Mr. Shanahan: I support equipping the Ukrainians.

Chairman McCain: You support providing lethal defensive weaponry to Ukraine.

Mr. Shanahan: Yes.

Chairman McCain: All right, good. I am glad to hear that.

But I have to tell you, Mr. Shanahan, our job is advice and consent. We are equal branches of government. Your response to that question was, frankly, very disappointing to me. You have been associated for the last I do not know how many years with one of the five corporations that provide 90 percent of the defensive weaponry to defend this Nation, and your answer was, well, I would have to look at the issue. That is not good enough, Mr. Shanahan. I am glad to hear you have changed your opinion from what was
submitted, but it is still disturbing to me.

It is still disturbing to me, after all these years, that you would say that you would have to look at the issue. Have you not been aware of the issue? Have you not been aware of the actions of the Senate Armed Services Committee? Have you not been aware of the thousands of people that have been killed by Vladimir Putin? Have you missed all that in your duties at one of the major defense corporations of this country?

Mr. Shanahan: No, Chairman. I am aware of that.

Chairman McCain: Well, I got to tell you it is very disturbing. One, I am disturbed that we now have an executive from one of the five major corporations that has corralled 90 percent of our defense budgets and on one of the major issues that this committee has had hearings about, has had markups about, has reported out our bill and you want to find out more information. Not a good beginning. Not a good beginning. Do not do that again, Mr. Shanahan, or I will not take your name up for a vote before this committee. Am I perfectly clear?

Mr. Shanahan: Very clear.

Chairman McCain: Senator Reed?

Senator Reed: Thank you very much, Mr. Chairman.

Mr. Shanahan, one of the issues that you are going to face is generically termed the Third Offset. Bob Work, who
you are succeeding, has done a remarkable job I think, and
he has been the leader for this effort. It is essentially
trying to counter technologically and otherwise our
adversaries, their area denial capabilities, their cyber
capabilities, their asymmetric capabilities, and leap ahead
with new technologies. And in trying to deal with that, the
Congress reestablished the position of Under Secretary of
Defense for Research and Engineering.

But as Deputy Secretary, you are going to play a
critical role in supporting the new or revised Under
Secretary, but also reaching out to the whole community,
intelligence community, the industrial community,
technological community. Can you give us some sense of how
you are going to continue Mr. Work’s efforts with respect to
the Third Offset?

Mr. Shanahan: Yes, Senator Reed. If confirmed, I will
spend time with the group that has done the Third Offset
work. I have not received the classified briefings on the
work that they have done.

The effort I would undertake is to make sure we have a
clear path to being able to operationalize the capability.
When I look at the strategy exercise that we will be
conducting to put together the fiscal year 2019 budget, it
will be critical that we have an assessment of how much
funding needs to be applied against the Third Offset. I
believe the restructuring of R&E will give us the
concentrated skill set so that we can have a more informed
recommendation.

Senator Reed: Well, thank you very much.

And I presume also because of your significant
experience in private industry, you already have some ideas
of companies that are not currently involved but could be
major contributors to this effort, some of these path
breaking not only software but technology companies. Is
that accurate?

Mr. Shanahan: That is correct. I think to Chairman
McCain’s point, we need to broaden our industrial base, and
it is important that we develop other capabilities and other
companies as well.

Senator Reed: Thank you.

One of the other changes that we made in last year’s
NDAA was creating an Under Secretary for Acquisition and
also Chief Management Officer. In many respects, you are
really the Chief Management Officer as the Deputy Secretary
of Defense. But how will you work with the Chief Management
Officer? Have you any ideas with respect to that issue?

Mr. Shanahan: I do. The Chief Management Officer, as
I see it, has responsibility for helping to streamline
business operations. So as the Deputy, it is all of
operations for the Department. That is how I see my
responsibility. A subset of that is the business
operations. But I will work hand in glove with the Chief
Management Officer. And the real intent -- and I have
experience in this area -- is how do we quickly capture
efficiency and the opportunities by standardizing and
sharing many of these services, if you will, across the
Department.

Senator Reed: Very good.

One of the areas that is complicated, troubling, and
daily we seem to be falling behind is the whole concept of
information operations. It is ironic that the country that
created Madison Avenue is now sort of trying to catch up in
terms of influencing individuals through media. The
Department of Defense has a role in this.

The first question is conceptionally I would think the
Secretary of Defense is going to be very much involved in
this. But do you see a role that you will play in terms of
trying to coordinate all the different aspects just within
DOD and then again reaching out to other agencies?

Mr. Shanahan: Sir, I do. I think the Deputy and the
Chief Operating Officer role really needs to ensure that we
have the right structures so that we are effective in
interfacing with these other organizations and that we have
the proper architectures so that the systems are cost
effective, the proper architectures so that we can upgrade

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them easily and evolve as technology changes.

Senator Reed: Very good.

Again, thank you, Mr. Shanahan. I think you are bringing significant experience to this very challenging job. Thank you very much.

Thank you, Mr. Chairman.

Chairman McCain: Senator Fischer?

Senator Fischer: Thank you, Mr. Chairman.

Mr. Shanahan, I appreciated your comments in our meeting about the nuclear deterrent, and being a weapons system that we use every single day, this fact is overlooked but every day we have missileers who are in launch control centers, and we have submarines that are on alert defending our Nation.

Secretary Carter characterized our nuclear deterrent as the bedrock of our national security. Do you agree with that statement?

Mr. Shanahan: I do.

Senator Fischer: I know the forthcoming NPR will lay out the particulars, but in general, do you support the modernization of our nuclear weapons, the associated delivery vehicles, command and control architecture, and the supporting infrastructure?

Mr. Shanahan: I do.

Senator Fischer: General Selva, the Vice Chair of the
Joint Chiefs of Staff, has testified that the Joint Staff puts our nuclear deterrent as the number one priority for modernization and recapitalization. And that is based on the fact in his words that we have squeezed about all the life we can out of the systems we currently possess. Do you agree with his assessment and the level of urgency and priority that this requires?

Mr. Shanahan: Senator, if confirmed, I will -- I have not had a review of the priorities of the Department. I understand the importance of the nuclear deterrent, and I will take advice from General Selva and make sure that he gets the proper support.

Senator Fischer: Thank you.

When you were in my office, we talked a little bit about technology and innovation, but one thing we did not touch on is the question of risk tolerance. Innovation is inherently risky and not all good ideas pan out. But the current environment seems to be very intolerant of risk. Do you believe the Department and the services need to be more tolerant of risk, and how do you think the Department can better navigate that tension between effectively using scarce resources and tolerating the amount of risk that is required if we are going to have any innovation take place?

Mr. Shanahan: My view on risk is that you have to manage risk. So out of the pointy end of the spear, we do
not want really any risk.

I think when it comes to innovation -- and this is the mindset I have developed working in the commercial world -- innovation is messy, and if you try something and it fails, I think that is -- your point around risk -- we should not be afraid. And organizations that pride themselves on execution tend to be afraid of failure. So I am a proponent of failing, failing fast, learning quickly. I think the faster you do that, the more we end up training people. It is not about the technology. It is about our people learning how to develop the technology because they know how the users can apply it.

Senator Fischer: In your response to the committee advance policy questions regarding Russia’s violation of the INF Treaty, you state, I understand that the administration is reviewing a number of potential responses as part of its ongoing review of this issue, and I will be keenly interested in making sure these are translated into action.

So to be clear for the record, do you believe a response is necessary beyond simply expressing concern through diplomatic channels, which has already been done?

Mr. Shanahan: I do.

Senator Fischer: Do you have any personal thoughts right now on what options would be available to be some of those responses?
Mr. Shanahan: I do not.

Senator Fischer: You also noted that Russia’s action in violation of the INF Treaty, if it is unchecked, could lead to doubt in the stability of current and future arms control agreements and initiatives. Could you elaborate on that statement? Sometimes there is a view that is expressed that holding violators accountable for their behavior risk, deals collapse and that we should, therefore, suppress any suggestion that a violation has happened. I do not believe you agree with that view. Do you?

Mr. Shanahan: Senator, I think the Russians are adversarial. I think through the whole of government we need to deal with their -- whether we call it aggression or their disruption to our interests. I at this point do not have any specific recommendations. If confirmed, I will spend a significant amount of time dealing with Russia.

Senator Fischer: But would you be supportive of developing options to present to the President besides diplomatic or just making statements and then letting it go by?

Mr. Shanahan: I would be supportive.

Senator Fischer: Thank you.

Thank you, Mr. Chairman.

Chairman McCain: Mr. Shanahan, you are not making me happy. We expect straightforward answers, and you just
ducked basically every question that Senator Fischer asked you. I am telling you, Mr. Shanahan, I believe in the Constitution of the United States which says that the Congress of the United States shall provide advice and consent. I am not going to sit here and watch you duck every question and expect that everything is going to go smoothly. It is not.

Senator Hirono?

Senator Hirono: Thank you, Mr. Chairman.

And welcome, Mr. Shanahan.

Mr. Shanahan, you have limited institutional experience in the military, DOD, or the Pentagon. In my experience, I have seen the Deputy Secretary heavily involved with running the bureaucracy while the Secretary works closely with the President, NSC, Congress, allies, although I just heard you say that you would work closely regarding Russia.

So if confirmed and if you are tasked with running the inner workings of the Pentagon and its many internal and interagency structures, how will you overcome your lack of institutional experience to effectively operate in this environment?

Mr. Shanahan: Senator, I have worked in environments where we have very disparate organizations. They may not be DOD, but in the commercial world with many different suppliers and agency-like organizations. I believe that my
technical and management background will prepare me to be
able to quickly assimilate the knowledge and the expertise
to properly interface.

Senator Hirono: What would be one of the first things
that you would do to get yourself to a position where you
can hit the ground running, should you be confirmed?

Mr. Shanahan: I think the first place that I was going
to hit the ground running was on the restructuring of R&E,
the A&S organization, and then working the Chief Management
Officer initiative. I think that will be a good way to
begin to understand the inner workings of DOD. And then in
the second phase of that, participating on the nuclear
posture review and the national ballistic missile defense
review will also begin to allow me to interface with some of
these other organizations and structures.

Senator Hirono: While you have a lot of experience in
the private sector, the DOD is an entirely different, I
think, entity in order of probably complexity and all the
people that you will be working with. So I assume that
should you be confirmed, you will have a list of to-do’s and
people that you are going to meet with so that you can
become quickly apprised of what your responsibilities will
be in running, basically in running sort of the nuts and
bolts of the DOD.

Mr. Shanahan: Yes, Senator.
Senator Hirono: Thank you.

Cost overruns and schedule delays on major system acquisition programs have plagued DOD for many decades. And this committee, under Senator McCain and previous chairmen, have tried to improve the defense acquisition system for better contracting outcomes for our military, as well as for our taxpayers. You have significant experience with one of our largest defense contractors. Based on your experience and perspectives from the industry side, what would you recommend in order to get better results from our contracting and acquisition processes?

Mr. Shanahan: You know, there are a number of tools from a contracting standpoint that are important. Firm fixed-price contracts is a very effective tool to drive supplier or contractor performance. Having the right incentive clauses is very important. But I also believe, if confirmed, when we work the audit, we will come up with a new cost accounting scheme so we can better understand what things should cost and understand to the degree how much we are overpaying. To me, really understanding the cost baseline that we have with the contractors is so important. And from that, we need to renegotiate.

Senator Hirono: I think with the kind of very specific experience you have in dealing with the acquisitions yourself, that you will be able to bring some very key
elements of why these overruns occur on a regular basis, much to our consternation. So I am going to be looking to you for those kinds of efforts.

Turning to the Indo-Asia-Pacific strategy -- I only have a little bit of time -- the Asia-Pacific area has some of the largest economies, many militaries representing 60 of GDP, et cetera. What are your thoughts on how we should move forward in the Asia-Pacific theater?

Mr. Shanahan: Well, I think the Chinese have been modernizing quite significantly in recent years, and that threatens our ability for freedom of movement. And it is really important that we find ways to maintain the security architecture of the Pacific Rim. It is very important that we support our allies and partners there and reassure them of our commitments.

Senator Hirono: Well, I would like to see a continuing focus on the Indo-Asia-Pacific area because as the rest of the world becomes even more unstable, at least if we can keep the Indo-Asia-Pacific area stable, even more stable, even with North Korea and China as major players there, through things like acquisition reform and other things that you could bring to the table, I hope that will release more resources for the Indo-Asia-Pacific arena.

Thank you, Mr. Chairman.

Chairman McCain: Senator Cotton?
Senator Cotton: Thank you.

And, Mr. Shanahan, congratulations on your nomination.

As we have discussed this morning, the Deputy Secretary plays a major role in managing the Department, while the Secretary is a member of the National Security Council and the public face of the armed forces to the American people and abroad. You have a long and distinguished career at Boeing. In particular, your reputation for turning around the Dreamliner program is probably something that a lot of military programs could use.

However, that long career at Boeing also raises some questions I think we should just address in a forthright manner upfront here at your hearing.

How do you plan to carry out your duties as the Deputy Secretary while avoiding any potential conflicts of interest based on your time at Boeing?

Mr. Shanahan: So I will divest all ties with Boeing with the exception of my executive retirement which is permitted under the ethics agreement. For the duration, if I am confirmed, I will not deal with any matters regarding Boeing unless cleared by the Office of Ethics. We will put in mechanisms so that my calendar, the meetings that I will participate in that we can screen to make sure that there are no matters related to Boeing that I will be exposed to.

Senator Cotton: Thank you for that.
Chairman McCain: Will that name specific programs?

Mr. Shanahan: Will the ethics agreement call out specific programs? It is all matters Boeing. So it would include all programs.

Senator Cotton: I think Chairman McCain was driving at the next question that I want to raise related to those precautions, which I think are prudent. Boeing, obviously, is one of our major defense contractors. They have many programs, some of which have some troubles of their own, the F-18, the KC-46 tanker, the V-22 Osprey, the F-15 Apaches and Chinooks in the Army. Do you think that recusing yourself from these Boeing-related issues could negatively impact the Department’s decision-making process?

Mr. Shanahan: I do not believe so. In my view, I believe I can provide general guidance in terms of program execution and techniques to drive better performance without getting into the specifics of a particular program.

Senator Cotton: Thank you for that.

And in terms of your financial divestiture, you are or will soon be fully divested from all Boeing stock except for your retirement program. Is that correct?

Mr. Shanahan: If confirmed, I will divest.

Senator Cotton: Given your time at Boeing and your successes there, I presume it is safe to say that they have made you a very wealthy man over 30 years compared to most
Arkansans.

Mr. Shanahan: They have treated me well.

Senator Cotton: And at this point in your career, your focus and your loyalty is solely on the Department of Defense and the soldiers, sailors, airmen, and marines who are out on our front lines?

Mr. Shanahan: Yes, Senator. I am 1,000 percent committed to the Department and to delivering on the reforms that Senator McCain, Chairman McCain has outlined.

Senator Cotton: Well, that is what I expected, but as I said, I thought it was important to put upfront the steps you are taking to recuse yourself from Boeing decisions and to ensure that you are making the decision in the best interest of the men and women of the armed forces, to include men and women who are going to depend on some Boeing systems, and there will be systems in place to account for that.

I do want to turn to one other issue that has been raised here as well, and that is trying to work with more smaller firms that would like to be defense contractors. As Senator McCain says, something like 90 percent of all acquisition business goes to five firms. Some of this relates to the Department of Defense’s own bureaucratic issues, but some relates to the culture that you see in the tech world. I have heard from many tech leaders and
entrepreneurs that they simply do not want to do business
with the Department of Defense, even though they have very
fine products and services, in part because they do not want
to deal with, say, 7-year timeline development programs or
they simply do not want to deal with all the red tape.

Have you given thought about how to conduct outreach to
that world and make the acquisitions process more user
friendly for smaller, more nimble firms and a firm like
Boeing?

Mr. Shanahan: I have, and if confirmed, I think that
is one of the more exciting aspects of the job is, you know,
we are seeing a transformation of technology and this is the
industrial base we need to grow. My experience at Boeing is
on developing supply chains. So we really need to have a
conscious focus on how to grow these new capabilities. I
think we are onerous in terms of the requirements we put on
these small organizations, whether it is demanding their
intellectual property or to go through these complicated
contractual mechanisms. So if confirmed, that is an area of
importance to me.

Senator Cotton: Thank you.

Chairman McCain: Senator King?

Senator King: Thank you, Mr. Chairman.

I want to follow up on the question that Senator Cotton
just asked. Procurement is one of the recurring issues that
comes before this committee. In fact, we had testimony from
Silicon Valley firms that they just were not going to bother
to even apply. And yet, as one of our generals testified
last week, we do not want our soldiers in a fair fight. And
that means maintaining a qualitative technical edge. And
yet, the system that we have in place seems determined to
not keep up with that.

Go a little deeper. How are we going to think through
this procurement system that is so Byzantine -- I hesitate
to even use that term. That is an insult to the Byzantium
Empire -- that is so arcane and cumbersome that it is
actually discouraging the importation into our defense
system of advanced technology?

Mr. Shanahan: Senator, this is an area where I have
had some fairly good success, and rather than trying to
change the whole system, you have to change parts of the
system. And I will give you an example.

We found technology that will fundamentally change how
we do work, and what we would do is develop prototypes and
we would operationalize those prototypes. And the process
-- this is going a little bit a deeper. The intent was to
flush out all the bureaucratic mechanisms that would say no.
And so the idea is not can this technology work. It is that
you run these prototypes. We called them “pathfinders,” and
the pathfinder was to find all the restrictions, all the
people that say no and take them out of the away. Once we had something that we could demonstrate works, then we replicate. And that is how we could get to scale. But it is in doing those prototypes that you can get a quick win and then you also find out where the real limitations in the system are.

Senator King: But one of the fundamental differences between Boeing and the United States Government is Boeing was in an exceedingly competitive situation where you had Airbus and other providers around the world trying to start to get into the airline business. So you had the whip of competition over your head. When we are talking about within the Defense Department, you do not have that, and that is why it has to be a major management focus and constant attention to sort of substitute for the pressure that competition creates.

Mr. Shanahan: Right. And I personally think the limits on the budget are the competition. It is the analog to the competition we had with Airbus. We have a competition for money in the Department. There is not enough to go around. We must find ways to generate savings so we can pay to go do these things.

Senator King: By the way, on procurement, not only is there an issue of cost, there is an issue of time. Senator Inhofe has presented graphs about the difference between the
private sector -- the time it takes Boeing to get a new aircraft from concept to flight is something like 7 years. In the military, it is 23 years. So time is an issue as well as money. And that has to be part of your focus.

Mr. Shanahan: Speed is everything. The shorter the time, the less the cost. In the commercial world, everything is fixed price development. So speed is the most important management element because it flushes out all the issues that prevent you from being able to perform.

Senator King: Well, I would suggest that in your position, it is not enough to simply say we are going to work harder at it. I hope that you will think about and perhaps convene a public-private group to think about how do we structure because I believe structure is ultimately policy, how do we structure the procurement system to produce at lower costs and at higher speed. And I urge that upon you as a possible initiative. I think just saying, well, we are going to try to do better is not going to be enough to change a system that is so thoroughly entrenched.

Secondly, in terms of costs, which is your area as the Chief Management Officer, is the growth of staff both within the Pentagon and within the services. And we have had lots of talk here, and there have been some cuts in staff. But I believe that is also an area that has to be looked at because every dollar that goes into tail does not go into
tooth. And when we are talking about scarce dollars for readiness and recapitalization of the nuclear deterrent, whatever it is, we need to find places. And there have been studies that indicate significant savings in the bureaucracy or the staff both in the Pentagon and in the services. I hope that is an area you will pay attention to.

Mr. Shanahan: It will be.

Senator King: And finally, we need to be able to audit the Department of Defense. I cannot keep going home to Maine and saying we are spending half a trillion dollars a year but it cannot be audited. Do you take that as one of your priorities? Because as I recall our hearings here over the last 4 years, 2017 or 2018 is supposed to be the target for the Department of Defense to be ready for an audit.

Mr. Shanahan: You have my commitment to start the audit in September, and it is one of the highest efforts in terms of priorities for me.

Chairman McCain: Could you repeat that?

Mr. Shanahan: The audit -- and I believe it is September or it could be October is when we will begin the audit for the Department of Defense.

Senator King: Thank you.

Thank you, Mr. Chairman.

Chairman McCain: Senator Ernst?

Senator Ernst: Thank you.
I appreciate that very much as well.

Last week, we had a hearing with the CNO, Secretary Stackley, and General Neller, and we talked a little bit -- I just want to tag on to what Senator King was saying -- about how we procure items and going through that process. And I asked if they needed additional authorities, and they stated that they believed they had all the authorities they needed to speed up the procurement process, but there were a lot of regulations that got in the way. So tagging onto his comments, will you make a commitment to go through those regulations, identify those that are unnecessary so that we can procure faster?

Mr. Shanahan: Senator, I am committed to unwinding the system that keeps our men and women from being able to perform.

The one thing I do know is that it is not our people that are the problem. It is the system that we have created over time, and dismantling that is the critical thing I need to do in this position.

Senator Ernst: Thank you. I appreciate that very much.

According to title 10, the Deputy Secretary of Defense is the Department’s Chief Management Officer. Earlier you kind of called that the all of operations officer, which is a great description. It is clear that you are an
experienced manager. You have had great success with Boeing.

   The law also requires you to serve in other roles in the Secretary’s absence. So I would like to start with more of a policy question, policy discussion.

   I have been calling attention to the increasing threat posed by violent extremist organizations in Southeast Asia for quite a while now. And as we speak, U.S. forces are assisting and liberating the Filipino City of Marawi from a terrorist siege. And Secretary Mattis had said that ending the named counterterrorism operation in the southern Philippines in 2014 was premature -- I agree with him -- and that doing so has made it difficult to resource our current efforts in that area. I personally think it is time to reestablish a named operation.

   What are your opinions on that?

   Mr. Shanahan: Well, the violent extremists -- I think this falls in line with our policy with ISIS where we can find them, by, with, and through others, we need to defeat them. If confirmed -- and this is an area where I will invest the time to understand our commitments in terms of resources and our ability to undertake those types of efforts.

   Senator Ernst: I appreciate that because we have for a long while taken our eye off of that region, and they
continue to grow and develop in Southeast Asia. So I appreciate that.

As I am sure you know, our aircrews continue to experience physiological episodes in high-performance aircraft, the F-22, the T-45, F-18, and now the F-35. Yet, we still have not found a fix for that.

This morning, the Air Force announced it was testing sensors for the F-35 Alpha that actually monitor pilots’ inhale/exhale gases and automatically activates emergency oxygen if there is a problem. And this is something that I have recommended to both the Air Force and Navy leaders in past hearings. So I am glad that they have actually taken action on this item.

And at Boeing, you were known as Mr. Fix-It. And I appreciate that title. If confirmed, how are you going to fix this particular problem? And more importantly, how will you guarantee that solutions are shared across aircraft and service branches so that we do not repeatedly see the same types of costly problems that have been undermining our warfighting readiness?

Mr. Shanahan: You know, the culture at Boeing is that safety and product integrity is the most important thing that we do. So issues such as the oxygen flow is -- if confirmed, those are the type of safety items that will receive my highest attention. That is how we have grown up.
We solve these problems, and then, to your point, they need to be implemented quickly. It is not good enough to have the answer. They have to be fully implemented. You have my assurance that I will support doing that.

Senator Ernst: And how will you communicate that between the branches and the services?

Mr. Shanahan: Well, I suspect -- and this goes kind of back to Senator Hirono -- there are many things I have to learn in terms of actually navigating the Department of Defense. It will either be through the technical leadership or through the service secretaries. I am quite confident that when we do have a solution, that we will be able to communicate it. It is going to be how quickly do we actually get the solution incorporated into the airplane. So that will be really about acquisition and getting these things on contract. That is the most important thing we have to do.

Senator Ernst: Okay. I appreciate it. Thank you for your time.

Thank you, Mr. Chair.

Chairman McCain: Senator Peters?

Senator Peters: Thank you, Mr. Chairman.

Mr. Shanahan, thank you for being here today. My questions really relate to the future of warfare and how we will be preparing for a rapidly changing battle
space. Senator Reed asked you a question about the Third Offset Strategy, which, as you know, Secretary of Defense Ash Carter introduced in order to move the innovation process forward to take advantage of incredible advances being made in the commercial sector. And, in fact, I think that is something that has changed pretty dramatically in recent years is that most of the innovation that also has military applications is occurring in the commercial side from artificial intelligence to 3D printing to synthetic biology, I mean, go down the list of incredible advancements.

So my question for you, first off, is just a broad question. I mean, what is your opinion of the Third Offset Strategy?

Mr. Shanahan: The majority of the details are classified, so I have not received the classified brief. But from what Secretary Work was able to share with me, the domains of technology are very important. So I plan to continue to support those efforts. To me, it is about how do we validate that those capabilities are the right ones in terms of conducting warfare. This is the messy part about innovation. I mean, we are going to have to make some bets and then we are going to have to do some prototyping so we can test these concepts with the user, with the warfighters.

Senator Peters: Well, we do. And that leads to a
question as to whether or not the current model that we use where we have a few very large defense contractors that do the vast majority of the work, as Senator McCain has mentioned earlier in this hearing, versus an ecosystem of small companies that are doing incredible cutting edge research and perhaps in technologies not directly related to the military but have dual-use applications.

How do you work within that environment? Do we have to rethink some of the paradigms we have operated in the past as to where we procure and how we procure advanced technology?

Mr. Shanahan: I think the procurement -- Senator, I think the procurement -- this is how I tend to think about these things. The procurement is the second step. I think the first step is our technical approach. The technical approach is given these emerging capabilities, whether it is electrification, added manufacturing, like you mentioned, machine learning -- given these emerging capabilities, how will we scale, how we will use them? Based on that, we decide who are the suppliers we want to grow? Who are the new people that we want to scale up in our industry? So I think the Third Offset work will give us the foundation for those technologies, and that is where we decide how to grow the tech base.

Based on who we pick, I think it is very
straightforward to go and change the procurement portion, you know, how we give them money, how we fund them to do tests. You know, one of the best things about working with the Department of Defense is the resources, you know, when we think of the test ranges and the users. I mean, I think we have to draw them into how we do our business and having them outside the fence is a real limitation. They need to learn how we do business, and then they will inform us on what we need to change.

Senator Peters: Well, how do you see using some of those internal Defense assets that you mentioned? For example, TARDEC in Michigan, my State, does incredible research work in autonomous vehicles working also in partnership with some of the incredible work being done in the auto industry as well. But how do you see that model working where you have organizations like TARDEC, which is a Department of Army facility, working with private industry? How is that model working? Where do you see that going in the future under your leadership?

Mr. Shanahan: A big portion of being able to pull on that technology is educating the users inside the Department, not the procurement team but the warfighters who need to think differently about how to utilize this technology. There is a lot of education that needs to take place so they can understand the potential of this new
technology. It is remarkable what we will be able to do with autonomy. The people that shape the strategy, the people that help decide what capability or how we fight need to invest in educating them on what these capabilities are and what they can do.

Senator Peters: Thank you for your responses.

Appreciate it.

Chairman McCain: Senator Perdue?

Senator Perdue: Thank you, Chair.

Mr. Shanahan, Vice President Pence once said you cannot fake great kids, and I think he is right. Thank you for bringing your children here. It looks like you were very successful.

I want to get to recapping the military because I think that is going to be the number one crisis you are going to have to deal with in this job.

I want to get at Boeing first, though, and your background there. Boeing revenue is about $100 billion.

Right?

Mr. Shanahan: Correct.

Senator Perdue: And just put it in perspective for the committee. We are dealing with a $600 billion-plus budget here in DOD across a lot of different services and platforms. At Boeing, did you ever have a year where you missed supplying a reviewed audit?
Mr. Shanahan: No.

Senator Perdue: Have you ever known a Fortune 500 company that ever missed an audit?

Mr. Shanahan: No.

Senator Perdue: So I want to make sure I understood your answer just a minute ago. You have been through that process. Audits require people at your level to deal with them. I know. I have been there. The question I have for you is this. I want to make sure I heard your answer earlier. You committed to the committee that you will start this audit in October. Is that correct?

Mr. Shanahan: Yes.

Senator Perdue: So my question is this -- we have been given testimony. We have been asking this for several years, obviously, since 1990 when the law was put in. So this is not a current question only.

My question is this. We have been given information from services that they are not ready, that the systems do not talk to each other, that the systems are not ready to be committed to support an overall audit. Is an audit possible to be started in October? And if so, how long would it take to complete that audit?

Mr. Shanahan: Senator, so I do not know exactly how long it will take to complete the audit.

Senator Perdue: That is fair.
Mr. Shanahan: But the commitment is to start, and we will start in October. You have my commitment to, if confirmed, get to the point where we can close the audit. To me, it is hygiene. If we are going to get after cost, if we are going to create a culture of affordability, we have to at least be able to do an audit. An audit does not get you to the place where you can actually do cost accounting, which then allows you to actually make affordability decisions. So my commitment to you is that we will get to a place where an audit is not something we are talking about.

Senator Perdue: Thank you. Where it becomes like breathing. Right?

Mr. Shanahan: Right.

Senator Perdue: I want to get at the recap because this is our biggest problem. We have got a budget problem, obviously. We are spending about 3 percent of our GDP on our military, and it is 100 basis points less than our 30-year average. It is about $200 billion today. The last time we had an estimate was from Secretary Gates that it was over $150 billion more than what we actually spent last year. So we have got a real issue in terms of trying to meet the recap requirements of all of our major platforms. The Navy alone says that they will need $26 billion a year for the next 30 years. That is $800 billion for rebuilding the surface fleet -- or rebuilding the fleet from 275 to
The question is now just how do we make it quicker, shorter, better. It is how in the world are we going to find the money to do that. In your role as COO -- and that is what this job is -- what will you do to help us figure that out?

Mr. Shanahan: Two things. You know, the first is to be able to come back to the committee with a strategy that says here is our force construct, here are our capabilities, these are the assets that we need because I think that will be the baseline to determine what do we modernize, what do we recapitalize.

The second piece of this -- and then the strategy is so important because if we do not lock in a strategy and we just work to a budget, then we will never really be able to sustain constant investment.

Senator Perdue: Were you part of the strategic planning team at Boeing?

Mr. Shanahan: I was. I am steeped in --

Senator Perdue: I am sorry to interrupt. I believe that because you would not have gotten into your position as SVP of Operations.

Let me ask you about your position. You have supply chain and operations the way it reads officially. Is that basically the COO? You report to the CEO. Is that correct?
Mr. Shanahan: Correct.

Senator Perdue: Who else reports to the CEO?

Mr. Shanahan: The CEO? I mean, you have the traditional --

Senator Perdue: You have CFO, COO, which is you.

Mr. Shanahan: Right. So my role was all of operations and supply chain --

Senator Perdue: Help me just understand the perspective then. Who else reports to the CEO?

Mr. Shanahan: The CEO for commercial, the CEO for defense, the CEO for services, chief counsel, head of HR --

Senator Perdue: Do you run operations across all those divisions?

Mr. Shanahan: I have responsibility for operations across all those divisions.

Senator Perdue: Thank you.

The question I had was, as you look at this responsibility, it looks like you are going from a COO of a $100 billion business to a COO of a $600 billion business. That is done all the time, but I wanted to put it in perspective.

I appreciate your willingness to step up and be available for this service. Thank you.

Mr. Shanahan: Thank you.

Chairman McCain: Senator Blumenthal?
Senator Blumenthal: Thank you, Mr. Chairman.

Good morning and thank you for your willingness to serve and your family’s support for your willingness to serve. And I am glad to see they made it down yesterday by train I understand.

I know that you have discussed briefly your commitment to recusing yourself from Boeing-related contracts and programs and the commitment also to notifying or to seeking a waiver in the event of any questions in that regard. Will you commit to make public the recusal waiver if one is necessary?

Mr. Shanahan: Yes.

Senator Blumenthal: Thank you.

Going to the issue of fair pay, as you may know, during last year’s NDAA process, I led the fight -- it was successful -- to remove harmful provisions from the final bill that sought inappropriately to limit the fair pay and safe workplaces executive order from applying to the Department of Defense. Boeing lobbied in support of efforts to curb this executive order. It lobbied against having contractors disclose labor law violations to the government. I vehemently opposed the rollback of the fair pay executive order earlier this year, and I continue to feel strongly that we must do everything possible to continue defending American workers in this way.
Approximately one in five Americans are employed by companies that do business with the Federal Government. Every year, tens of thousands of American workers are denied overtime wages or unlawfully discriminated against in hiring or pay, have their health and safety put at risk by federal contractors who may cut corners, or are denied basic workplace protections. This is not to say Boeing engaged in any of these practices. It was not directed at Boeing.

But my question to you is, do you believe that we should ensure that taxpayer dollars go to defense companies who play by the rules and uphold existing laws?

Mr. Shanahan: I believe they should. I mean, we need to take care of our employees. We need to take care of the workforce. I think that is the fundamental responsibility of all companies.

Senator Blumenthal: Would you favor reinstatement of an executive order that protected minorities, people with disabilities, veterans from discrimination in the awarding of defense contracts?

Mr. Shanahan: Senator, I do not know the particulars of the changes that you are referring to, but I support providing the protections that people need. So if confirmed, I mean, that will be something that I would investigate and spend time to understand.

Senator Blumenthal: Would you commit to conduct a
review of the Defense Department policies so as to take
action that prevents that kind of discrimination or denial
of overtime pay and so forth on the part of defense
contractors?

Mr. Shanahan: I would take that action to review that.

Senator Blumenthal: Thank you.

On the defense industrial base, you are probably more
aware than any of us on the committee about the need for
skill training and education to preserve and enhance and
expand our defense industrial base. And you and I talked
about it briefly when we met. Perhaps you can enlighten us
as to what you would do as the Deputy Defense Secretary to
make sure that we provide that kind of skill training in
places like Electric Boat or Pratt & Whitney where we make
some of the critical defense products.

Mr. Shanahan: Sure. Thank you, Senator.

Education is something I have a passion around. In
Washington, we were able to work with the superintendent of
public education for the State to get a math equivalency
credit for high school students so that they could get
training to allow them to go into either maritime,
aerospace, or electrical work. We worked with the community
colleges to set up standard programs to allow them to get
certificates so that employers could literally meet them
upon graduation and give them jobs, and they would step into
those new jobs without having to go through formal training.
So it was a cost reduction to the companies. It was a
benefit to the community colleges because people were taking
courses that really led to high paying jobs.

I would use the position to start to -- this is
something that I really believe at a national level we can
effect. There are all of these jobs, due to demographics,
where people are going to retire out, and they are high
paying. So whether it is Electric Boat or the Boeing
Company, the demographics are I think something like 80
percent of the people can retire in the next 5 years. It is
a huge opportunity.

Senator Blumenthal: I hope you will come to
Connecticut and talk about this issue. Thank you.

Chairman McCain: Thank you.

Senator Blumenthal: Thanks, Mr. Chairman.

Chairman McCain: Senator Rounds?

Senator Rounds: Thank you, Mr. Chairman.

Good morning, Mr. Shanahan.

Mr. Shanahan: Good morning.

Senator Rounds: I am happy to see in your testimony
that you focus on defense reform and innovation
opportunities. I do not think anyone in this room would
argue the fact that the Department of Defense has
historically a poor track record in acquisitions. Since the
attacks on 9/11 through 2011, the DOD has spent $46 billion on a dozen weapons systems that never even entered production. In fact, a 2014 poll of almost 400 DOD acquisitions employees revealed less than 30 percent were confident in the process to deliver weapons to warfighters. In a culture where “critical” means months, “urgent” means years, and requirements span decades, this is no surprise to those of us up here.

All the while, our adversaries are operating in smaller, more agile innovation and acquisition cycles, both of which are eroding the technological advantage that we have enjoyed for generations.

There is one aircraft system right now that seems to be kind of bucking that trend from what we are learning. I have been impressed with the progress and the speed of the current B-21 program. I understand that a large part of the program’s efficiency is that it is not in the normal defense acquisitions pipeline. And you may or may not have any -- you may have not done any research yet. Is there any opportunity to replicate some of the B-21 program practices in order to make the most efficient use of every taxpayer dollar that we have got? I am not sure how involved you have been or how much research you have done in terms of B-21 program as it sits right now, but if you would care to comment, great. If you do not have a background in it yet,
we will move on.

Mr. Shanahan: I do not have a background in the B-21.

Senator Rounds: Well, they have done some things in
the B-21 that I think have kept them on time and on target,
and I have been very pleased with the progress that we have
seen. But it is an innovative approach which is a little
bit different for the Department of Defense.

Let me continue on with another specific issue, and you
may or may not have a background in it but at least I will
share it with you and it might pique your interest as you
move forward. Okay?

I understand that you rose through the ranks at Boeing
as an engineer, a leading fabrication -- or that you have
led fabrication divisions and that you have run aircraft
assembly lines. So I think you will appreciate my final
thought.

I think there is a third piece overlooking the
conversation of how to buy and what to buy, and that piece
is how to build. Maturing of innovative manufacturing
techniques and capabilities are often overlooked. In fact,
there is a company in California that has recently 3D
printed a small house, and they did it in 24 hours.

Another incredible engineering breakthrough is called
cold spray. I am not sure if you are familiar with cold
spray or not. They have actually done some work in terms of
the B-1B’s at Ellsworth Air Force Base using cold spray to
make some very quick repairs or very efficiently saved a lot
of time and a lot of money as well. It shoots metal
particles through a heated gas stream at supersonic speed to
create a cross between additive manufacturing and welding.
It can be used to repair broken parts or reinforce them so
they do not wear down. And I have seen estimates that this
could save the Department of Defense over $100 million a
year in parts replacement alone.

Now, a large supporter of cold spray is the Army
Research Lab where they are exploring ways to use it in
ballistics and to manufacture or repair things faster,
safer, and cheaper. As I was saying, it is kind of an ad
here, but it was developed in South Dakota. I am looking
forward to see you and your team look very seriously at the
unique combination of opportunities this particular new
product might very well offer to the Department of Defense.

I presume you have a background where you have looked
at innovative new products and techniques. And part of the
job is to move them on to the production lines in an
efficient fashion. Can you share with us the background
that you have got in that or success stories that you have
got in that?

Mr. Shanahan: I was tracking very well with you around
3D or additive manufacturing, which is really the future.
So when we think about satellites of the future, we are going to print them. When we think about unmanned vehicles of the future, just like your house example, we will print them. We will have modular payloads so that we can just stick them in. And the affordability of these new systems will allow us to lose them. I mean, it just changes everything about cost. I am enormously encouraged about all the new technology out there.

The issue that we are going to run into -- and this is some work that I was doing while I was at Boeing, and it manifests itself at like DLA. It is not that we cannot print the part that is structurally capable. Our processes will not allow us to use it.

Senator Rounds: Right.

Mr. Shanahan: And that is the work we have to do.

Senator Rounds: That is going to be your job.

Mr. Shanahan: Right, exactly, because the technology is there and the cost savings are there. We have prevented it.

Senator Rounds: Thank you.

Thank you, Mr. Chairman.

Chairman McCain: Senator Warren?

Senator Warren: Thank you, Mr. Chairman.

And thank you, Mr. Shanahan, for being here and for taking the time to meet with me last week in my office.
I want to pick up on a point made by Senator Reed on the Third Offset Strategy to invest in the advanced technologies that maintain superior capabilities against future threats. Many of these technologies, though, are in the development phase, and meanwhile, our near-peer competitors continue to improve their capabilities.

So I just wonder, Mr. Shanahan, if you could just say a word about the level of your commitment to a strong research, development, test, and evaluation account especially investments in basic and applied research.

Mr. Shanahan: Senator, the future is dependent on how well we innovate and integrate these new technologies because we are at another point in time where the world is going to change.

My biggest fear is that a threat will manifest itself more quickly than we have planned and we will not be ready. So we will rush to development and we will see all the risks of the past. So it is so important that we be making those investments now. It takes time, and so we have to have patience. We have to understand that not all the bets work. You know, it may be 3 percent in basic research, but that 3 percent will be a game changer.

Senator Warren: That is right. Well, good. We need a strong commitment here.

When you visited my office, we talked about the
significant technological advances that are actually happening over in the commercial sector as well. And one way that DOD is tapping into those advancements is through the Defense Innovation Unit Experimental, or DIUx, which partners with nontraditional defense contractors with technology firms, with entrepreneurs to accelerate the delivery of advanced technologies into the hands of the warfighters.

Can you just say a word about your level of interest in investing in DIUx and strengthening the partnerships between DOD and the private sector that is driving this kind of innovation?

Mr. Shanahan: I think that is more of the type of work we will be doing because what these smaller companies do, they unlock the creativity of the warfighter. So they get exposed to some initial technology, and then they say to these companies, can you make these changes? And those companies can rapidly do that. They do not have all the bureaucracy. There is not the formal contracting mechanisms. So the development cycles are very, very quick. I am a big proponent of doing that, but there has to be some adult supervision. It cannot be everybody indiscriminately going to work with these different groups. But it is the fuel for the future.

Senator Warren: Good.
Well, we have an amazing DIUx facility in Massachusetts, and I am convinced that we need to continue to make these investments in both the commercial sector and in our own research enterprise to develop the kinds of game changing innovations that we are going to need.

Now, Mr. Shanahan, in your response to advance questions from this committee, you said -- and I am just going to quote what you said -- it will be difficult to regain superiority simultaneously in every warfighting domain. So I will prioritize technologies based on their maturity, potential, and ability to better advantage our warfighters.

Could you say a word about what areas of technology advancement you believe best meet those criteria and how you think about prioritizing those demands?

Mr. Shanahan: Yes. I do not have the specific domains. The comment there is really getting at the process that we must go through to make choices. It is kind of back to your comment about basic research. We will have to narrow the basic research. There is only so much finite funding. But the key to this is aligning it to a capability we want to mature. So my point there is that there are certain aspects of the Third Offset that we will say this is something we need to anchor around. This is the path we need to follow to achieve that.
Senator Warren: Good. Well, I think this is powerfully important that we sustain our investments in these leap-ahead technologies that our future will depend on. So thank you very much.

Thank you, Mr. Chairman.

Chairman McCain: Senator Tillis?

Senator Tillis: Thank you, Mr. Chairman.

Mr. Shanahan, thank you for being here and congratulations on your nomination.

I never miss a hearing like this to bring up my favorite prop when I talk about procurement. One thing that excites me about your nomination is your extensive work in supply chain operations transformation, and I want to get to that in the time allowed.

But I want to acquaint you to the organization that you are about to get confirmed to. It is an organization that can take 10 years and 680 pages to define the next generation handgun. I know that at Boeing, one of the things that you set out to improve and turn around the Dreamliner project was really looking at the fundamental supply chains and the operations process and trying better align it to address the issues so you could get into the minor things like availability of fasteners and a number of other things that you found, the flight control development life cycle.
But do you have any sense of the nature of the organization you are about to inherit in terms of its ability of having lean processes implemented and a culture of lean design in it?

Mr. Shanahan: I do.

Senator Tillis: And how would you assess it?

Mr. Shanahan: It is challenged, very challenged. Many people have worked to streamline it, and we have not seen the success we need.

Senator Tillis: By the way, I wanted to go back. I think what you are looking at are some of the foundational processes that have to change. I appreciated your answers to Senator Cotton and others about recusing yourself from potential programs. If you are doing your job, you are going to be far removed from the day-to-day decision-making process and recommendations on these programs, and you are fixing the underlying processes so that next generation handguns is probably 100 pages in a couple of years at the most. And in the more advanced weapons systems, you are going to scale the supply chains and the processes to the technological challenges of the product you are trying to produce.

So how do you go about actually -- your first year, what would you do to actually try to figure out where you could put your resources to have the greatest effect so that
we do not continue to have these hearings that I have
participated in over the last 2 and a half years that are
clearly just operational problems?

Mr. Shanahan: So at a first blush, the three things
that I will focus on -- number one is really getting that
strategy in place that gets at the future next generation
capability so that we are seeding it properly.

The second is -- and this gets at the current business.
I think it is a failed effort to try to fix it all. That is
like boiling the ocean. To me, it is doing the value
assessment. Where is the most money that can be saved? And
what are the top 10 programs that we have to go capture real
value tonight? From that, what will fall out are these are
the six or 10 things we have to go fix if we want to prevent
this going forward. But my management style is more you
have to put points on the board. You cannot work a generic
process improvement and say that 5 years from now we are
going to be better. How are we doing that tonight?

The other area is then, you know, in all these business
functions. How do we quickly work through all the
governance and people not wanting to share and really get to
consolidation and lower cost?

Senator Tillis: I think one of the challenges you are
going to run into -- and I hope as you look at the
transformation -- is having those who are in uniform that
are in the DOD. And then, of course, you have civilian and
contractor content. But you really have to do a critical
assessment of whether or not they have the core skills and
education to do what you are attempting to do.

I met with a class that is about to graduate from the
War College. The question I asked them, throughout your
curriculum, how much has been focused on business process
transformation, the operational side? It is not the
warfighting side. I am confident that on the warfighting
side they are well qualified for their jobs. But you really
have to do a serious assessment about the inventory of
people who have the discipline -- the experience I should
say -- experience in the disciplines to really transform
this organization.

How do you go about doing that?

Mr. Shanahan: I mean, my technique in the past has
been find those big opportunities and understand who is
leading the performance. Pretty soon you will find out
where the leadership needs to be effected.

Senator Tillis: Well, the last thing -- I am out of
time -- is that when you go through here, you need to very
quickly identify the self-imposed impediments. There are
things that are within your lanes that you can fix. And
then you need to be prepared to come here and tell us the
things that we have to change that are impediments to you
actually achieving the transformational results that we want. But there is no doubt in my mind that there are a lot of obstacles you will run into along the way that are going to require congressional action to get it right.

Thank you. I look forward to supporting your confirmation.

Mr. Shanahan: Thank you.

Chairman McCain: Senator Sullivan?

Senator Sullivan: Thank you, Mr. Chairman.

And, Mr. Shanahan, thank you again for your willingness to serve. I appreciate your family being here. I appreciated the meeting we had yesterday.

I am going to follow up on what I think you are seeing as a theme here, which is people believe that you have a lot of background in helping us address what is a very significant challenge.

So give me a sense. At Boeing, how many 787’s are you producing a month there?

Mr. Shanahan: 12 a month.

Senator Sullivan: So we are trying to build one icebreaker for the United States, and one of the estimates that has come out of our services is it is going to take 10 years a billion dollars.

So there is a lot of focus. The chairman mentioned in his opening statement about acquisition and acquisition
reform that we have tried to do here. But we also need
people in the building who understand how to get to
efficiencies.

When you think about this, how do we go from --
obviously, we are not Boeing -- but 12 aircraft a month that
Americans can do in our country to one ship, $1 billion, 10
years to develop? What are some of the things that you need
to be focused on and we should be focused on to get us out
of this sense where we cannot build anything on time or have
a 600-page RFP for a handgun?

Mr. Shanahan: Sure. I think Senator Tillis was on
this track. The leadership that has judgment that says 10
years and a billion dollars seems like a long time.

Senator Sullivan: Do you think that seems like a long
time?

Mr. Shanahan: It is a long time.

Senator Sullivan: Is it not that by the time you build
a ship that the technology of 10 years is completely
outdated -- the ship you just built?

Mr. Shanahan: I can only imagine that it would be and
you would be spending another bunch of money to upgrade it.

Senator Sullivan: So what do we need to do? What
experiences can you bring to help us with that, help the
country with that? It is enormously important.

Mr. Shanahan: Yes. The two things that helped me the
most are you have got to get good leaders in place. They just have the judgment. It is like 300 pages. We do not need this for a handgun.

Senator Sullivan: I think it is 600, but nevertheless. 680.

Mr. Shanahan: And then it gets back to why the audit is so important. We need to have an understanding of our cost baseline because whether you are in automotive or in aerospace, what should it cost? It is back to the ship one. What should this ship cost? And it is just physics to weld it up. We can run the math to say this is what it should cost in terms of commercial practices. That will inform us. Should cost tells you whether you are in the ball park or not, and if you are 2, 3, 5X, we need to stop the meeting and start over because that is just an unacceptable answer.

Senator Sullivan: So you think the audit process will help us have a much deeper understanding of why we have some of these processes that to any obvious observer seem outrageous?

Mr. Shanahan: I think, as I spend time on the audit, it is going to be where do we want to spend the money to make sure that the data is accurate, and then how do we use that data to inform us on our cost performance because there are things that we have to do in the audit to pass it that maybe do not add value, but there are other areas where it
really gives us an understanding of where we are inefficient
or, in the case of acquisition, this should cost is really
doing the qualitative analysis of what a similar ship --
you can parametrically adjust anything, but what would a
similar type of commercial vessel cost.

Senator Sullivan: Let me turn to another issue we
talked about yesterday, and that is the laydown of our
forces in the Pacific, which a number of us on the
committee, the chairman, myself, and others, have taken a
lot of interest in because we need to get this right. We
have had a hard time getting it right in terms of cost, in
terms of strategic location of our Marines and Air Force and
other forces. Will you commit to work with this committee
on making sure there is a united effort and kind of joint
cooperation between the Congress and the Pentagon on making
sure we get that correct?

Mr. Shanahan: I am committed to doing that.

Senator Sullivan: A final question. I noticed in your
background you have a lot of technical expertise on missile
defense. Just give me your sense on what you think our
priorities -- I know you answered advance questions for this
hearing that dealt with missile defense. A number of us are
interested in it. What should be our priorities on homeland
missile defense, not just missile defense for our allies in
the Asia-Pacific or the Middle East? And where should the
priorities be? And do you see the threat to the homeland increasing? There has been a lot of testimony over the last year from the top military and intelligence officials that it is literally at our doorstep, that North Korea is on the verge of an intercontinental ballistic nuclear missile that can range the continental United States. Give us a sense of your thoughts, background, and priorities on missile defense.

Mr. Shanahan: Absolutely. My last time in the Department of Defense was over 10 years ago running the GMD program, ground-based midcourse defense, and operationalizing it to defeat a launch of an ICBM out of North Korea. And we emplaced all of the interceptors. I think there are 40 of them up in Alaska.

The North Koreans are learning quickly. I mean, 10 missile tests this year is -- you know, they are going to continue to evolve their capability. We need to evolve our capability and make sure we have sufficient inventory in Alaska and other places to protect against a launch or a threat from the North Koreans.

Senator Sullivan: Thank you.

Thank you, Mr. Chairman.

Chairman McCain: Well, Mr. Shanahan, I want you to look at the answers that you gave, the standard answers that were proposed to you. Some of them were less than specific.
At least one of them and more were almost insulting.

I want to move forward as quickly as I can with your nomination. I am concerned that 90 percent of defense spending is in the hands of five corporations, of which you represent one. I have to have confidence that the fox is not going to be put back into the henhouse.

Mr. Shanahan, I think you are a fine man. You have an outstanding record. But when you answer a question about defensive weapons for Ukraine as something that needs to be examined before you reach a conclusion, that is not an informed answer. This is not a new issue.

So take a look at your responses that you sent to this committee. Take a look at the responses that you gave to some of these answers.

Somehow over the last several years, this committee seems to have been treated as sort of a rubber stamp. That is not the role. That is not what the Constitution of the United States says. The Constitution of the United States says that the United States Senate would provide advice and consent.

The answers that you gave to the questions, whether intentionally or unintentionally, were almost condescending.

Defensive weapons for Ukraine? Well, something we ought to discuss. I wish you could have been with me in Ukraine on New Year’s Eve when President Poroshenko gave a medal to the
mother of a young man who had just been killed by a Russian sniper, and the tears coming down her face. I am not sure you would have given the same answer that you gave in response to those written questions, which were straightforward, standardized, no different from anyone else.

So I want to work with this administration. I want to work with this President. I want to work with the new Secretary of Defense, who I happened to be one of the most ardent admirers of. But I have to tell you in a couple weeks, we are going to mark up the defense authorization bill. The President has two choices: either give us a strategy or we will put a strategy that we develop into the defense authorization bill. We are talking about shooting down airplanes in Syria. We are talking about Afghanistan, that there is going to be X thousand of increase. And yet, no one has informed the American people and this committee. So I have to say that I want some answers. I want some straightforward answers. And this town, you know very well, abhors a vacuum. If they do not give us a strategy from the people that I admire the most, we are going to put a strategy in. We are losing in Afghanistan. We just had three Americans killed in the last couple days. This is not an academic exercise.

Now, I understand the problems that they are facing.
They should be able to sort out those problems rather than say, hey, we are going to do the following four things, by the way, and we will expect the Congress to just rubber stamp it. We are not going to. We are not going to.

So your job is one of the most important and key elements. And frankly, I am not overjoyed that you came from one of the corporations -- five -- five corporations, 90 percent -- 90 percent of the spending of the taxpayers’ dollars comes out of five different corporations. That is not what our Founding Fathers had in mind.

So look at the answers that you gave us -- they were standard questions that we ask of every nominee. It was nothing unusual -- and see if you want to abridge some of them. I want to give the Secretary of Defense the team that he needs, but I am not going to give him a team that I think is business as usual of the last 8 years. Too many hundreds of thousands are refugees -- 6 million actually. 400,000 are dead. We are not talking about academic exercises.

So, Mr. Shanahan, take a look at those answers you gave, get the answers back as quickly as you can. It is the desire of this committee to recommend you. It is the desire of us. It is also our desire and obligation to the Constitution of the United States which says advice and consent.

This hearing is concluded.
[Whereupon, at 11:14 a.m., the hearing was adjourned.]