Stenographic Transcript Before the

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

HEARING TO CONSIDER THE NOMINATION OF: GENERAL PAUL J. SELVA, USAF, FOR REAPPOINTMENT TO THE GRADE OF GENERAL AND REAPPOINTMENT TO BE VICE CHAIRMAN OF THE JOINT CHIEFS OF STAFF

Tuesday, July 18, 2017

Washington, D.C.

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3	FOR REAPPOINTMENT TO THE GRADE OF GENERAL AND
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6	
7	Tuesday, July 18, 2017
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9	U.S. Senate
10	Committee on Armed Services
11	Washington, D.C.
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13	The committee met, pursuant to notice, at 9:30 a.m. in
14	Room SD-G50, Dirksen Senate Office Building, Hon. James M.
15	Inhofe, presiding.
16	Committee Members Present: Senators Inhofe
17	[presiding], Wicker, Fischer, Cotton, Rounds, Ernst, Tillis,
18	Sullivan, Cruz, Graham, Reed, Nelson, McCaskill, Shaheen,
19	Gillibrand, Blumenthal, Donnelly, Hirono, Kaine, King,
20	Heinrich, Warren, and Peters.
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OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S.
 SENATOR FROM OKLAHOMA

Senator Inhofe: The meeting will come to order.
I think, first of all, we all have on our minds and in
our prayers Senator McCain. He is going through some
recovery right now and will not be able to come back this
week. So that will change the way we are doing business a
little bit. But, nonetheless, he will be back with us very
soon.

10 Our committee meets this morning to consider the 11 nomination -- I should say the renomination -- of General 12 Selva for the appointment to be the Vice Chairman of the 13 Joint Chiefs of Staff.

I think since we have already been through this drill on the eight required questions, we are going to forego that. I am assuming you have not changed your mind since the last time we asked the eight questions. Is that correct?

19 General Selva: I have not changed my mind.

20 Senator Inhofe: Do you have any family here you would 21 like to introduce?

22 General Selva: I do, sir. I will do that in my 23 opening statement.

24 Senator Inhofe: All right. That is good.

25 General Selva, your record of service to our Nation is

1 well known to this committee. Your first 2 years at the 2 Joint Chiefs of Staff have been marked by great challenges 3 to our national security: the advance of ISIS in the Middle East; the Russian aggression in Ukraine and actions against 4 5 others in that region; North Korea's pursuit of both nuclear 6 and long-range missiles capability. Meanwhile, our young men and women continue to serve on the battlefield in 7 Afghanistan, ensuring that that country never again serves 8 as a safe haven for terrorists. 9

Moving forward, new leadership at the Department of Defense and military services presents renewed opportunities for our armed forces. As we work to meet the threats of today and prepare for the threats of the future, crises around the world only continue to multiply. Our service members face the most complex and diverse array of global threats since the end of World War II.

17 Leading our military during such challenging times 18 requires strong leadership, and this committee looks forward 19 to your testimony about how you plan to guide our men and 20 women.

- 21 Senator Reed?
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STATEMENT OF HON. JACK REED, U.S. SENATOR FROM RHODE
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Senator Reed: Well, thank you very much, Mr. Chairman.
I too want to join you in wishing Senator McCain a speedy
recovery and a rapid return to his responsibilities. In
fact, this might be one of the few times I can say sincerely
"go Navy" because I certainly do. I want to see him back,
as we all do.

9 Senator Inhofe: I might observe, though, it cannot go
10 unnoticed that the first three that were here on time were
11 all three Army.

12 [Laughter.]

Senator Reed: Thank you very much, Mr. Chairman. 13 14 I want to join you in welcoming General Selva. Thank 15 you, sir, for your service. As we consider your 16 reappointment to Vice Chairman of the Joint Chiefs of Staff, we recognize and thank you for your many years of service to 17 the Nation and your willingness to continue to serve. Also, 18 19 I want to recognize your wife Ricki for her many years of 20 support.

The United States faces a wide range of multifaceted and varied challenges around the world. If you are reconfirmed as the Vice Chairman, you will be an integral player in addressing these complex international issues facing our national interest.

1 Russia's malign influence and active measures 2 activities have been aimed at undermining the American 3 people's faith in our election process, as well as other Western elections. Furthermore, Russia continues to 4 5 threaten its neighbors and our NATO allies and has failed to 6 end its interference in Ukraine by complying with its commitments under the Minsk cease-fire agreement. Finally, 7 8 Russia has refused to withdraw its support for the Assad 9 regime.

10 North Korea's nuclear missile program is an immediate 11 and grave national security threat, and the United States 12 continues to grapple with the fact that there is no set of quick and certain options. China has not demonstrated its 13 14 willingness to enforce effective sanctions against North 15 Korea and, in addition, continues to threaten the rules-16 based order in the Asia-Pacific region by economic coercion 17 of its smaller, more vulnerable neighbors, and by undermining the freedom of navigation. 18

Iran continues their aggressive weapons development activities, including ballistic missile development efforts, as well as other destabilizing activities in the region. Finally, while we continue to make steady military progress against ISIS, the administration has yet to publicly articulate a broader whole-of-government strategy for addressing the issues that gave rise to ISIS in the

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1 first place.

General Selva, the aforementioned challenges are urgent 2 3 and pressing, and the committee looks forward to hearing from you on how the Department of Defense plans to address 4 5 these issues.

6 In addition, the Vice Chairman is assigned a number of specific responsibilities. For example, the fiscal year 7 8 2017 National Defense Authorization Act strengthened the Vice Chairman's role on the Joint Requirements Oversight 9 Council, JROC, by making the Vice Chairman the principal 10 11 adviser to the Chairman of the Joint Chiefs on joint 12 planning capabilities and joint performance requirements. Given the important function of the JROC in reviewing 13 14 requirements for acquisition programs to ensure they are reasonable and necessary, I look forward to your thoughts on 15 16 the effectiveness of these new authorities and whether you 17 believe additional changes are warranted.

The Vice Chairman is a key player in the interagency 18 19 process, a role that often requires working closely with 20 senior policymakers within the Department and at the 21 National Security Council on critical national security 22 issues. In light of the strategic challenges I referenced 23 earlier, the committee looks forward to hearing from you on 24 the effectiveness of the current interagency process. 25

Finally, General Selva, you have been a partner with

1 Deputy Secretary Work in developing and fostering the 2 Department's innovation strategy, including the so-called Third Offset, the Strategic Capabilities Office, the Defense 3 Innovation Unit Experimental, or DIUx, and other special 4 5 projects. If confirmed to a second term as the Vice 6 Chairman, you will provide vital continuity between the last administration and the present administration. It is 7 imperative that the Department of Defense under Secretary 8 Mattis continue this effort to learn how to leverage the 9 10 most dynamic sectors of our economy to harness new 11 technology and ways of thinking to solve our difficult and 12 diverse global challenges. 13 Thank you again, General Selva, for your willingness to serve our Nation, and I look forward to the hearing. 14 15 Thank you, Mr. Chairman. 16 Senator Inhofe: Thank you, Senator Reed. 17 You are recognized, General Selva. 18 19 20 21 22 23 24 25

STATEMENT OF GENERAL PAUL J. SELVA, USAF, FOR
 REAPPOINTMENT TO THE GRADE OF GENERAL AND REAPPOINTMENT TO
 BE VICE CHAIRMAN OF THE JOINT CHIEFS OF STAFF

4 General Selva: Thank you, Senator Inhofe.

5 Before I begin, I would like to also recognize Chairman 6 McCain's service to our Nation both in and out of uniform. 7 On behalf of the Joint Staff, I wish him a complete and 8 speedy recovery, and I look forward to him being back here 9 at work soon.

10 Senator Inhofe, Ranking Member Reed, distinguished 11 members of the committee, thank you for the opportunity to 12 appear before you to be considered for a second term as the 13 Vice Chairman of the Joint Chiefs of Staff. I am grateful 14 to the President and the Secretary of Defense for their 15 continued trust and faith in my ability to serve.

16 I would like to make three brief points before I17 continue and look forward to your questions.

First, I want to commend those who wear the cloth of 18 19 our Nation. During my 2 years as the Vice Chairman, I have 20 had the opportunity to visit service members and their 21 families around the globe, and I am continually impressed by 22 their dedication, their selfless service, and their 23 exceptional talents. It has been my distinct honor to serve 24 the men and women of the United States armed forces as the 25 Vice Chairman of the Joint Chiefs of Staff. And if

1 reconfirmed, I will strive to keep faith with them.

2 Second, as you have already mentioned, Senator Inhofe, 3 it is important to acknowledge the highly complex challenges that face our joint force today. The combination of 4 5 external challenges presented by adversaries and competitors 6 and internal challenges such as readiness and modernization, amplified by continual budget instability, are all issues 7 8 with which this committee is very familiar. Please know that I value the dialogue that I and other senior military 9 leaders have with this committee, and I thank the committee 10 11 for your work on behalf of this Nation's soldiers, sailors, 12 airmen, marines, and coast guardsmen, particularly the swift passage of this year's National Defense Authorization Act. 13 14 I hope through my work and our discussions that I have 15 conveyed to you the seriousness with which I take my 16 responsibilities as the Vice Chairman.

17 Finally, I would like to recognize my wife Ricki, the love of my life, who is with me today and who has shared my 18 19 37-year career and our 37-year marriage. As many of you 20 know, she was a classmate when we attended the United States 21 Air Force Academy. She is not only a lifelong friend and 22 partner, but she provides me with the counsel that only 23 someone in her position can. And for that I will forever be 24 grateful.

25 Senator Inhofe, Ranking Member Reed, members of the

1	committee, thank you again for the opportunity to appear
2	before this committee to be considered for a second term as
3	the Vice Chairman of the Joint Chiefs of Staff. I look
4	forward to your questions.
5	[The prepared statement of General Selva follows:]
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Senator Inhofe: Thank you, General Selva.

I would like to start off with one that has been foremost on my mind and I think on the minds of most of the members here, as well as the uniforms. And I applaud the uniforms for being straightforward and honest about the threats that we are facing right now, and that would be North Korea.

8 You know, they successfully tested a ballistic missile 9 on the Fourth of July. The country also completed a 10 successful nuclear test earlier on May 14th. The experts 11 consider North Korea's missile test on July Fourth to be the 12 most significant advancement toward a nuclear-capable 13 intercontinental ballistic missile.

We have had a lot of witnesses talk about this prior to July Fourth. They were talking about when this happens, what that will mean in terms of a threat to the United States. If you take the projected range of that, that would actually be somewhere around 5,000 miles, which would put parts of the United States into range. So it is a scary thing.

We had an Armed Services Committee hearing on the Asia-Pacific strategy on April 25th. We had a panel of experts, and they were good. They agreed with me that North Korea currently represents the most imminent threat to our national security.

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So I would like to have you go ahead and start with
 three questions concerning that.

3 One, do you agree with the experts who have come to 4 that conclusion concerning our national security?

5 And secondly, North Korea is known to export ballistic 6 missile technology to other adversaries like Iran. Do you 7 believe that they are in the process of doing that? They 8 have done that. And then what other countries might pose a 9 threat as a result of what they are receiving from North 10 Korea?

And thirdly, what is your level of confidence in terms of our intelligence community's ability to monitor what is really going on there? Those three things to start off with.

15 General Selva: Thank you, Mr. Chairman.

16 I do agree in principle with the assessment that the North Koreans are moving quickly to develop an 17 intercontinental ballistic missile capability. I, however, 18 19 am not saying the test on the Fourth of July demonstrates 20 that they have the capacity to strike the United States with 21 any degree of accuracy or reasonable confidence of success. 22 What the experts tell me is that the North Koreans have yet 23 to demonstrate the capacity to do the guidance and control 24 that would be required --

25 Senator Inhofe: I was only referring to range.

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General Selva: Yes, sir. On range, they clearly have
 the capability.

Senator Inhofe: You know, if they have the capability
in range, the other improvements are perhaps not too far
behind.

General Selva: Yes, sir. We will have to watch very
carefully with the IC the developments on those particular
capabilities.

9 I do agree with the intelligence community and others that the Democratic Peoples Republic of Korea is an arms 10 11 proliferators. There is no evidence that they have engaged 12 in proliferation of their long-range ballistic missile technology, but they have proliferated every other weapons 13 14 system that they have ever invented. So it is a pretty 15 clear pathway to the potential proliferation of these kinds 16 of weapons systems.

Senator Inhofe: And the third question was on the capability of our intelligence.

19 General Selva: I am reasonably confident in the 20 ability of our intelligence community to monitor the testing 21 but not the deployment of these missile systems. Kim Jong-22 un and his forces are very good at camouflage, concealment, 23 and deception. We have a series of programs that I would be 24 happy to talk about in a classified setting that talk to the 25 ability of our intelligence community both military and

1 civilian to monitor those activities.

2 Senator Inhofe: Yes. I think it has been said outside 3 of a classified hearing that the things that he has been 4 doing make him -- the nicest thing I can say about Kim Jong-5 un is he is totally unpredictable and the most unpredictable 6 of anyone I have ever had any kind of experience with or 7 even reading about. And that is what has been scary to most 8 of the people, and I assume you agree with that.

9 General Selva: Yes, sir. I do agree with that 10 assessment.

11 Senator Inhofe: Okay.

12 Now, getting down to our threats, this committee has 13 received the testimony from the uniforms and from the 14 experienced people outside of the uniforms that only a third 15 of our Army brigade combat teams, only a fourth of our 16 combat aviation brigades are ready. We hear about 62 percent of our F-18's that the marines use do not work. 17 So we recognize when we are going through what we have been 18 19 going through in the last few years that the first thing to 20 go is maintenance and then, of course, modernization.

So I would like to have your assessment whether or not you do agree with General Wilson, for example, when he testified before this committee, that fewer than 50 percent of the Air Force combat force are sufficiently ready for a highly contested fight against peer adversaries. So he is

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1 going beyond just equipment. We are getting down to our 2 individuals.

3 And then another Wilson, Secretary Wilson, and General 4 Goldfein have told us that they will be short 1,500 pilots, 5 most of them fighters, by the end of this year.

6 Do you agree with this assessment? Would you want to elaborate on anything that they have said? 7

8 General Selva: Senator, I agree with both assessments. 9 Both speak to the availability of funds and resources to do 10 the high-end training that is required to make our forces 11 ready for what we call high intensity combat against a peer 12 competitor. The budget in 2017 is helpful. The proposed 13 budget for 2018 will move us down the pathway to being able to restore much of that training. But it will be a 2-year 14 15 process beyond the initial insertion of those resources 16 before you see the readiness improve.

17 Senator Inhofe: I agree with that.

Senator Reed? 18

19 Senator Reed: Thank you very much, Mr. Chairman. 20 And thank you, General Selva, again for your service. 21 One of the issues in terms of the Third Offset is 22 creating some different agency. One is the Defense 23 Innovation Unit Experimental, DIUx. And they are working in 24 the public knowledge on sort of very cheap satellites --25

inexpensive I should say -- and also exploiting them with

artificial intelligence. It is something that we really
 need for many places, particularly Korea, for constant
 dwell.

We are told that they are about to run out of money, and we have not received the reprogramming yet. I would think this would be an urgent need. Can you explain why they are in this distress and what we can do?

8 General Selva: Yes, sir, I can. We actually put 9 tremendous demands on the defense experimental unit. In the programs that they are working for us, we were notified 10 11 early last week by Director Raj Shah that they had been cash 12 flowing into two programs. We have a reprogramming proposal that is in staff as we speak that will address the balance 13 14 of their requirements for this fiscal year, and we will 15 actually begin some of the funding for programs that will 16 extend into next fiscal year. They will be able to do that 17 with year-end money.

18 Senator Reed: Thank you very much.

One of the areas of concern -- and there are many -- is the situation in Iraq. I was there about 4 weeks ago. They are making progress on the ground. General Townsend is doing a superb job as the commander on the ground, along with, when I was up at Q-West, the 82nd Airborne Division, 2nd Brigade was leading the advisory effort.

25 But the issue now becomes, as we reduce their

1 effectiveness -- ISIS -- our long-term presence there. Do
2 you have views on that?

And also, I heard there were claims at least by Revolutionary Guards of Iran that if they are designated a terror group, they will retaliate against our forces. Can you give us any insights there?

General Selva: Sir, on Iraq, the fighting is far from 7 8 over. ISIS has lost their sanctuary in Mosul but they still have a handful of small towns that they control in and 9 around the province. President Abadi has a plan with the 10 11 Iraqi Security Forces to begin a campaign, with Steve 12 Townsend's help and consent, to clear those towns and move into Anbar Province to secure their border with Syria, all 13 important work as that will deny ISIS sanctuary on both 14 15 sides of the Syrian-Iraqi border.

16 I share you concern. I read in this morning's papers about the Iranian Republican Guard's Quds Force making a 17 statement that if they are declared an international 18 19 terrorist organization, that they will retaliate against our 20 forces in Iraq. We will have to posture ourselves to be 21 ready for that, but I do not think we should take that 22 threat and keep it from taking action against the Quds 23 Force.

24 Senator Reed: Thank you.

25 In another area in your advance policy questions, you

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indicated, which is something that has been seconded by so many, that our adversaries in anti-access and area denial technologies have eroded what used to be a tremendous overmatch by the United States. And the question is, what are we doing to get back way ahead not just a few inches ahead, metaphorically?

General Selva: Thank you, Senator. You alluded to the 7 8 work that we have been doing over the past couple years in 9 the advanced concepts development arena, as well as working what Deputy Secretary Work called the Third Offset strategy. 10 11 Those are concepts that would allow us to contest what we 12 call the anti-access/area denial strategies that many of our 13 adversaries have attempted to impose upon us by making our 14 basing and our forces more resilient and able to survive 15 under the kinds of attacks that are associated with the area 16 denial strategies, particularly that China and North Korea 17 are attempting to impose upon us. It allows us to project force into areas that otherwise would be presumed denied. 18 19 Senator Reed: Thank you.

Just finally and quickly, we have been working for several different Congresses on acquisition reform. We have passed legislation. We still have a long way to go. I think we both recognize that, honestly. And as Chairman of JROC, you have been given additional responsibility both actual and also kind of referential or symbolic. But can

you tell us what you are doing to kind of help the service chiefs jump start acquisition and get it so we can deliver systems. The Army is commendable for many things, their timeliness, et cetera. But they have had a tough record in getting systems from the drawing board into the field. So can you comment?

General Selva: Yes, sir. We are implementing the guidance that we received in last year's NDAA. Two specific things that give the Vice Chairman's office a little bit more flexibility. One is the direct requirement to be the advisor to the Chairman for readiness and the deployment of systems that support readiness.

The second is a building relationship with the service 13 14 chiefs and the service secretaries in their acquisition 15 authority roles. So the JROC is now providing requirements 16 directly to the service acquisition authorities not only for 17 the basic design and integration capabilities that would go into systems but actual performance along the line of buying 18 19 systems. One really striking example of that capability was 20 a piece of work that we did to move counter-unmanned systems 21 technologies into Iraq from idea to fruition, measured in 22 months, from delivery to deployment, measured in weeks, and 23 those are numbers that are actually guite useful.

24 Senator Reed: Thank you.

25 Senator Inhofe: Senator Ernst?

1 Senator Ernst: Thank you, Mr. Chair.

Thank you very much, General Selva. Mrs. Selva, thank 2 3 you for your support and service to our Nation as well. 4 General Selva, in your answers to advance policy 5 questions regarding Southeast Asia, you suggest that short-6 term stressors can be managed within the alliance construct. And a few weeks ago referring to the Philippines 7 specifically, Secretary Mattis testified that in 2014 we 8 9 canceled our named counterterror operation with a premature 10 view of success, causing us to lose funding lines that we 11 would have otherwise been able to offer. 12 Do you agree with me and Secretary Mattis that 13 reestablishing a named operation is something we should 14 consider as part of our alliance obligations in order to 15 make sure that those short-term stressors do not turn into a 16 prolonged or long-term catastrophe?

17 General Selva: Yes, ma'am. In every case where we see the resurgence of terror networks, particularly in the 18 19 fragile areas of the southern Philippines, I think it is 20 worth considering whether or not we reinstate a named 21 operation not only to provide for the resources that are 22 required but to give the Pacific Command commander and the 23 field commanders in the Philippines the kinds of authorities 24 they need to work with indigenous Philippine forces to 25 actually help them be successful in that battle space.

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Senator Ernst: Excellent. I hope that we can work
 with Secretary Mattis on this issue.

3 Moving on to another topic, you have been openly 4 critical of Congress about the budget process. And I agree 5 that it is long past time for us to break the cycle of these 6 continuing resolutions. We are not doing ourselves any favor. However, budgets are also a two-way street. And the 7 8 DOD has not been able to conduct or pass a clean audit for a very, very long time. And so that is not helping our cause 9 10 either.

11 What specifically will you do in your next 2 years to 12 achieve a clean audit that you have not maybe been able to 13 accomplish in the last 2 years?

General Selva: I have found over the last several 14 15 years that achieving the clean audit goal is a really vexing 16 journey. In particular, the discussions over the valuation 17 of real property are an obstacle in the way of getting that work done, the debates over what we own and what it is 18 19 actually worth. I will share with you that in advance of 20 his confirmation, I spent several hours with the new Deputy 21 Secretary of Defense, Patrick Shanahan, discussing how we 22 might get at this issue of valuing capital property so that 23 we can, in fact, clear a clean audit. We will commit to 24 working that together through the Defense Management Action 25 Group to try and come to resolution.

1 Senator Ernst: I appreciate that. And I hope that we 2 can move forward on that, especially when it comes to the 3 real property. We have to own this, and we absolutely must 4 get his done to know how the dollars are being spent so that 5 we can reassure our taxpayers that we as Congress and you as 6 the DOD are doing the right thing. So thank you for that. 7 I hope we are successful.

8 You also support providing lethal defensive assistance 9 to Ukraine, something I have been pushing for a number of 10 years as well. Other than being actively engaged with the 11 interagency on this issue, what specific steps are underway 12 in DOD in order to make this happen?

13 General Selva: So we are working very closely between 14 the Joint Staff and U.S. European Command to actually put 15 requirements on the table for an inventory of what that 16 lethal defensive aid might look like. It will be more than 17 just a military recommendation. This will be a policy choice on whether or not we are going to give the Ukrainian 18 19 Government the tools they need to defend themselves against 20 what we believe to be a Russian-supported insurgency 21 movement in the Donbas.

22 Senator Ernst: I think it is really important.

And in light of Russia's recently thwarted attempt to deny Montenegro's accession to NATO, what steps should we be taking to reaffirm our commitment to nations like Ukraine

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1 and Kosovo and other candidates just in reassuring them that we will assist them should they wish to become NATO members? 2 3 General Selva: Ma'am, I think one of the tools that we can bring to bear as the Joint Staff and as the military 4 5 team is our mil-to-mil contacts with the chiefs of defense 6 and the leaders of their militaries to make sure that all those countries, in spite of what is going on internally 7 8 with or without the interference of the Russian Government, actually are able to make the military reforms that are 9 necessary so that they can move towards a path to membership 10 11 in NATO.

12 Senator Ernst: I appreciate that. We have got a lot 13 of State partnership programs out there and those countries 14 need our reassurance. So thank you, General Selva, again. 15 Thank you, Mr. Chair.

16 Senator Inhofe: Senator Gillibrand?

Senator Gillibrand: Hello, General. Thank you for
being here. Thank you for your service. I welcome your
family.

I want to talk to you a little bit about where we are on trying to combat military sexual assault. In 2013, then Chairman of the Joint Chiefs of Staff, General Martin Dempsey, said a majority of the Senate of the United States expressed a lack of confidence in our ability to solve this ourselves. We are currently on the clock, if you will. The

1 President of the United States said to us in December, you know what? You have got a year to review this thing and 2 3 show me you can make a difference. We understand that just because Senator Gillibrand's vote was defeated yesterday 4 5 does not mean that a year from now it may not be reintroduced, and if we have not been able to demonstrate we 6 are making a difference, you know, then we deserve to be 7 8 held to the scrutiny and standard.

9 This is now 4 years later. And we do not see a change in the overall numbers. We do not see a change in the rate 10 11 of prosecution. We do not see a change in the rate of 12 conviction. And we do not see a change in the rate of retaliation. So I am really worried that in these 13 14 measurables where commanders are entirely responsible for 15 outcomes, they have not met the level of scrutiny and 16 oversight that is really necessary to really tackle this 17 problem effectively.

18 So do you agree that more needs to be done to create 19 environments where victims and bystanders can report and not 20 be retaliated against?

General Selva: Senator, I believe that survivors of sexual assault and bystanders should be given an environment where they can report the events that have happened, and we can provide an unbiased investigation and potential prosecution of the wrongdoers who perpetrated the crime.

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Senator Gillibrand: And do you agree that despite the
 Department's efforts, we have not achieved enough progress?

3 General Selva: I do not agree that we have not achieved enough progress, but perfection is the only 4 5 standard that can be allowed in this space. Sexual assault 6 is contrary to the notion that we treat all soldiers, sailors, airmen, and marines with the dignity and respect 7 8 they deserve because they wear the uniform of this Nation. 9 Senator Gillibrand: I do not think we are going for perfection. I think we are going for a climate where men 10 11 and women can serve without being sexually assaulted, a 12 climate where they can report their crimes and know that they will be prosecuted, that they can report their crimes 13 14 and know that they will not be retaliated. And so we are 15 not even close. I mean, the estimate of last year was 16 15,000 sexual assaults, unwanted sexual contact, and rape. 17 That is nowhere where we need to be. We still have almost a 60 percent retaliation rate, and our rate of conviction has 18 19 not moved in 5 years.

20 So I do not think we are achieving enough progress. I 21 think we have done a lot of good things in terms of getting 22 better evidentiary records, getting better evidentiary 23 standards, making sure there is special counsel for the 24 individuals who do report. But our rate of unrestricted 25 reports, the ones where you are willing to put your name and

1 make it public, is going down. Our rate of restricted 2 reports percentage is going up. So the confidence in the 3 system just is not there.

So I really hope that you will commit to me to do a full look at this issue, look for new solutions, look for untried solutions because what we are doing today is not working. And we have done every small ball recommended reform we could possibly do by every committee that has offered them.

10 General Selva: Ma'am, I will commit to working with 11 the services and the service secretaries to take a deep dive 12 into all of the programs that they have implemented and to 13 take a look at whether or not they will be effective in 14 supporting the survivors of sexual assault and in making 15 sure that we get to unbiased investigations and 16 prosecutions.

17 Senator Gillibrand: Thank you.

I would now like to talk a bit about our transgender 18 19 service members. I have been pleased by the advances the 20 Department of Defense policies had made to be more inclusive 21 to transgender service members who are twice as likely to 22 serve, according to one study, than the general population. 23 But I am concerned that the recent 6-month delay the 24 Department has approved before letting transgender people 25 enlist in the services will have some unintended

1 consequences.

2 What have you learned so far in your review of this 3 issue, and how is the implementation going so far? 4 General Selva: Thank you, Senator. I am an advocate 5 of every qualified person who can meet the physical 6 standards to serve in our uniformed services to be able to 7 do so.

8 Our decision to delay the accessions of transgender 9 individuals into the services was largely based on a disagreement on the science of how mental health care and 10 11 hormone therapy for transgender individuals would help solve 12 the medical issues that are associated with gender dysphoria. There are a host of other issues that involve 13 14 the potential physical standards that the service chiefs 15 asked for additional time to assess so that they can make 16 the necessary changes to infrastructure, as well as training 17 curricula, for our basic trainees who come in transgender status, particularly those who have not undergone gender 18 19 reassignment surgery and, while they present as their target 20 gender, are physiologically still in their birth gender. 21 And those issues will have to be dealt with before we can 22 actually begin to assess those individuals into active 23 service.

24 Senator Gillibrand: Thank you.

25 Thank you, Mr. Chairman.

Senator Inhofe: Thank you, Senator Gillibrand.
 Senator Cotton?

3 Senator Cotton: General Selva, welcome back.4 Congratulations on your reappointment.

5 I would like to discuss the Intermediate-Range Nuclear 6 Forces Treaty, a treaty between the United States and the 7 then Soviet Union, now Russia, that prohibits land-based 8 cruise missiles or ballistic missiles with a range of 500 to 9 5,500 kilometers. Russia, it has been widely known, is 10 cheating on this treaty. The State Department found that 3 11 years ago.

12 You testified at the House Armed Services Committee 13 that to your knowledge, Russia does not intend to return to 14 compliance with the INF Treaty. Do you remain of the same 15 opinion today?

General Selva: I do, sir, and there is no new intelligence that says that the Russians are either inclined to return or to abrogate the treaty. So they are still trying to walk the middle line.

20 Senator Cotton: I have to say I agree that as long as 21 Vladimir Putin gets to eat his cake and have it too, why 22 would he change? I assume that he is somewhat ambivalent 23 about the treaty. On the one hand, he benefits much more 24 from the prohibition on intermediate-range missiles in 25 Europe since the one country that could rapidly produce

those missiles and deploy them, the United States, is
 restrained from making those missiles and deploying them.

On the other hand, I assume that he does not like the 3 4 fact that countries on his periphery, in particular, China, 5 can produce and deploy them. So the way to square that 6 circle is simply to cheat, and as long as we let him get away with it, then there is no reason not to keep cheating. 7 8 Is there anything in your mind that we could do to put pressure on Russia to bring them back into compliance to 9 10 change their current mindset?

General Selva: The diplomatic tools that exist inside of the Intermediate Nuclear Forces Treaty allow us to put a modicum of pressure on the Russians through the bilateral consultative committee to try and get them to return to compliance.

16 The other tools that exist in the treaty include beginning research and development efforts to field but not 17 test intermediate-range ballistic and cruise missiles within 18 19 the boundaries of the treaty. It is our assessment that the 20 Russians have gone beyond that provision in the treaty and 21 have actually fielded an intermediate-range cruise missile 22 that could be either nuclear or conventional capable. So we 23 do have some options inside the treaty to put pressure on 24 the Russians not only diplomatically but also inside the 25 military realm.

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1 Senator Cotton: I am glad that you raised that because my legislation, the INF Treaty Preservation Act, would 2 3 authorize money for just that and, in fact, with the House and the Senate passed versions of the NDAA, it would start a 4 5 program of record. The administration put out a statement 6 of administration policy last week that had some issue with that provision and another, but I suspect we will work it 7 out in the end since we all want to see Russia come back 8 9 into compliance with this treaty.

10 Putting aside its impact on our relationship with 11 Russia, though, I want to bring your attention to Admiral 12 Harris' testimony. He stated a few months ago in this committee that over 90 percent of China's land-based missile 13 14 forces fall between the range of 500 and 5,000 kilometers. 15 Of course, China is not in violation of the treaty because 16 China is not a signatory to the treaty. Only the United 17 States and Russia are.

We do not have any matching offensive capability due to our treaty obligations. Do you interpret this as a possible offensive imbalance in the Asia-Pacific?

General Selva: Senator, it would be easy to interpret that as an offensive imbalance but for that fact that we are not restricted from fielding ballistic missile or cruise missile systems that could be launched from ships or airplanes under the Intermediate Nuclear Forces Treaty. It

1 is specific to land-based missiles. And so with respect to whether or not we use the INF Treaty as a reason to say 2 3 targets inside of China might not be held at risk I think is 4 a bridge too far. I believe we can assert that the 5 deployment of missile systems on aircraft and ships would 6 allow us to hold those targets at risk.

Senator Cotton: They do, although the obvious 7 8 disadvantage of ships and aircraft is that they are 9 relatively small compared to land, which is why China has 90 percent of their missile forces in that range from land. 10 We 11 are limited to what we can do based on our ships and our 12 aircraft.

Do you think that we should consider extending 13 14 offensive capabilities to allies in the Asia-Pacific who are 15 also not bound by this treaty to help counterbalance China's 16 offensive capabilities?

17 General Selva: I think those are options we should look at as people who provide sound military advice to 18 19 political leaders, but that would be a policy choice on 20 whether or not to use that leverage against the Chinese. 21

Senator Cotton: Thank you.

22 One final question about this area. Both General 23 Milley and General McMaster in his previous job have 24 testified the Army is outranged and outgunned. When they 25 say that, that the Army is outranged and outgunned, they are

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1 speaking about missile systems that have this prohibited 2 range. Correct? The 500 to 5,500 kilometer range? 3 General Selva: Senator, that is part of their argument but it is not all of their argument. Many of our multiple 4 5 launch rocket systems are outranged by the Russians within 6 the ranges that are stipulated --Senator Cotton: Below the 500 kilometers. 7 8 General Selva: Yes, sir. Senator Cotton: So it is both below the 500 kilometer, 9 which is a bad thing and we should address, but also that we 10 11 cannot get beyond the 500 kilometer range. 12 General Selva: Yes, sir. 13 Senator Cotton: Thank you very much, and thank you 14 again for your service. 15 General Selva: Thank you, sir. 16 Senator Inhofe: Thank you, Senator Cotton. 17 Senator King? Senator King: Thank you, Mr. Chairman. I want to join 18 19 everyone today who has mentioned our hopes and prayers for 20 Senator McCain to get back so he can harass the witnesses, 21 as he is accustomed to do. 22 General Selva, I know that you are interested in 23 innovation, and that is an important part of acquisition and 24 how we get where we are. I am concerned. We have had 25 testimony before this committee that small companies in

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Silicon Valley, for example, will not even bid, will not 1 2 even interact with the Pentagon because the process is so 3 cumbersome and lengthy and burdensome. And now we are at a point where some significant majority of the Defense 4 5 Department funds go to four or five major contractors. 6 How do we deal with the system itself, the structure, 7 the infrastructure of acquisition so that we can open up to greater innovation coming very frequently from smaller 8 9 companies?

10 General Selva: Senator, for large programs, our small 11 companies in Silicon Valley are likely not going to be the 12 competitors we are looking for.

13 However, that said, two very innovative programs are actually underway as we speak. The first is a venture 14 capital incubator at National Defense University that helps 15 our acquisition professionals learn the ins and outs of the 16 17 venture capital business. And venture capital is what runs Silicon Valley. It is the willingness to take risks on new 18 19 programs, on new technologies, on rapid prototyping that 20 might or might not deliver at relatively small amounts of 21 money. And that is the reason we established in part the 22 Defense Innovation Unit Experimental in Silicon Valley not 23 only to have a point of presence to interact with these new 24 technology companies but to actually have a funding vehicle 25 where we can essentially engage in rapid prototyping and

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1 venture capital-like activities with those companies.

2 Senator King: Is that far enough along to determine
3 whether it is working?

General Selva: Sir, I think it is far enough along to determine that it is working. In fact, we have expanded the concept to technology centers in Boston and Austin, Texas as well because we are finding the kinds of companies that can bring us the innovative ideas that can then be scaled into major programs.

10 Senator King: Let me talk about the Third Offset. The 11 first two were focused largely on the Warsaw Pact and the 12 Soviet Union. Talk about the Third Offset as it would 13 relate to the multiplicity and diversity of threats that we 14 face today.

15 General Selva: Thank you, Senator.

16 The threats we face today are largely based on mimicking our command and control philosophies but adding to 17 them long-range precision strike munitions that can deny us 18 access to the areas that we previously had free access to. 19 20 The projection of power is fundamental to our ability 21 to fight wars. And so as we look at the Third Offset, the 22 principal things we were examining and continue to examine 23 are artificial intelligence and the ability to team humans 24 with machines to speed our understanding of the complex 25 battle space that is represented by these new adversaries

and competitors and then react inside of that battle space
 faster than they can respond to our actions.

3 It also involves building around our bases and our
4 forces a degree of resiliency through camouflage,
5 concealment, deception, as well as distributed operations
6 that prevent our opponents from being able to hold the whole
7 force at risk using their ballistic and cruise missile
8 systems. That is a snapshot of what the Third Offset would
9 bring us.

10 Senator King: And I assume part of this is resiliency 11 as a defense against cyber. One would assume that if a 12 conflict was to begin, the first phase would be cyber to 13 take out communications systems and those kind of things. 14 Is that part of the thinking?

15 General Selva: Yes, sir. In fact, implicit in the 16 Third Offset thinking is the partnership between humans and machines, and in that space, machine-to-machine defense of 17 cyber networks is actually an absolute requirement. It is 18 19 not an implied task. It is an explicit task. If we cannot 20 defend our networks at machine speed, we are giving our 21 opponents maneuvering space in that domain to defeat us in 22 detail.

23 Senator King: A final question. There really is not 24 time for an answer, and perhaps you could take it for the 25 record. I recently finished General McMaster's book about
1 Vietnam, "Dereliction of Duty." And it is very critical, as you know, both the political decision-making structure and 2 3 the Joint Chiefs. I would like your thoughts not now but in 4 writing on what the role of the Joint Chiefs are in a 5 situation where the political leadership is either not 6 listening or taking a position that you feel is contrary to the country's interests in terms of its military 7 8 capabilities. General McMaster does a masterful job of 9 outlining the problem, but I am interested in some thinking about what is the solution to the problem that he 10 11 illuminates so brilliantly in that book. 12 General Selva: In short, Senator, I would say our obligation is to provide blunt, honest, best military 13 advice. And in the absence of a rule that forces our 14 15 policymakers to actually follow that advice, we continue to 16 give it loud and long. 17 Senator King: Thank you. Appreciate it. Thank you, Mr. Chairman. 18 19 Senator Inhofe: Thank you, Senator King. 20 Senator Warren? 21 Senator Warren: Thank you, Mr. Chairman. And like my 22 colleagues, I want to say for the record how much we miss 23 Senator McCain and wish him a speedy recovery. 24 I also note that Senator Reed and Senator King talked 25 about DIUx. So I will not go back through this. But I do

want to express my very strong support for the work you are
 doing there and how much more we can do with DIUx.

What I wanted to focus on, General Selva, I have heard you publicly describe the main global threats that we face as challenges: Russia, China, Iran, North Korea, and violent extremism. I want to ask you about another global threat, and that is climate change.

8 A Defense Department report from 2 years ago observed -- and I am going to quote it here -- global climate change 9 will have wide-ranging implications for U.S. national 10 11 security interests over the foreseeable future because it 12 will aggravate existing problems such as poverty, social 13 tensions, environmental degradation, ineffectual leadership, 14 and weak political institutions. In short, this DOD report 15 described climate change as a threat multiplier.

16 So, General Selva, what impact do you believe that the 17 change in climate will have on the military services? And 18 what do you believe the Department of Defense should be 19 doing now to prepare for this impact?

20 General Selva: Thank you, ma'am.

The dynamics that are happening in our climate will drive uncertainty and will drive conflict. And I will just provide one example of how that can happen, and this is a manmade problem. The dams along the Nile River control the flow of water into what was the Fertile Crescent of Egypt.

And any change to that water flow causes the Egyptians to become more hostile to their neighbors who are putting dams upstream of the Egyptian stretch of the Nile River. I could build that argument in a variety of countries around the world, and those are manmade problems not directly related to climate change but related to how we as humans change our environment.

8 If you extend that argument to the kinds of things that 9 might happen if we see tidal rises, if we see increasing weather patterns of drought and flood and forest fires and 10 11 other natural events that happen inside of our environment, 12 then we are going to have to be prepared for what that means 13 in terms of the potential for instability in regions of the 14 country where those impacts happen, particularly today 15 places where there is massive food instability.

16 The Sahel in Africa is a classic example where a small 17 drought over a limited period of time can decimate the crops and cause instability and make that an area fertile for 18 19 recruitment of extremists because they see no other way. 20 Similarly, you could look at the decimation of the 21 fisheries off Somalia that contributed to piracy because the 22 fishermen could not make their livelihood by doing what they 23 do best, which is fishing on the fishing grounds off of 24 Somalia.

25 So I think we need to be prepared for those. It will

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1 cause us to have to address questions like humanitarian 2 disaster relief. It will also cause us to have to focus on 3 places where climate instability might cause actual 4 political instability in regions of the world we had not 5 previously had to pay attention to.

6 Senator Warren: So as climate change is an ongoing phenomenon, one that right now is worsening, the climate 7 8 change is going to have a profound impact directly on our military and on our military infrastructure and on how the 9 10 military is able to carry out its mission. So I really 11 hope, in addition to all the other global challenges that 12 you have in front of you -- and I know they are many and I 13 know they are serious -- we need you to lead today on this 14 challenge, General. Tomorrow may be too late.

15 So I want to follow up in just the little bit of time I 16 have remaining on Senator King's question about the Third 17 Offset. And I know you have made this a priority all during 18 your first term, and I assume you will do the same if you 19 are there for a second term.

But what I am concerned about is that we do not appear to be moving very fast. Many of the technologies that we are talking about here are still in the development phase. Meanwhile, our near-peer competitors are continuing to improve their capabilities. It can take years, sometimes decades from the time we first sign a contract for a new

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1 technology to actually make it out into the field.

2 So let me just ask you if you can say something very 3 briefly because we are really over time. And you can take 4 this for the record. What can we do about this to speed up 5 our response time here?

General Selva: I would make two quick points.
Senator Warren: Okay, and let us make them quick.
General Selva: First is rapid prototyping. We have to
be willing to invest and fail in systems that might not
work.

11 The second is we cannot be bashful about bringing new 12 software into our architectures. And so we have worked very 13 closely with some of the companies in Silicon Valley to do 14 rapid prototyping, testing, and deployment of software that 15 helps with things like automatic target recognition and 16 change detection.

17 I think those are two things that we could do right now 18 and be quite successful.

Senator Warren: Good. I know you share my concern about being outpaced by technology and how much you make this a priority. You will have, I think, everyone's support here as you make that a priority. Thank you.

23 Senator Inhofe: Thank you.

24 Senator Rounds?

25 Senator Rounds: Thank you, Mr. Chair.

General Selva, first of all, let me begin by just
 thanking you for your service to our country.

Your previous work before you took your current position -- you were the Commander of the U.S. Transportation Command. And I know that in your statement for the record, you stated that our military strategy is predicated on our ability to deploy and sustain forces. Based upon your previous position, you understand the need to be able to get to where the fight is at.

I understand that you appreciate the reliance that we have on commercial air carriers in order to do that within our current plans. As you already know, right now DOD has no means to extend the cyber protection to these critical commercial carriers. I have talked about this at a few hearings, including just last week.

16 My question for you is that if you were an adversary nation, how would you exploit this? And how would that 17 impede the ability of the United States to deploy forces? I 18 19 realize that you may be limited in what you can say about 20 this in an open session, but I think it would be really good 21 for this committee and the American people to hear a few 22 general comments on the issue because unless we continue to 23 focus and gain public support for what I think we need to do 24 with regard to cyber protection, it is going to be very 25 difficult to where we have to be. And we have to have the

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commercial air carriers available in times of an airlift.
 Could you comment about what that means and how our
 adversaries might exploit the current situation?

General Selva: Senator, I am cautious other than
echoing what you said about the potential vulnerabilities of
commercial networks in an open session. But I will add the
following.

8 It is not just our air carriers that make us successful 9 at projecting force overseas. It is our air carriers, our over ocean merchant marine, as well as the rail and trucking 10 11 industry in this country. And all three together, land, 12 sea, and air, are the capability that we bring to be able to deploy force around the world. All of those capabilities I 13 14 just described are dependent on the quality and veracity of 15 the data that they use to move our forces. And so that 16 data, those networks are just as important as the trucks, 17 trains, ships, and planes that move our soldiers, sailors, airmen, and marines. 18

19 Senator Rounds: Thank you, sir.

I think solving this public-private cybersecurity vulnerability would give us insights and experience to really build the framework to use on the countless other cyber seams between organizations in and outside of government.

25 Can you give me an update at least in general terms on

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how the security gap is being addressed today? Clearly, it is not a case of where we are just planning for the future. We have things in place today. Can you give us some reassurances?

5 General Selva: Again, this is based on my experience 6 in my prior job. The TRANSCOM J-6 Director of Communications is given the authorities and responsibilities 7 8 of protecting not only the TRANSCOM network but extending through contract vehicles to our civilian providers those 9 10 data standards and network standards that allow them to 11 subscribe to many of the protections that are afforded to 12 the TRANSCOM network. That may be a model upon which we could build a continuing public-private partnership into 13 14 critical infrastructure in other sectors of the economy. 15 Senator Rounds: Thank you, sir.

16 Just in the minute or so I have remaining, in your 17 experience is 2 years enough time to maximize the Vice Chief's potential to provide optimal strategic guidance, as 18 19 well as maintain continuity for your large portfolio? 20 General Selva: No, sir, it is not, and that is why I 21 am so encouraged to see the work that was done in the 2017 22 National Defense Authorization Act that actually makes the 23 Chairman and the Vice Chairman positions 4-year tours with 24 only one potential renomination for a 2-year extension. 25 That 4-year term will allow the Chairman and the Vice

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Chairman to have the strategic impact that you expect of
 uniformed members in those positions.

3 Senator Rounds: Thank you, sir.

4 Thank you, Mr. Chairman.

5 Senator Inhofe: Thank you, Senator Rounds.

6 Senator Peters?

7 Senator Peters: Thank you, Mr. Chairman.

General Selva, it is great to have you here before us again. I certainly appreciate the opportunities to have some discussions with you both here, as well as in my office. And I want to thank you for your focus on advanced technologies and the understanding of how we need to be at the forefront of that to continue to keep our competitive edge.

15 I just want to say, before I ask you a question, we 16 have heard a lot about Silicon Valley and other places like 17 Boston when it comes to advanced technology, but we have all of that in Michigan as well. In fact, when the U.S. Patent 18 Office opened their first field office outside of 19 20 Washington, D.C., they did it in Detroit, Michigan because 21 more patents are filed there than anywhere in the country. 22 And given the fact that we have more engineers per capita 23 than any other area, it leads to that. So I certainly hope 24 as you are looking at innovative technology, you continue to 25 focus on a wide geographic space and understand that we have

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1 incredible capabilities throughout our country.

I recently met with General Dyass, the acting Director 2 3 of the Army's Capabilities Integration Center, as well as Dr. Thomas Russell from the Army's Acquisition, Logistics, 4 5 and Technology, to discuss the Army's robotics and 6 autonomous systems strategy. During that meeting, we discussed the challenges of fielding these capabilities 7 within troop formations and the efficacy of employing 8 autonomous and semi-autonomous systems in future conflicts. 9

10 And I know the Army's strategy calls for the investment 11 in specific technology areas over the next 5 years in 12 autonomy, robotics, artificial intelligence, as well as 13 common control.

I would just like to hear your assessment and analysis 14 15 as to the status of each of the services and the Department 16 in researching and utilizing particularly autonomy and 17 robotics.

General Selva: Thank you, Senator. 18

19 All of the services are actually quite engaged in a 20 campaign to understand where advanced artificial 21 intelligence and autonomy can be inserted into current 22 concepts of operations and how they might be used in new and 23 imaginative concepts of operations to help defeat 24 adversaries across the spectrum of potential conflicts that 25 we might find ourselves in.

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1 I am very careful in public settings about the discussion of the very specifics of some of those autonomy 2 initiatives, particularly as they relate to advanced air 3 defense and the projection of force into denied areas 4 5 because they will actually expose some of the 6 vulnerabilities we believe our opponents have and they will actually expose some of the tools that we think we can bring 7 8 to bear.

9 But if you allow me to use shorthand, it is very compelling when one looks at the capabilities that 10 11 artificial intelligence can bring to the speed and accuracy 12 of command and control and the capabilities that advanced robotics might bring to a complex battle space, particularly 13 14 machine-to-machine interaction in space and cyberspace where 15 speed is of the essence. And I will stop there at the risk 16 of exposing things that we are actually doing.

17 Senator Peters: No. I fully understand, General. The DOD directive 3000.09 governs the Department's 18 19 approach to autonomous weapons systems and is due to be 20 renewed this year, as you know. And this directive 21 specifically assigns responsibilities for the development 22 and use of autonomous and semi-autonomous functions and 23 weapons systems, including both manned as well as unmanned 24 platforms. And in doing so, the Department has stated that 25 it will not allow any robot or machine to take lethal action

without a human operator in the decision-making loop. And I
 know you are well aware of the moral and ethical issues
 associated with that.

However, our adversaries often do not consider the same 4 5 moral and ethical issues that we consider each and every 6 day. In fact, a recent article in "Defense One" highlights Russia's ambition to employ AI-directed weapons equipped 7 with a neural network capable of identifying and engaging 8 9 targets and even suggesting that Russian weapon makers see 10 robotics and AI as a key for their future sales for 11 adversaries of ours around the world.

12 So given that DOD directive is due to expire later this 13 year, can you provide us some update on the process to 14 update and renew the process and your thoughts regarding 15 what seems to be Russian developments in AI targeting? 16 General Selva: Yes, sir, I will.

First of all, there will be a raucous debate in the 17 Department about whether or not we take humans out of the 18 19 decision to take lethal action. I will tell you in this 20 forum that I am an advocate for keeping that restriction. 21 Because we take our values to war and because many of the 22 things that we must do in war are governed by the laws of 23 war, which say we must take proportional and discriminate action against an enemy to achieve our objectives, I do not 24 25 think it is reasonable for us to put robots in charge of

1 whether or not we take a human life. That does not mean that we do not have to address the development of those 2 3 kinds of technologies and potentially find their vulnerabilities and exploit those vulnerabilities to our own 4 5 defense. But publicly I think we should all be advocates 6 for keeping the ethical rules of war in place, lest we unleash on humanity a set of robots that we do not know how 7 8 to control. And that is way off in the future, but it is 9 something we need to deal with right now.

10 Senator Peters: Thank you, General.

11 Senator Inhofe: Senator Fischer?

12 Senator Fischer: Thank you, Senator Inhofe.

13 Good morning, General.

14 General, when do you expect the NPR and the BMDR to be 15 complete?

General Selva: My expectation is it will take several more months to complete the Nuclear Posture Review, and the Ballistic Missile Defense Review will follow it because the second review is actually informed by many of the strategic choices that will be made in the Nuclear Posture Review.

21 Senator Fischer: And you testified earlier this year 22 that the NPR would be examining response options to Russia's 23 violation of the INF Treaty. Is that correct?

24 General Selva: Yes, ma'am.

25 Senator Fischer: And by that, do you mean that the NPR

will describe potential response options, or will it contain
 a decision that we pursue a particular course of action?

General Selva: The design of the NPR is to provide the President with options. So we will provide him with a set of options that might be reasonable responses to the Russian activity with respect to the INF.

7 Senator Fischer: With no decision on those, just8 options?

9 General Selva: Yes, ma'am.

10 Senator Fischer: And I know that we have conferred 11 with the Russians about their violation, and what has their 12 response been?

13 General Selva: They have been mute on how they intend 14 to respond.

Senator Fischer: Have you seen any indication that they intend to come back into compliance with this treaty? General Selva: No, ma'am.

Senator Fischer: As you provide options to the President, will you be including the Russian response or non-response in those options that you give him?

General Selva: Yes, ma'am. The Russian activities are a part of the strategic environment within which we will present options to the President.

24 Senator Fischer: If they would, all of a sudden, step 25 forward and begin a dialogue with us, would that change then

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1 the options that you present to the President?

General Selva: It would likely change those options, but if the Russians step forward and said they were willing to return to compliance with the INF, we would have to have a method of actually verifying that compliance, which would require inspections of the weapons systems they have deployed.

8 Senator Fischer: So you would anticipate the options9 still would contain that they have not responded.

10 General Selva: Yes, ma'am.

11 Senator Fischer: And there has been some suggestion 12 that Russia does not really get any kind of military 13 advantage from the deployment of their ground launched 14 cruise missile. Do you agree with that view?

General Selva: Given the location of the specific missile and the deployment, they do not gain any advantage in Europe, and that is as close as I will get to agreeing with that view, ma'am.

19 Senator Fischer: Beyond the direct military 20 implications, do you believe there are broader strategic 21 implications when it comes to confronting violations of an 22 arms control agreement and that failing to respond could 23 have a negative consequence on those broader implications 24 when it comes to nonproliferation?

25 General Selva: I think, ma'am, with respect to any

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given treaty on nonproliferation, the inability to enforce
 the standards to which parties have agreed, whether
 bilaterally or multilaterally, renders all other agreements
 less compelling.

5 Senator Fischer: Can you tell us your opinion on where 6 we go from here?

General Selva: I think we should use all of the tools 7 8 that exist within the Intermediate Nuclear Forces Treaty to 9 negotiate with and try to compel the Russians to return to compliance. I am not saying that they will. We should also 10 11 take a look inside of the treaty, as we present options to 12 the President, at those research and development programs 13 that are available to us to actually increase pressure on 14 the Russians.

15 Senator Fischer: Thank you.

As you know, Russia maintains far more tactical nuclear weapons than the United States, and they are deploying more nuclear-capable sea, air, and now ground launched cruise missiles. Do you believe that the line between strategic nuclear weapons and tactical nuclear weapons is eroding, and what implications does this have for any future arms control talks?

General Selva: I think as we discuss nuclear deterrence with the Russians and now the Chinese and likely in the future other countries, we need to make very clear

1 that there is no firebreak between strategic nuclear weapons 2 and, quote, non-strategic nuclear weapons, that the use of 3 nuclear weapons in war crosses a threshold that will require 4 a response.

5 Senator Fischer: Is this advice that the present6 administration has received?

General Selva: It is the standing advice we have given
every President that I know of in recent history.

9 Senator Fischer: And do you believe that future 10 agreements must include limitations on those tactical 11 nuclear weapons?

General Selva: I think it would be a useful diplomatic exercise and useful initiative to attempt to negotiate with all holders of tactical nuclear weapons, their reduction and potential elimination to avoid the potential for miscalculation in the future.

io miscalculation in the future.

Senator Fischer: Should it be more than just an exercise? Should it be part of the goals that we are trying to attain in any treaty?

General Selva: Yes, ma'am. Let me be clear with my terms. I did not mean that as an exercise as an intellectual exercise. I meant it as an act of force of diplomacy to actually get that work done.

24 Senator Fischer: Thank you very much, General.

25 Thank you, Senator Inhofe.

Senator Inhofe: Thank you, Senator Fischer.
 Senator Heinrich?

3 Senator Heinrich: Welcome back, General.

I want to follow up on the questions on the Third Offset that Senator King and Senator warren raised, and specifically I want to talk a little bit about directed energy.

8 As the Vice Chairman of the Joint Chiefs, you have unique insight into the Joint Requirements Oversight Council 9 which identifies capability gaps for the military and 10 11 generates the requirements to fill those gaps. For the 12 purposes of things like base protection, counter-rocket, 13 counter-artillery, counter-mortar, counter-UAS, directed 14 energy weapons systems have significant advantages but seem 15 to be unable to enter the requirements setting process 16 largely because alternative kinetic options already exist.

17 What do you think is preventing the transition of these 18 technologies to the warfighter? Is it simply the pursuit of 19 perfection over fielding something today or are directed 20 energy weapons being held to a different standard?

General Selva: Thank you for the question, Senator. I do not believe they are being held to a different standard. The introduction of directed energy weapons into particularly defensive capabilities has proven a difficult task in order to produce the power and the concentration of

energy on targets to destroy them, particularly artillery and ballistic missiles. We have had significant progress in the counter unmanned aircraft systems area in bringing directed energy weapons into either defeating the sensors or defeating the actual aircraft themselves.

6 I think the promise is there for directed energy. Ιt is going to be a matter of the concentration of that energy 7 8 to have lethal effect. And so back to your original point, I do not believe we are holding the directed energy 9 technology to a different standard, but we need to continue 10 11 to investigate whether or not it does give us the advantages 12 that the technology advocates promise specifically with respect to the necessity to kill an incoming kinetic 13 14 vehicle.

Senator Heinrich: You know, I have been following this 15 16 for a long time. As you know, I started out my career at 17 Air Force research labs, and I would just encourage you to take a close look at where these are today both in terms of 18 19 high-energy lasers and high-powered microwaves. You know, 20 once you see artillery shells shot out of the sky, unmanned 21 aerial vehicles, I think we are at a point today where this 22 is ready for prime time as opposed to continuing to chase perfection. And I think the solutions that it offers avoid 23 24 many of the collateral damage issues that inherently plague 25 kinetic munitions and missiles. So I would just urge you to

sort of stay at the cutting edge of what we can offer right
 now within this technology.

I want to shift a little bit to the issue of Russia. 3 And you and I have talked before about that. But to me and 4 5 to many of my colleagues, I think the pattern of behavior 6 from Russia is painfully obvious, that they will do what it takes to achieve their objectives with very little 7 limitations. Whether it is interfering in U.S. elections, 8 9 interfering with European elections, formulating an assassination plot like in Montenegro, Russia is treating 10 11 the West right now like it is the wild, wild West with no 12 norms, no laws, no consequences.

Should there be consequences for the kind of hostile actions that we have seen from Russia both directed at the United States and at our allies in Europe?

General Selva: Senator, I believe there should be consequences. The Russians have adopted a philosophy of operating below what they believe what is the West's threshold to respond.

20 Senator Heinrich: Exactly.

General Selva: We need to understand what that strategy means and how to counter it and impose the kinds of consequences that are necessary to prevent them from being successful or to deter them from the activity in the first place. Part and parcel of that is understanding how they

1 are doing what they are doing.

2 Senator Heinrich: Absolutely.

3 Do you have thoughts on what those consequences should 4 look like if we want Russia to change their current pattern 5 of behavior?

6 General Selva: I think this is going to require that 7 we bring all of the tools of government to bear. The 8 military tool is not going to be enough particularly given 9 the kinds of circumstances where the Russians attempt to 10 operate, as I mentioned earlier, below our threshold to 11 respond.

12 Senator Heinrich: So a whole-of-government approach 13 that includes things like sanctions, that includes things 14 like the removal of properties that we have seen here in the 15 United States. We should consider all of those things 16 working in concert.

General Selva: All of those, among others, yes, sir.Senator Heinrich: Thank you.

19 General Selva: To your question on directed energy, I 20 will commit to having a meeting with the JROC and bring in 21 the technology experts who can bring us up to date to make 22 sure we are not missing something.

23 Senator Heinrich: I would deeply appreciate that. I 24 think there is a handful of projects that are sort of on the 25 shelf and ready to go right now, that there is a great deal

1 of interest in moving forward directly to the warfighter.

2 General Selva: Yes, sir.

3 Senator Inhofe: Thank you, Senator Heinrich.

4 Senator Sullivan?

5 Senator Sullivan: Thank you, Mr. Chairman.

6 And, General, congratulations on your renomination.

7 I want to talk about readiness here for a minute. From 8 2010 to 2016, the Department of Defense budget was cut by 24 9 percent, a quarter of the budget gone. Did you support that 10 drastic cut?

General Selva: Sir, I was not in the position I am in during that period of time. I was the executor of the cuts at the receiving end as both a fielded commander and a combatant commander.

My caution is those cuts hurt. They hurt not only our ability to respond with respect to purchasing new weapons systems and being ready for what we are facing today, but they also caused us to balance readiness and procurement. And because readiness is something you can defer to the future, we deferred a lot of training during that time period in order to make those numbers work.

22 Senator Sullivan: I agree with that, and I think that 23 these drastic cuts are coming home to roost in terms of 24 readiness. Do you believe that a lack of readiness can be 25 deadly for our military members?

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1 General Selva: A lack of readiness in high-end combat 2 can be deadly. It is important to understand that what we did during that time period was focus on the fight that was 3 right ahead of us. So we made sure our forces were ready to 4 5 deploy to the places they were going, and we deferred most 6 of the high-end training, the complex maneuver exercises, the joint exercises that make us ready to face peer 7 8 competitors.

9 Senator Sullivan: Let me just go into more specifics. 10 There was an article in the "Marine Corps Times" a year and 11 a half ago. It talked about Marine Corps aviation and how 12 the lack of readiness is not only harmful to our national 13 interests but it is actually threatening the safety of our 14 aviators. When they are not able to fly, the article said, 15 more Marine aviation-related deaths are going up.

We had a horrible, horrible accident just 2 weeks ago with the C-130 refueler. 16 brave souls were killed in that.

What are we doing about those kind of training accidents that in my view are undermining the ability of the force to operate and risking the lives of the men and women who volunteer to defend their country? It is outrageous. General Selva: First of all, Senator, I mourn the loss of the 16 marines last week as well. But it is way too

25 premature to make any conclusions about the cause of that

accident. And in deference to the bravery of those 16
 marines, I think we should reserve judgment on whether or
 not training was an issue in that accident.

4 It is common among aviators, of which I am one, that 5 training does have value in increasing the safety and 6 efficacy of our force. So during those time periods where we compromise on training, we do assume risk. That is a 7 8 consequence of having to balance within a budget that we are given to operate. So I think we should be careful about 9 10 making conclusions about last week's accident or using a 11 single article to make conclusions about the viability of 12 training for aviators inside the Marine Corps.

Senator Sullivan: Well, in 2015, Marine aviationrelated deaths hit a 5-year high. And something needs to change. And to me, it relates to training. Are our aviators in the Marine Corps and Air Force flying less hours right now?

18 General Selva: Sir, I am not disputing that we need to 19 focus on training and safety within all of our aviation 20 services. Please do not get me wrong. With reference to 21 the specific accident we are talking about --

22 Senator Sullivan: I am not talking about that. That 23 is an example of what is happening too often, and I think it 24 relates directly to a 25 percent decline in military 25 spending. Nobody talks about this Congress approved that

the previous administration cut a quarter of the defense
 budget.

General Selva: It is reasonable to draw the conclusion that reductions in training are potentially the cause of an increase in the risk we take to do the work we do.

6 Senator Sullivan: Let me ask just a follow-up on Chairman Inhofe's question about North Korea. The testimony 7 8 in front of this committee has been consistently in an open setting it is no longer a matter of if but when Kim Jong-un 9 10 is going to have an intercontinental ballistic nuclear 11 missile that can threaten not just Alaska, my State, and 12 Hawaii, Senator Hirono's State, but the entire Lower 48 13 continental United States.

Can you describe succinctly what our North Korea strategy is, what the goal is, and how we are trying to achieve it, and how we in the Congress can help you? Is the goal to prevent at all costs Kim Jong-un having that capability? Because, as you know, General, he is rapidly, rapidly getting it. What is the goal. What is the end state? And how can we support it?

General Selva: Senator, I think we have to have two parallel lines of effort. The first is to attempt diplomatically and militarily to prevent him from achieving his goal of having a nuclear weapon on an intercontinental ballistic missile.

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Senator Sullivan: And would we preemptively launch
 military operations?

General Selva: I think we have to entertain that potential option. That would be a policy choice by the President of the United States to execute or not execute that option.

7 Senator Sullivan: Which would need the authorization8 of Congress. Do you believe that?

9 General Selva: We would. And we need to think
10 seriously about what the consequences of that action might
11 be.

12 A parallel line of effort is to make sure that as he continues along a path to developing weapons that can strike 13 the continental United States, that we have a parallel 14 15 effort to provide for the defense of the United States with 16 a suitable ballistic missile defense system that can handle the low volume at this point of missiles that he might be 17 able to deploy that could strike us here across all of U.S. 18 19 territory, Alaska, Hawaii, and the Lower 48.

20 Senator Sullivan: Thank you.

21 Thank you, Mr. Chairman.

22 Senator Inhofe: Thank you, Senator Sullivan.

23 Senator Hirono?

24 Senator Hirono: Thank you, Mr. Chairman.

25 And, General, it is good to see you again. Thank you

1 very much for your continuing service.

As we sit here discussing the threats posed by both 2 Russia and North Korea, they are two very different 3 countries that we try to figure out what is it going to take 4 5 for us to alter the behavior of both of these countries. 6 In the case of Russia, it appears as though maintaining sanctions and possibly imposing more sanctions has some kind 7 8 of salutary effect. Would you agree with that? General Selva: Yes, ma'am. I think in concert with 9

10 our NATO allies and other partners, that targeted sanctions 11 on Russia do actually have effect and can affect their 12 behavior.

13 Senator Hirono: It is a lot harder to figure out what 14 will incentivize North Korea to alter their push to become a 15 nuclear power. So we seem to be placing a lot of emphasis 16 on our hope that China will play a pivotal role in reining 17 in North Korea's ambitions. Do you think that we are placing too much emphasis on China? And if so, you 18 19 mentioned diplomatic solutions or diplomatic approaches. Ι 20 do not know that we even have a confirmed ambassador to 21 South Korea, for example.

What are your thoughts about what more we can do, i.e., to incentivize China to do more with regard to North Korea or for us to pursue some other avenues, long shots as they may be, because Kim Jong-un does not appear to respond to

1 the usual approaches?

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General Selva: Thank you, ma'am.

I think the work that is being done to pressurize the situation with respect to North Korea in terms of economic sanctions and broad trade sanctions is helpful. It is also quite useful to get the Chinese to do whatever they can diplomatically and use whatever leverage they have.

A point that is not lost on me and I do not think on 8 any of you is the fact that Kim Jong-un, who has possession 9 10 of nuclear weapons that can threaten the United States, 11 clearly has possession of weapons that could threaten his 12 relationship with China and fundamentally change the power structure in the region. And that makes a Kim Jong-un armed 13 14 with nuclear weapons a threat to China as well. I think we 15 should leverage as much of that as we can to try and get the 16 Chinese not only to work on what they believe is maintaining 17 the stability of North Korea, but to put pressure on him not to deploy nuclear weapons should he continue their 18 development. And I think that accrues to our benefit 19 20 because it avoids open conflict with North Korea, although 21 we need to continue to be prepared in the event that they 22 are not successful.

23 Senator Hirono: So do you think that our best bet with 24 regard to North Korea is to come to a much better 25 understanding with China? Because you say that economic

1 sanctions has an impact on North Korea, although it is hard 2 to see that as having much of a deterrent effect at all. 3 And we all recognize that, yes, a nuclear-armed North Korea 4 is a threat to China, but it is very hard to tell when China 5 will deem that there has been a tipping point reach with 6 regard to North Korea where some kind of a much more 7 concerted effort will come into play.

8 Do we have the kind of relationship with China right 9 now that will enable us very quickly to identify what I 10 would deem a tipping point and do something in a concerted 11 way with the U.S. and China?

General Selva: I can only give you an assessment as an observer of the activities of the State Department and our Secretary of State. They are giving a tremendous amount of effort to building that relationship with China. The early indications were that China was willing to put pressure on North Korea, although we have not seen that pressure be successful.

19 Senator Hirono: Well, I am keeping my fingers crossed. 20 With regard to the Asia-Pacific region, there are some 21 who argue that or observe that we do not have a current 22 overarching strategy to address the challenges in this part 23 of the region, which has some of the largest militaries and 24 four of the five most significant threats to the U.S. are in 25 the Asia-Pacific area. So do you agree that we do not have

an overarching strategy to address the challenges in the
 Asia-Pacific arena?

General Selva: I do not agree that we do not have a 3 4 strategy. The question is whether the critics of that 5 strategy believe it is fulsome enough to deal with the 6 threats of a resurgent North Korea, an emerging China, and a resurgent Russia, three of the principal threats in the 7 8 region, in addition to violent extremism. 9 Senator Hirono: I am running out of time, General. So if we do have a strategy, very succinctly what is that 10 11 strategy with regard to the Asia-Pacific threats? 12 General Selva: We manage some of our longest standing 13 alliances in the Pacific with Japan, Korea, the Philippines, 14 Thailand, and others. We have relationships with Australia, 15 New Zealand, and likeminded nations that are putting 16 pressure on China not to destabilize the region. Those are not specifically aimed at North Korea, but they could be. 17 We are a nation that exists on trade and economic 18 19 relationships in the region and very strong diplomatic 20 relationships and alliances across the Pacific. Those are 21 the sum pieces of the strategy without actually trying to 22 outline all of it.

23 Senator Hirono: Thank you.

24 Thank you, Mr. Chairman.

25 Senator Inhofe: Thank you, Senator Hirono.

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Senator Wicker?

2 Senator Wicker: Thank you, Mr. Chairman.

Thank you, General Selva. I appreciate you being here. There is a lot of bipartisanship on this committee, and I think you know that based on the legislation that we are putting forward. And the senior Senator from Hawaii serves as ranking member of the Seapower Subcommittee, a committee that I have the honor of chairing.

9 We recommended to the full committee and this committee 10 has reported language which is contained in the SHIPS Act 11 which sets as a policy of the United States of America that 12 we move to a 355-ship fleet. The House of Representatives 13 has also taken this issue up and has put that in their bill, 14 and that bill is further along over there than here.

15 This 355-ship requirement, General -- and I hope you 16 will take this back to the Joint Chiefs of Staff. This 355ship requirement is not something the shipbuilding industry 17 came up with, although I am sure they are delighted about 18 19 It is not something that we invented as people in it. 20 States that build ships, although we would like to see the 21 idea of defending our Nation and military manufacturing. 22 This is a requirement that came from the people out in the 23 field looking at the seas and saying what do we need to make 24 America safe at this particular time. And basically they 25 took the requirements, sent them in, and it was way more

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1 than 355. It was about twice that much. And then they 2 said, resource-constrained, what should be the requirement? 3 And so the considered opinion of the best minds in the 4 military came up with the 355.

I just want to emphasize to you before I ask another question that we take that requirement seriously. And we have been in a position this year, both in the House and Senate committees, to give you what you need, and we want to communicate to you that we take this seriously and we want to be your partner there and actually give substance to what has been stated as the requirement. So please know that.

12 Now, also in the area of bipartisanship, I want to applaud what Senator Heinrich said about Russia. And I 13 14 think I am quoting him correctly. Russia will do whatever 15 they feel is necessary and they look at the threshold of 16 what we in the West are sort of willing to tolerate and kind 17 of stay under that threshold. That has been a pretty good strategy for President Putin. And I am getting tired of it. 18 19 And I hope the American people and the Pentagon and this 20 committee are getting tired of it because it threatens 21 international security.

Now, you answered a question to Senator Ernst about providing lethal weapons to Ukraine. And as I understand it, in eastern Ukraine, the Government of Ukraine has troops there, and they are engaged in kinetic activity against

Russian-backed forces. Is that correct, General Selva?
 General Selva: Yes, sir, that is correct, along the
 line of contact between the Donbas and the rest of the
 Ukraine.

Senator Wicker: And would it be helpful to those
Ukrainian troops if they had better lethal weapons in which
to defend their country and defend the Government of
Ukraine?

9 General Selva: Sir, that is a policy choice. The 10 kinds of lethal defensive weapons that have been advocated 11 for Ukraine would allow them to defend themselves along the 12 line of contact against those forces supported by the 13 Russians.

14 Senator Wicker: And so there is a discussion among the 15 Joint Staff about this I understand from your earlier 16 answer. And you are working with the European Command to 17 identify what types of weapons are necessary. So when can 18 we expect a decision about that, and how can we be helpful 19 in exhorting our government to provide the kind of weapons 20 that I think Senator Ernst and I and others are advocating? General Selva: Sir, those discussions are ongoing. So 21 22 I think within the coming months you will have an answer to 23 that question. But we have advocated, for example, for 24 lethal means like anti-tank weapons, so not tanks and 25 offensive capability, but defensive capability --

Senator Wicker: We have advocated. Who is the "we"
there?

General Selva: We being the European Command and theJoint Staff.

5 Senator Wicker: Now, months. It could be 11 months. 6 It could be 2 months. Can you give us a little more 7 specific idea of when we might actually be able to make a 8 decision and do something that would help these people 9 defend themselves and stand up to the sort of activity that 10 Senator Heinrich was talking about in his question?

General Selva: Sir, if I can take that back and get you the actual timeline for the discussions. I do not have it with me, but I am happy to do that.

14 [The information follows:]

15 [COMMITTEE INSERT]

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1 Senator Wicker: Okay. Well, thank you very much. And 2 please be advised that this Senator for one thinks that it 3 is time for us to give these people what they need to defend 4 their own country. Thank you, sir.

5 Senator Inhofe: Senator Wicker, let me add that 6 currently the Oklahoma 45th Guard is over there training 7 them, and they are a little bit perplexed on what they are 8 training them with. Excellent question.

9 Senator Blumenthal?

10 Senator Blumenthal: Thank you, Mr. Chairman.

11 I want to follow those questions asked by my colleague 12 from Mississippi, and first to overwhelmingly endorse his view -- and I have championed it on this committee -- that 13 14 this Nation should be providing the kind of lethal defensive 15 weapons, including anti-tank armaments, that are necessary 16 for the Ukrainians to defend their own nation. You would agree with me that they are defending their nation against 17 Russian aggression. Correct? 18

19 General Selva: Yes, sir. They are defending their 20 sovereignty.

21 Senator Blumenthal: And you said I think a moment ago 22 that the question of whether to provide that type of 23 weaponry is a policy choice. But perhaps you can tell us in 24 as graphic terms as possible what the difference it would 25 make if we provide those kinds of weapons to the Ukrainians.

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They would be far more effective on the battlefield in
 defending their country. Correct?

General Selva: Yes, sir. And let me make sure that I am clear on the discussion of the policy question. The policy question is not whether or not to provide lethal defensive assistance but the kinds and quantities of that lethal defensive assistance to the Ukrainians so that they can defend their sovereignty.

9 Senator Blumenthal: Maybe you can give us some10 examples of that choice.

General Selva: How advanced would the anti-tank weapons be and in what quantities would they be delivered as an example of that conversation.

14 Senator Blumenthal: Why not give them the most 15 advanced kind of anti-tank weapons or the most advanced kind 16 that they need to counter -- why give them second rate anti-17 tank weapons?

General Selva: So I do not want to be argumentative. 18 19 Some of the weapons that we have have technology controls on 20 them that we do not transfer them to other countries unless 21 we can have assurances that the technology will not be 22 exploited. Even in your question, you actually qualified by 23 saying the lethal capabilities they need versus the best 24 possible available. And that is the policy choice we have 25 to make with respect to the types and amounts of aid that we
1 provide.

2 Senator Blumenthal: And I would agree with you that we 3 should not transfer technology that could be compromised or 4 that could be captured by our Russian adversaries. And they 5 are our adversaries too. But I just want to join in the 6 expression of impatience, very strong impatience with the 7 delays that we seemed to have encountered.

8 And I met just last Sunday with a group of Ukrainian 9 Americans who, in effect, said to me, you know, you have 10 been coming to us saying these weapons are going to be 11 provided. Is there some kind of barrier or obstacle? And I 12 am at a loss to give them the kind of answer they deserve. And I think we are at a loss to understand what the barriers 13 14 or obstacles are. And I am not directing this question or 15 my impatience at you personally because I recognize there 16 are other factors at issue here.

With respect to Russian interference in our elections, you have no reason to question the overwhelming unanimous views of the intelligence community that they interfered in our elections. Do you?

General Selva: I have no reason to question their views, but I have no firsthand knowledge of the information that they are examining.

24 Senator Blumenthal: And would you agree with me that 25 having some kind of cybersecurity pact with the Russians

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1 seems foolhardy at best?

2 General Selva: Not having the details of the potential agreement, it is hard for me to say that they would be any 3 more reasonable about a cyber pact than they are about INF 4 5 or any of the other treaties without some ironclad method of verification and validation of their intentions. So it is 6 worth a conversation. The question is without any detail, 7 8 we are having a hypothetical discussion about whether or not 9 they would comply.

Senator Blumenthal: Their record in the cyber domain is one of attacking this Nation. Would you agree?

12 General Selva: Yes, sir.

Senator Blumenthal: So sharing any information with them is just going to give them additional, in effect, keys to our cyber kingdom.

16 General Selva: If that is the foundation of such an 17 agreement, that would be true.

18 Senator Blumenthal: Well, any kind of information 19 sharing would be involved in a pact or agreement, and it 20 seems highly foolhardy and dangerous to our national 21 security.

General Selva: Again, without the context of the actual agreement, it is hard to know what information would or would not be shared.

25 Senator Blumenthal: Thank you.

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I want to end where I should have begun by thanking you for your service and congratulations on your reappointment and your new position. Thank you very much, sir.

4 Senator Inhofe: Senator Graham?

5 Senator Graham: Thank you.

General, I want to echo that too. You have served welland I look forward to keeping you in the job.

8 I associate myself with Senator Wicker and Blumenthal9 and Inhofe about helping the Ukraine.

Do you agree that given the threats we face -- and we have just been talking about a few of them -- the Air Force needs to be bigger and more capable in the out-years? General Selva: Yes, sir. And I believe that is the proposal that the Chief of Staff of the Air Force and the Secretary brought forward in the last budget.

16 Senator Graham: Thank you.

17 Let us talk about three battlefields right quickly.
18 Iraq. Do you support a residual force once ISIL is defeated
19 in Iraq, if the Iraqis would agree, of U.S. forces?

20 General Selva: Yes, sir. If the Iraqis will agree, we 21 will likely need to do continued advising and assisting and 22 training of the Iraqi Security Forces.

23 Senator Graham: Is that true for the Air Force
24 particularly?

25 General Selva: Yes, sir.

Senator Graham: The Iranians are there in fairly large
 numbers I hear. Is that correct? Or having influence in
 fairly substantial ways.

General Selva: As a consequence of a long relationship
between Iraqi Shia and the Iranian Government, there are
Iranians present in Iraq. That does not mean that they
necessarily have to be a controlling influence in Iraq.
Continuing to build our relationship with the Iraqi
Government and the Iraqi Security Forces I believe is in our
interests.

Senator Graham: Well, offering Iraq something they would want from us not from Iran like helping train the Air Force would probably give us leverage in Iraq.

14 General Selva: It quite possibly would, yes, sir.
15 Senator Graham: Afghanistan. What is the state of the
16 Afghan Air Force in terms of the capability to support their
17 forces in the field?

General Selva: They are beginning to be able to 18 19 support their forces in the field with a modicum of lift and 20 with light attack aircraft, which are very useful in the 21 theater. Their helicopter force is subject to the 22 maintenance woes of old Russian aircraft. So we have a 23 proposal in place to actually replace their aging Russian 24 vintage helicopters with UH-60's. Those are the helicopters 25 that the Afghan Air Force trains on here in the United

1 States.

2 Senator Graham: Until that happens, do you agree that 3 it would be in our interest to provide some air power that 4 is missing to the Afghan Security Forces as they fight 5 international terrorists?

General Selva: Yes, sir, particularly as a bridge to
their capability to provide long-term support for their
ground force.

9 Senator Graham: Do you support additional troops going10 into Afghanistan?

General Selva: I think that would be a determination of what specific tasks those forces would be doing, but as we look at Afghanistan today --

14 Senator Graham: Counterterrorism would be --

General Selva: Counterterrorism would be one of those missions. Supporting the Afghan National Security Forces with train, advise, and assist would be another one of those missions.

19 Senator Graham: And have some air power at their

20 disposal they do not have today?

21 General Selva: Yes, sir.

22 Senator Graham: Syria. The day we take Raqqa back, we
23 better have a plan post-Raqqa. Right?

24 General Selva: Yes, sir.

25 Senator Graham: What role do you think the United

States should play in terms of stabilizing Syria when Raqqa
 falls?

3 General Selva: It is actually I think a bigger task 4 than that, Senator. Ragga is the current center of external 5 planning for ISIS in Syria, but they have already begun a 6 migration towards the middle Euphrates Valley. So until we have worked either by, with, and through partners on the 7 8 ground or the Syrian Government shows a willingness to actually deny sanctuary to ISIS, they will continue to be a 9 threat to stability in Iraq and in the region. So we will 10 11 not be done when we are done in Ragga.

12 Senator Graham: A very good point.

13 Air power is being deployed in Syria against ISIL14 today. Right? American air power?

General Selva: American and coalition air power from 69 nations are being used in Iraq and Syria today, as well as a very small number of ground forces that are providing advice and assistance to those elements that are willing to fight ISIS in Syria.

20 Senator Graham: Would you be open to adding more air 21 power into Afghanistan? I was shocked to hear the number of 22 F-16's we have was pretty small.

General Selva: I would have to look at the numbers, to be honest with you, Senator. The capacity of those airplanes to range most of Afghanistan and to service the

1 targets in Afghanistan with the help of tankers and bombers 2 from the Gulf is actually a pretty compelling amount of air 3 power in the region, as we speak. 4 Senator Graham: Well, when I left, I was shocked at 5 the few that we had given the task that we face in 6 Afghanistan. 7 So from the American military point of view, a lot of

8 hard fighting yet to be done in Syria, Iraq, and 9 Afghanistan?

10 General Selva: Yes, sir.

11 Senator Graham: Can you see a scenario where American 12 air power is not absolutely essential to deciding the

13 outcome of these battles?

14 General Selva: No, sir.

Senator Graham: Thank you very much. And to all those who serve in the Air Force, thank them.

17 General Selva: Thank you, sir.

18 Senator Inhofe: Thank you, Senator Graham.

19 Senator Cruz?

20 Senator Cruz: Thank you, Mr. Chairman. I will say at 21 the outset that our thoughts and prayers are with Chairman 22 McCain as he recovers from his surgery, and we look forward 23 to his being back at the committee very soon.

General, thank you for your service.

I want to talk to you about several different topics,

1 but I want to start with the Iran certification.

Yesterday, the administration certified to Congress that Iran is in compliance with the nuclear deal. I have very significant concerns with that certification. I want to ask you in your judgment do you believe Iran is in compliance with the deal?

General Selva: Based on the evidence that has been presented by the intelligence community, it appears that Iran is in compliance with the rules that were laid out in the JCPOA.

Senator Cruz: Are they testing ballistic missiles?
 General Selva: They are testing ballistic missiles,
 but those were not covered under the agreement.

Senator Cruz: How serious do you assess the threat of Iran developing nuclear weapons?

General Selva: I think without the controls of the JCPOA, Iran has the technical expertise to be able to continue down the path to development of nuclear weapons.

Senator Cruz: As you know, a similar deal was negotiated with North Korea in the Clinton administration, and it resulted in North Korea acquiring a substantial number of nuclear weapons. What do you believe makes this deal likely to result in any outcome different from what happened in North Korea?

25 General Selva: I think there are two substantial

differences at the outset. That does not mean that will not be setbacks in the agreement. The first is the inspection regime that went into the agreement that allows for international inspectors to inspect all of the areas that the Iranians used in their development and storage of enriched uranium and potentially the development of nuclear weapons. The second is --

8 Senator Cruz: How much advance notice does Iran get9 before those notifications?

10 General Selva: I do not have the details of how much 11 advance notice they get, but we are reasonably confident 12 that the inspectors are able to randomly inspect. And they 13 have installed technical measures that allow for constant 14 surveillance of those same sites.

The second is the provisions that allow for sanctions outside of the agreement to continue to be in place on those areas of the Iranian economy, as well as leadership that engage in activities that are not governed by the treaty -or by the agreement. It is not a treaty.

20 Senator Cruz: So last week we also discovered that 21 Iran had sentenced an American citizen and a Princeton 22 graduate student to 10 years in prison. Does it concern you 23 that we are certifying they are in compliance with the deal 24 in the wake of their imprisoning yet another American? 25 General Selva: It concerns me whenever an American

citizen is imprisoned overseas, particularly in a regime that is not transparent with their judiciary system. But again, the specifics of the agreement are directed explicitly at the development of and storage of nuclear weapons.

Senator Cruz: Well, we will continue this 6 conversation, but I will say that I think the Iran deal is 7 wholly inadequate. The inspection regime is designed to 8 facilitate cheating. It requires effectively 3 weeks 9 10 advance notice, and for the most sensitive sites, the 11 Iranians self-inspect. And the American people received 12 numerous assurances that North Korea would abide by an 13 agreement very, very similar to this, and North Korea, Kim 14 Jong-il, happily took the billions of dollars the Clinton 15 administration sent to them and used it to develop nuclear 16 weapons. I believe the Ayatollah Khamenei intends to do the 17 exact same thing.

And I think the certification yesterday was unfortunate 18 19 and is dangerous. There is another certification that is 20 due in October I believe, and there is also an upcoming 21 deadline for waiving sanctions. And let me say I would urge 22 the administration there is no greater threat on the face of 23 the earth to the United States than the threat of a nuclear 24 Iran. And I think the certification yesterday was very hard 25 to justify with the facts on the ground.

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Let me shift to another topic. There is right now a
 disagreement going on between the Department of Defense and
 the House Armed Services Committee concerning whether a
 separate military branch should be created for space. I
 would be interested in your thoughts on that question.
 General Selva: Thank you, Senator.

I do not believe now is the right time to have a discussion about developing a space force with all of the leadership and infrastructure that would go with it. It would also complicate the command and control of the space constellation which is critical to our military operations. So I believe the time is not right for a conversation about a separate space corps or space force.

14 Senator Cruz: So how do we do a better job defending 15 ourselves in space, given the vulnerabilities and our 16 dependence on satellite technology for virtually every 17 aspect of our military?

18 General Selva: Senator, I think there are three things 19 that we need to do. Actually two are in progress. One is 20 in work.

The first was the consolidation of our national military defense of space in a single command and control center in Colorado Springs that allowed us to operate the entire constellation as opposed to satellites in the aegis. The National Defense Space Center I believe it is called is

1 functioning at Schriever Air Force Base in Colorado as we 2 speak.

3 The second is to vest the Commander of Air Force Space Command with the components and responsibilities to manage 4 5 the entire constellation vice trying to manage it through 6 subcomponents of his own headquarters. USSTRATCOM, under General John Hyten's leadership, has implemented that change 7 8 in the command and control arrangements just in the last few months. It is time to let that play out and see if we can 9 get some efficiencies out of it. 10

And the third is to continue to vest in the Secretary of the Air Force the acquisition authority for satellite constellations that are critical to military defense.

14 Senator Cruz: Thank you, General.

15 Senator Inhofe: Thank you, Senator Cruz.

16 Senator Nelson?

17 Senator Nelson: Thank you, Mr. Chairman.

18 At the outset, I want to say on behalf of so many of us 19 that have not had a chance to register our wishes that 20 Chairman McCain have a speedy recovery and return as quickly 21 as possible.

You know, you have had, General, an extraordinary career, very distinguished. I suspect that there is not a problem in the world with you continuing that service, and I thank you for your willingness to be able to do it.

1 Because of that experience, do you want to comment on the fact that Russia has a history of meddling in other 2 3 people's elections going way back, as far back as what we 4 saw and what they did in Georgia, what obviously we have 5 seen that they have done in Ukraine and using cyber? I am 6 asking this for your perspective because I think Putin understands he cannot beat us on land. He cannot beat us in 7 8 the air. He cannot beat us on the sea or under the sea, and he cannot beat us in space. But he thinks he can beat us in 9 cyber. And he has had a number of successes going back to 10 11 Georgia, Ukraine, now in the European elections, several 12 European countries.

13 So do you want to comment about how serious this cyber 14 attack problem from Russia is, including our own country and 15 the attacks that we have seen here?

16 General Selva: Thank you, Senator.

I indicated earlier that I do not have any firsthand 17 knowledge of the Russian activity that is alleged in our 18 19 elections from the intelligence community. However, as a 20 person who has spent a lot of time thinking about the 21 security of the data that represents our electoral system, I 22 think we ought to think very carefully about how we protect 23 that data and how we use that data to facilitate the 24 democratic process in our United States.

25 An example that I have used publicly and, if you will

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1 forgive me, I will use now is it is much easier to tamper with registration data than it is to tamper with voting 2 So if I wanted to complicate an American election or 3 data. I wanted to complicate an election anywhere in the world, I 4 5 would simply make it more difficult for people to vote as 6 opposed to trying to get in after the fact and change the record of their votes. And so as we look at our system, 7 8 which is distributed across 50 States and every precinct and municipality in those 50 States, we need to be really 9 10 careful that we do not make the assertion that that 11 inherently distributed system is protected because of its 12 diversity and distribution.

So I think we as a Nation ought to think carefully 13 14 about the value of the data on all of us, our voting records 15 in terms of how we register and where we register, and how 16 protecting that matters for future elections. And that way 17 no one, not Russia, not China, not anybody else who wants to intervene in an election will have the capacity to change 18 19 our willingness and ability vote and our willingness and 20 ability to vote our conscience for those democratically 21 elected leaders of our country.

22 Senator Nelson: So, for example, it could be something 23 as simple as going into the registration records and 24 deleting registrations. So a person shows up and they say, 25 Mr. Jones, I am sorry you are not registered. Show up on

1 election day or something as easy as going in and changing addresses so that it fouls up the registration system of 2 what precinct that you are in. It could be something as 3 simple as this, and it would hugely complicate, especially 4 5 in a place like Florida that has had tremendous complications with its voting, which has produced long lines 6 that are sometimes as long as 7 hours. And that is recent 7 8 history, by the way. You can imagine with people trying to contest the fact that they show up on election day and they 9 say they are not registered and they know they are and they 10 11 are trying to prove that they are and how that would foul up 12 all of the other voters standing in line. It is an 13 extraordinary and scary thought.

14 And since I am the last one here seeking recognition, I 15 just want to ask you another question. What is your 16 experience? Would you share with the committee your 17 experience where your own privacy has been invaded on your personal accounts? Is that something that you feel 18 19 comfortable in sharing? I think it would be very helpful 20 for the committee to either know that publicly or privately. General Selva: Yes, sir. I would share this small 21 22 amount of information publicly.

Immediately following the OPM breach, where significant amounts of personal identifying information were made available through a loss of data, about 48 hours later I was

locked out of one of my bank and investment accounts as a consequence of a third party attempting to enter that account using information that was likely garnered from that personally identifying information that was the consequence of the OPM breach. I subsequently received a letter from OPM that notified me that my personal data was, in fact, part of the breach. And so that is an example.

8 I can guarantee you for that hour and a half to 2 hours 9 it took for me to work with my bank and brokerage company to 10 make sure my data and my investments were secure that my 11 attention was not entirely devoted to the task at hand, 12 which was being the Commander of the United States 13 Transportation Command.

Senator Nelson: And are you aware that that has happened to other high-ranking United States military officers?

17 General Selva: Yes, sir.

18 Senator Nelson: I think that states it, Mr. Chairman.
19 Thank you.

20 Senator Inhofe: Thank you, Senator Nelson.

21 Senator Reed, did you want to add anything?

22 Senator Reed: No.

23 Senator Inhofe: Well, let me say, General Selva, you 24 have been an excellent witness. We appreciate very much 25 your straightforward answers, and we thank you for your

1	service.
2	And we stand adjourned.
3	[Whereupon, at 11:22 a.m., the hearing was adjourned.]
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