

Stenographic Transcript
Before the

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

UNITED STATES CYBER COMMAND

Thursday, February 27, 2018

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1 HEARING TO RECEIVE TESTIMONY ON
2 UNITED STATES CYBER COMMAND IN REVIEW OF THE
3 DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2019
4 AND THE FUTURE YEARS DEFENSE PROGRAM

5
6 Tuesday, February 27, 2018

7
8 U.S. Senate
9 Committee on Armed Services
10 Washington, D.C.
11

12 The committee met, pursuant to notice, at 9:30 a.m. in
13 Room SH-216, Hart Senate Office Building, Hon. James M.
14 Inhofe, presiding.

15 Committee Members Present: Senators Inhofe
16 [presiding], Wicker, Fischer, Ernst, Tillis, Perdue, Sasse,
17 Reed, Nelson, McCaskill, Shaheen, Gillibrand, Blumenthal,
18 Donnelly, Hirono, Kaine, King, Heinrich, Warren, and Peters.
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1 OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S.

2 SENATOR FROM OKLAHOMA

3 Senator Inhofe: The committee meets today to hear
4 Admiral Mike Rogers -- you know, you have more titles than
5 anybody else down here, you really do -- as the Commander of
6 the --

7 Admiral Rogers: I have that going for me, sir.

8 Senator Inhofe: -- Commander of the U.S. Cyber
9 Command, Director of the National Security Agency, and Chief
10 of the Central Security Service. And, given your upcoming
11 retirement, it might be this is the last time you'll be
12 dropping in. Is -- do you think that will happen? We'll
13 miss you.

14 Well, the -- as the recent National Defense Strategy
15 identified renewed great power and competition with Russia
16 and China -- and that kind of stands -- goes along with what
17 General Dunford said when he said that we are losing our
18 qualitative and quantitative edge as we move into this 32 --
19 or, this 23 National Defense Strategy. As we approach the
20 eighth anniversary of Cyber Command, we should recognize the
21 remarkable progress you've made in taking what was a very
22 niche warfighting concept and establishing around it a full-
23 fledged warfighting command. Later this year, we anticipate
24 that you will achieve full operational capability of -- for
25 the 6,200-person Cyber Mission Force.

1 Despite the many successes, there are still significant
2 challenges. The committee remains concerned about a hollow
3 cyber force due to the lack of priority across the services
4 to deliver the required tools and capabilities and
5 personnel. Efforts have improved, but the fact remains that
6 we have not -- are not where we need to be, and that we lack
7 the bench strength necessary.

8 And the other area -- and then I'll have some questions
9 about this during our question time -- is the fact that
10 we're at -- I think, at somewhat of a disadvantage with
11 responsibilities that are spread, as I mentioned to you a
12 few minutes ago, across DOD, DHS, and the FBI, with little
13 semblance of coordination. We can't just wait for a major
14 cyberattack and then try to get this thing right. If we
15 look at some of the other countries, that they have got this
16 more centralized and coordinated. So, we need to address
17 that to see if maybe we've got some improvements that we can
18 make structurally.

19 Senator Reed.

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1 STATEMENT OF HON. JACK REED, U.S. SENATOR FROM RHODE
2 ISLAND

3 Senator Reed: Well, thank you very much, Mr. Chairman.

4 And, Admiral Rogers, welcome. And since we are holding
5 the confirmation hearing for your successor later this week,
6 this is likely your last appearance before the committee.
7 Let me thank you for decades of service to the country, to
8 the NSA and Cyber Command. You've done an extraordinary
9 job. Thank you, sir.

10 One of the great threats facing our democracy is
11 influence operations, a type of information warfare which
12 are mostly conducted through cyberspace, the domain and
13 theater of operations of Cyber Command. Russia engaged in a
14 sophisticated influence campaign during the 2016 election
15 cycle. China has been engaged in information operations
16 against their own citizens in order to control their access
17 to information and their behavior, and is becoming more
18 active abroad. They have also engaged in massive theft of
19 intellectual property conducted against U.S. companies for
20 their own economic gain. North Korea's attack on Sony
21 America was an attempt to silence an entertainment company
22 from exercising its right to free speech and thereby send a
23 message across the world. These efforts by our adversaries
24 highlight some of our vulnerabilities in this area, which I
25 hope you will address today.

1 While our adversaries are freely conducting
2 information operations, Cyber Command is still predominantly
3 designed to conduct technical operations to either defend or
4 attack computer systems, to sustain or impede the function
5 of computers and networks. It is not built to deal with the
6 content of the information flowing through cyberspace with
7 the cognitive dimension of information warfare. Cyber
8 Command has made important strides in the last year in the
9 cognitive dimension in the struggle against ISIS, but still
10 has a long way to go, and must also focus on the strategic
11 level of engagement, not merely an operational tactical
12 support to engage forces.

13 Other organizations and officials in the Defense
14 Department are responsible for what the Department calls
15 "psychological and deception operations." But, those
16 officials and departments, in turn, have no expertise or
17 capabilities in the technical aspects of cyberspace
18 operations. This is a serious handicap when we are
19 confronted with adversaries, like Russia, that conduct
20 information warfare that combines the technical and
21 cognitive dimensions to manipulate perceptions through
22 cyberspace. Because we have separated these things
23 organizationally and in terms of policy and strategy, we are
24 greatly disadvantaged when it comes to countering an
25 adversary's integrated operations and when it comes to

1 conducting our own information operations through
2 cyberspace.

3 The FY18 NDAA included a provision, cosponsored by
4 Senator McCain and myself, which directs the Secretary of
5 Defense to designate a senior official to lead the
6 integration of all Defense Department components and
7 capabilities that contribute to information warfare, and to
8 develop specific strategies, plans, and capabilities to
9 operate effectively in this arena to counter and deter
10 adversaries. I'm eager to learn how Cyber Command is
11 responding to this legislation.

12 As stressed in the newly released National Defense
13 Strategy, Russia and other adversaries have mastered the art
14 of conducting a systematic aggression against the United
15 States and its interests and allies by staying just below
16 the level that would be considered armed aggression or an
17 act of war. As the DNI testified recently to the Senate
18 Intelligence Committee, adversaries are using cyber
19 operations to achieve strategic objectives, and will
20 continue to do so unless they face clear repercussions.
21 Adversaries are achieving strategic effects incrementally by
22 applying constant pressure through cyberspace against the
23 sources of our national power.

24 In addition to tools such as sanctions, diplomacy,
25 indictments, and public shaming, we must meet not only

1 Russia, but all adversaries, where the struggle is taking
2 place in the information sphere. As part of this, we need
3 to engage in blunt information operations against us at
4 their source by disrupting them in cyberspace as they
5 unfold.

6 The National Mission Teams of the Cyber Mission Force
7 were created to conduct exactly these missions. According
8 to Defense Department's official cyberstrategy, the National
9 Mission Teams were created to defend the country by
10 disrupting ongoing cyberattacks of, quote, "significant
11 consequence." Some of these influence operations in
12 cyberspace are directed against the foundations of American
13 democracy: the free expression of Americans' political
14 views, the voting booth, and through our political parties
15 and campaign organizations. Surely, such acts meet the
16 threshold of "significant consequences" justifying the use
17 of the National Mission Teams under the Defense Department's
18 cyberstrategy.

19 The members of the Cyber Subcommittee, led by Senators
20 Round and Senator Nelson, have made this point numerous
21 times. And I want to thank them for their leadership on the
22 issue. Admiral Rogers, I'm also interested in your views on
23 this issue.

24 Finally, I understand that presidential leadership is
25 critical on these issues. I raised this matter with the

1 Director of National Intelligence and each of the
2 intelligence agency directors, including you, Admiral
3 Rogers, at a recent public hearing of the Intelligence
4 Committee. The very disappointing answer that I received is
5 that the President has not corrected any action on
6 countering these threats. In addition, countering these
7 threats requires not only the Defense Department to
8 integrate all the components of information warfare, it is
9 essential to integrate capabilities and authorities of all
10 the national security and law enforcement organizations
11 across the government as a whole. This, too, requires
12 leadership that, so far, has been lacking.

13 Admiral Rogers, thank you again for your service and
14 the your service of your family. And I look forward to your
15 testimony.

16 Senator Inhofe: Thank you, Senator Reed.

17 I, regretfully, say that Senator Rounds, who does chair
18 the Subcommittee, will not be here today, or actually this
19 week. He -- with the loss of his father.

20 Senator Reed: Oh. Sorry.

21 Senator Inhofe: So, we all regret that.

22 Admiral Rogers.

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1 STATEMENT OF ADMIRAL MICHAEL S. ROGERS, USN,
2 COMMANDER, UNITED STATES CYBER COMMAND; DIRECTOR, NATIONAL
3 SECURITY AGENCY; AND CHIEF, CENTRAL SECURITY SERVICES

4 Admiral Rogers: Thank you, sir.

5 Chairman Inhofe, Ranking Member Reed, and distinguished
6 members of the committee, thank you for your enduring
7 support and the opportunity to talk with you today about the
8 hard-working men and women of United States Cyber Command.

9 But, first, I'd like to take a moment to extend our
10 thoughts and prayers to Chairman McCain and his family, and
11 to voice our support for him as he undertakes this tough
12 health fight. Senator McCain, keep fighting. Look forward
13 to you getting back, sir.

14 On behalf of the men and women of the United States
15 Cyber Command, I'm here to discuss the Command's posture and
16 describe how we prepare for and execute operations in the
17 cyberspace domain to support the Nation's defense against
18 increasingly sophisticated and capable adversaries.

19 The cyberspace domain that existed when we first
20 established Cyber Command, nearly -- over 8 years ago, has
21 evolved dramatically. Today, we face threats that have
22 increased in sophistication, magnitude, intensity, volume,
23 and velocity, threatening our vital national security
24 interests and economic well-being. China and Russia, whom
25 we see as peer or near-peer competitors in cyberspace,

1 remain our greatest concern. But, rogue regimes, like Iran
2 and North Korea have growing capabilities and are using
3 aggressive methods to conduct malicious cyberspace
4 activities.

5 Further, several states have mounted sustained
6 campaigns against our cleared defense contractors to scout
7 and steal key enabling technologies, capabilities, and
8 systems. Our adversaries have grown more emboldened,
9 conducting increasingly aggressive activities to extend
10 their influence without fear of significant consequence. We
11 must change our approaches and responses here if we are to
12 change this dynamic.

13 While the domain has evolved, Cyber Command's three
14 missions areas endure. Our first priority is the defense of
15 the Department of Defense Information Network, or the DODIN.
16 Second, we enable other joint force commanders by delivering
17 effects in and through cyberspace. Finally, we defend the
18 Nation against cyberthreats through support to DHS and
19 others when directed to do so by the President or the
20 Secretary of Defense. In concert with the National Defense
21 Strategy, we are charting a path to achieve and sustain
22 cyberspace superiority, to deliver strategic and operational
23 advantage and increased options for combatant commanders and
24 policymakers. Without cyberspace superiority in today's
25 battlefield, risk to mission increases across all domains

1 and endangers our security.

2 Since my last update almost a year ago, Cyber Command
3 has achieved a number of significant milestones. First,
4 Joint Force Headquarters DODIN, our subordinate headquarters
5 responsible for securing, operating, and defending the
6 Department's complex IT infrastructure, has achieved full
7 operational capability. Second, Joint Task Force Ares, the
8 organization we created to lead the fight in cyber against
9 ISIS, has successfully integrated cyberspace operations into
10 that broader military campaign, and achieved some excellent
11 results. We will continue to pursue ISIS in support of the
12 Nation's objectives. Third, we've significantly enhanced
13 our training and cyber operation platforms to prepare the
14 battlespace against our key adversaries.

15 And this year will bring several additional
16 accomplishments. Cyber Command will be elevated to a
17 unified combatant commander when I step down, later this
18 spring. As a combatant command, we will have the unique
19 responsibilities of being a joint force provider and a joint
20 force trainer responsible for providing mission-ready
21 cyberspace operations forces to other combatant commanders
22 and ensuring that joint cyberforces are trained to a high
23 standard and remain interoperable.

24 In addition, in April, we'll start moving into a state-
25 of-the-art integrated cyber center and joint operations

1 facility at Fort Meade. This will be our first fully
2 integrated operations center that enhances the whole-of-
3 government coordination and improves planning and operations
4 against a range of growing cyberthreats.

5 Within this dynamic domain, it's imperative to
6 continually evolve the training and tools of our operators.

7 And we've recently delivered the first of several
8 foundational toolkits designed to enable the Cyber Mission
9 Force to work against adversary networks while reducing the
10 risk of exposure, as well as equipping JTF Ares in its fight
11 against ISIS with capabilities designed to disrupt adversary
12 use of the Internet.

13 Innovation and rapid tech development demand
14 competition and the ability to leverage all partners,
15 including small businesses. We intend, in the coming year,
16 to create an unclassified collaboration venue where
17 businesses and academia can help us tackle tough problems
18 without needing to jump over clearance hurdles, for example,
19 which, for many, are very difficult barriers. Of course,
20 all these tools require a talented and sophisticated
21 workforce to operate and employ them. The Cyber Excepted
22 Service will help us recruit, manage, and retain cyber
23 expertise in a highly competitive talent market.

24 Our success also remains entwined with continued
25 integration of the Reserve and National Guard. In our

1 headquarters alone, we currently employ more than 300 full-
2 time and part-time reservists, and, in addition, more than
3 150 Reserve and National Guard members are mobilized to lead
4 and execute cyberspace operations. For most -- perhaps most
5 significantly, we are nearing completion of the buildout of
6 our Cyber Mission Force, with all teams on a glide path to
7 reach full operational capability before the end of this
8 fiscal year. As the teams reach FOC, our focus is shifting
9 beyond the build to ensuring that those teams are ready to
10 perform their mission and to execute sustained and optimized
11 mission outcomes for the Nation year after year for a
12 sustained effort over time.

13 And I fully realize that cybersecurity is a national
14 security issue that requires a whole-of-government approach
15 that brings together not only government, departments,
16 agencies, but also the private sector and our international
17 partners. And, over the last year, we've also increased our
18 interaction with critical infrastructure elements within the
19 private sector and the broader set of U.S. Government
20 partners supporting them.

21 And, as you know, I serve as both Commander of the
22 United States Cyber Command and Director of the National
23 Security Agency. This dual-hat appointment underpins the
24 close relationship between these two organizations. The
25 Fiscal Year '17 National Defense Authorization Act included

1 a provision that describes the conditions for splitting or
2 ending the dual-hat arrangement, and the Department is
3 working its way through this question; and ultimately the
4 Secretary, in conjunction with the DNI, will provide a final
5 recommendation to the President. All of us at Cyber Command
6 are proud of the roles we play in our Nation's cyber efforts
7 and are motivated to accomplish our assigned missions
8 overseen by the Congress, particularly this committee.

9 And, finally, after serving over 4 years as the
10 Commander of Cyber Command, and after nearly 37 years of
11 service as a naval officer, I'm set to retire later this
12 spring, and I will do all I can during the intervening
13 period to ensure the mission continues, that our men and
14 women remain ever motivated, and that we have a smooth
15 transition. And I'm grateful for the committee's continued
16 support and confidence of myself and the Cyber Command team,
17 and I look forward to answering your questions today.

18 [The prepared statement of Admiral Rogers follows:]

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1 Senator Inhofe: Thank you, Admiral Rogers.

2 Well, in my opening statement, I addressed this -- the
3 three agencies' approach that we have responsible for
4 defending against the attacks. We have the FBI as the lead
5 for law enforcement; the Department of Homeland Security is
6 the lead for critical infrastructure and defending
7 government computer networks; and, thirdly, the Department
8 of Defense as the lead for defending the homeland, defending
9 military computer networks, and developing and employing
10 military cyber capabilities. So, you've got the DOD, the
11 DHS, and the FBI. No one agency -- no one agency -- has all
12 the authorities required to defend and protect the homeland.

13 So, did we set it up wrong to start with? What does need
14 to be done to encourage a more whole-of-government -- you
15 mentioned that in your opening statement -- combating the
16 cyberthreats that are out there?

17 Admiral Rogers: So, I think the challenge, as I look
18 at the problem set -- and I'm looking at it from the
19 perspective of an operational commander -- How do we execute
20 and generate outcomes, if you will? I think it's less an
21 issue of people not understanding what their respective
22 roles are within the structure you outlined. And instead, I
23 think the challenge is, How do we integrate those
24 capabilities into a tighter hole, if you will, that's really
25 optimized to execute at the day-to-day level? I think

1 that's the area where I look at the future, and, as I -- you
2 know, during my -- with my responsibilities as Commander of
3 Cyber Command, that's where I'd like to see us focus our
4 efforts. How do we get down to integrated structures and
5 organizations at the execution level? Because that's where
6 you get speed. And one of the challenges with the current
7 structure -- as I said, while I think people understand
8 their respective roles, it is not optimized for speed and
9 agility. And one of the things that I see in the world
10 we're living in right now, we have got to get faster and we
11 have got to be more agile.

12 Senator Inhofe: Yeah. The -- there's a lot of
13 discussion about the gaps and seams that exist between each
14 leg of the whole-of-government approach. Now, our
15 adversaries will seek to exploit those gaps and seams, and
16 the confusion that follows an attack as various agencies and
17 departments grapple with the scatter of authorities needed
18 to respond. What are the most dangerous gaps and seams, as
19 you look at them?

20 Admiral Rogers: So, for right now, the time it takes
21 to deploy capability, the time that it takes to coordinate a
22 response across multiple organizations, when those well-
23 meaning and hard-working organizations are existing in
24 separate structures, that's not optimized for speed. And,
25 to me, what I think the biggest challenge for us is, How do

1 we integrate this more at an execution level? I understand
2 there's a broader policy issue here, and a broader legal
3 framework. And that's not my role as an operational
4 commander. But, where I see the need for speed and agility
5 is really when it gets down to --

6 Senator Inhofe: Is someone working on that now?

7 Admiral Rogers: Oh, there's an ongoing dialogue about,
8 So what's the right way ahead? Now, again, I'm the
9 operational commander, so I have a voice in that --

10 Senator Inhofe: Maybe we have too many people in that.

11 Admiral Rogers: -- in that process. And there's no
12 lack of opinions on this topic.

13 Senator Inhofe: Yeah. Lastly, you had said previously
14 -- and I'm quoting now -- "Offensive cyber, in some ways, is
15 treated almost like nuclear weapons, in the sense that their
16 application outside of defined area of responsibilities is
17 controlled at the chief executive level; it is not delegated
18 down." Has anything changed under this new administration
19 --

20 Admiral Rogers: So, we're currently -- again, I don't
21 want to speak for the policy side, but I will acknowledge we
22 are currently in a policy discussion on this very issue.
23 You know, the Secretary of Defense has been very aggressive
24 in articulating this concerns him. There's an ongoing
25 discussion at the moment that I hope is going to come to a

1 way ahead in the near term. Again, I will get an input into
2 that, as the operational commander. I'm not the primary
3 decisionmaker, here. I understand what my role is.

4 Senator Inhofe: All right, good.

5 Senator Reed.

6 Senator Reed: Well, thank you very much, Mr. Chairman.

7 Again, thank you, Admiral Rogers, for not only your
8 testimony, but your service.

9 I have a series of questions, and I think they require
10 just, sort of, yes-or-no answers.

11 The mission of National Mission Teams under DOD
12 cyberstrategy is to blunt cyberattacks against the United
13 States of, quote, "significant consequence." Is that
14 accurate?

15 Admiral Rogers: Yes.

16 Senator Reed: Okay. The Russia's --

17 Admiral Rogers: Although, if I could, I'd phrase it
18 as, that's an accurate mission for Cyber Command. We
19 haven't actually defined it specifically down on the team
20 level. But, I understand the point you're trying to make,
21 sir.

22 Senator Reed: Now, is Russia's ongoing campaign to
23 steal and leak confidential information from our candidates'
24 political parties to plant and amplify misinformation in
25 social media, to break into State election board networks,

1 of significant consequence to our national security?

2 Admiral Rogers: Certainly, if successful.

3 Senator Reed: Yes. Do you agree with the DNI Coats'
4 testimony that they will continue to conduct cyber
5 operations to achieve strategic objectives unless they face
6 clear repercussions?

7 Admiral Rogers: Yes, sir, that was my testimony, as
8 well, in that hearing.

9 Senator Reed: Is Russia attempting to achieve its
10 strategic objective by influencing U.S. public opinion in
11 elections?

12 Admiral Rogers: Yes, sir, I believe they are
13 attempting to undermine our institutions.

14 Senator Reed: Now, aside from our intelligence
15 agencies operating under a presidential finding, are there
16 any other organizations, other than the Cyber Command's
17 Cyber Mission Forces, that have the authority and capability
18 to disrupt Russian election hacking operations where they
19 originate? Does the FBI, DHS, or the States, the private
20 sector, have such authorities or capabilities?

21 Admiral Rogers: You could argue, probably, only that
22 -- again, that there's a legal aspect to this that I'm not
23 the most qualified -- but, probably you'd argue some
24 combination of DOD/DOJ have the standing authority in that
25 regard.

1 Senator Reed: But, the mission teams, particularly at
2 the origin of these attacks, have the authority to do so.

3 Admiral Rogers: If granted the authority. And I don't
4 have the day-to-day authority to do that. If granted the
5 authority.

6 Senator Reed: So, you would need, basically, to be
7 directed by the President, through the Secretary of Defense
8 --

9 Admiral Rogers: Yes, sir, as I -- in fact, I mentioned
10 that in my statement.

11 Senator Reed: Have you been directed to do so, given
12 the strategic threat that faces the United States and the
13 significant consequences you recognize already?

14 Admiral Rogers: No, I have not. But, if I could flesh
15 this out, I'll say something in an open, unclassified. I'd
16 be glad to go into more detail --

17 Senator Reed: Yes, sir.

18 Admiral Rogers: -- in a classified.

19 Based on the authority that I have as the Commander, I
20 have directed the National Mission Force to begin some
21 specific work -- I'd rather not publicly go into that --

22 Senator Reed: Right.

23 Admiral Rogers: -- using the authorities that I retain
24 as a commander in this mission space.

25 Senator Reed: So, it's inherent ability of a commander

1 to prepare, plan --

2 Admiral Rogers: Yes, sir.

3 Senator Reed: -- and structure. But, you need the --
4 you need direct authority of the President, through the
5 Secretary of Defense --

6 Admiral Rogers: To do some specific things.

7 Senator Reed: Some specific authority.

8 Admiral Rogers: There are some things I have the
9 authority, and I am acting within that authority now --

10 Senator Reed: But, where you -- essentially, we have
11 not taken on the Russians yet. We're watching them intrude
12 in our elections, spread misinformation, become more
13 sophisticated, try to achieve strategic objectives, as you
14 have recognized, and we're just, essentially, sitting back
15 and waiting.

16 Admiral Rogers: I don't know if I would characterize
17 it as "we're sitting back and waiting," but I will say it's
18 probably -- and again, I apologize, I don't want to --

19 Senator Reed: Right.

20 Admiral Rogers: -- get into the classified here --
21 it's probably fair to say that we have not opted to engage
22 in some of the same behaviors that we are seeing, if I could
23 just keep it --

24 Senator Reed: No, I -- it's -- one searches for, sort
25 of, historical analogies, but, you know, we have, in the

1 past, seen threats building, but, at some point,
2 particularly when they've manifested --

3 Admiral Rogers: Sir.

4 Senator Reed: -- themselves, which they already have
5 in 2016, we've taken action, that we've not just continued
6 to watch.

7 Admiral Rogers: Right. No, we are doing some things.

8 Senator Reed: Let's go back to the -- brief time I
9 have remaining -- the issue that is, I think, consistent
10 throughout your testimony and the Chairman's comments. And
11 that is, the technological aspects, which you do pretty
12 well, and the cognitive issues, you know, the message versus
13 the medium, we are all over the place, in terms of
14 fragmentation. Is there any effort to pull that together?
15 And let me, maybe, focus on a specific point. You know,
16 you're trying, within DOD, to sort of get everybody lined
17 up, then the SECDEF and the administration are trying to
18 line up all the other parts. There's one -- and I -- from my
19 experience in banking, the Treasury Department has a --
20 which is designed to do -- be disruptive of financial
21 transactions, designed to -- you know, it's not just ideas,
22 it's money that motivates the --

23 Admiral Rogers: Yes, sir. Yes, sir.

24 Senator Reed: So, in your view, are you coordinating
25 with them adequately? Two, do they have adequate resources

1 on their own to be an effective force to disrupt illegal
2 financing and to monitor sanctions?

3 Admiral Rogers: So, I'm not knowledgeable enough about
4 the specific level of capability and resources, but I will
5 say we, both Cyber Command and NSA as well, spend a lot of
6 time working with our Treasury counterparts about developing
7 insights and knowledge through cyber and other means that
8 give them insight that enable them to take action.

9 Senator Reed: Do you think they're effective?

10 Admiral Rogers: Oh, I think the economic broader
11 efforts that I've seen undertaken are positive. And you've
12 seen them against a wealth -- a host of actors out there.

13 Senator Reed: Thank you.

14 Senator Inhofe: Since a quorum is now present, I'd ask
15 the committee consider a list of 1288 pending military
16 nominations. All of these nominations have been before the
17 committee the required length of time.

18 Is there a motion to favorably report this list of 1288
19 pending military nominations?

20 Senator Reed: So move.

21 Senator Wicker: Second.

22 Senator Inhofe: Okay, second.

23 All in favor, say aye.

24 [A chorus of ayes.]

25 Senator Inhofe: Opposed, no.

1 [No response.]

2 Senator Inhofe: The motion carries.

3 Senator Ernst.

4 Senator Ernst: Thank you. Thank you, Mr. Chair.

5 Admiral Rogers, in your opening statement, you rightly
6 noted the importance of National Guard and Reserve cyber
7 warriors. And many of those young men and women bring
8 critical cyber skills from the private sector. Very, very
9 important. However, you don't mention how or if the DOD
10 plans to track cyber capabilities found in the National
11 Guard and Reserve Force. And we've had this discussion
12 before. But, in 2016, the Government Accountability Office
13 report found that, quote, "National Guard units have
14 developed capabilities that could be used, if requested and
15 approved, to support civil authorities in a cyber incident.
16 However, the Department of Defense does not have visibility
17 of all National Guard units' capabilities for this support,"
18 end quote.

19 Last year, I introduced legislation, along with my
20 committee colleagues, Senators Gillibrand and Senator
21 Fischer, to correct this oversight. Unfortunately, it
22 wasn't included in the final version of the 2018 NDAA. And,
23 as of July of 2017, DOD has not complied with the GAO's
24 recommendation.

25 So, sir, how do you ensure Cyber Command is fully

1 tapping into the expertise of our National Guard and Reserve
2 units when the DOD doesn't have visibility of all of the
3 capabilities within the National Guard? And what more can
4 we do to correct this at Cyber Command?

5 Admiral Rogers: So, I try to work closely with General
6 Lengyel and the National Guard Bureau, the National Guard
7 team. I complement them. They just established and
8 released a cyber strategy, for example, just last month, as
9 a matter of fact. And we were part of that dialogue about,
10 So how do we make sure we're doing, you know, an integrated
11 approach within the DOD here? This can't be an Active-only
12 component or civilian-only component.

13 As you and I have previously discussed the aspects of
14 your question, in some ways, you know, we're beyond, you
15 know, my immediate responsibilities. What I've tried to
16 work with the National Guard Bureau is, So how do we create
17 a structure that enables us to access the full range of
18 capability? Not just units, but, to your point, Hey, how do
19 you get down to the individual bubble?

20 It's similar, in many ways -- putting on my other hat,
21 Director of NSA -- we've tried to do the same thing over
22 time for language. Many people in the Department have
23 language skills that have no connection with whatever their
24 job is that we've trained them to do. And I'm trying to
25 see, Can we do the same thing over time with the Guard and

1 the Reserve?

2 Senator Ernst: Certainly. An additional identifier or
3 something --

4 Admiral Rogers: Right.

5 Senator Ernst: -- that can be tracked. I think we
6 really need to focus on that much more so than we have done
7 in the past, just because of the continuing threat that we
8 see in cyber out there. And, you know, as -- kind of along
9 this same theme, though, it is such an important part of our
10 national defense, and we're going to have to continue to
11 improve our capabilities and readiness in this area. And
12 so, if you could, in just the couple of minutes that I have
13 left, What more can we do to make sure that we have an
14 adequate pool of really talented individuals that can step
15 up into these fields? We've seen, at large, military
16 recruiting has been very difficult, even for our regular
17 branches of service. So, what can we do to make sure that
18 we are filling the gap with qualified individuals that meet
19 the requirements of today's military?

20 Admiral Rogers: So, first, to me, you've got to look
21 at it as an ecosystem and realize there's different
22 components to this cyber population, from civilians to
23 Active military to Guard and Reserve. Each one of those
24 components has different attributes. So, one of the things
25 we need to do is come up with solutions that optimize for

1 each of these subpopulations. So, the Congress, for
2 example, with the Civilian Exemption Service, the CES,
3 effort, that's a big positive for us on the civilian side.
4 On the DOD side, the services are -- for Active, are working
5 through, So, you know, are there other compensation tools,
6 for example, that we can use? Are there other things we
7 need to do in terms of the commitment we make to individuals
8 when they first enlist or get commissioned, in terms of, Can
9 we align them early on and offer them extended service in
10 the cyber arena?

11 On the Guard and Reserve, it's a similar kind of thing,
12 though one -- it goes to your point -- the one thing I've --
13 it's been a little while since I had this conversation with
14 General Lengyel, but, outside the Army Guard and the Army
15 Reserve and the National Guard, the other services tend to
16 use Reserves on a cadre status, as opposed to units. And
17 one of the things that I'm trying to work with my Guard
18 teammates on, Is there a way to both use the unit structure
19 that's traditional within the Guard, but also maybe a cadre
20 kind of thing? That gets to your point about, How do we
21 access individual skills? We are clearly not there yet, but
22 I'm wondering, Is that a part of the future structure that
23 we need to be looking at, that we haven't, to date?

24 Senator Ernst: Right. And thank you. My time is
25 expired, but certainly this is an issue we need to wrangle

1 with and make sure that we're coming up with an appropriate
2 answer.

3 So, thank you, Admiral, very much.

4 Senator Inhofe: Thank you.

5 Senator Nelson.

6 Senator Nelson: Admiral, thank you for your public
7 service, your long service. And we wish you well in
8 retirement.

9 Since Senator Rounds is not here, I will speak for him,
10 in that we have the privilege of leading the Cyber
11 Subcommittee. And I want you to know that we think the
12 public sectors in the Department of Defense are woefully
13 unprepared and split and segmented and not coordinated to be
14 able to handle now what is one of the greatest threats to
15 our national security, the cyberattacks that constantly
16 come. And we feel that about the private-sector community,
17 as well.

18 Now, having said that, Mr. Chairman, I want to enter
19 into the record a letter that Senator Blumenthal, Senator
20 Shaheen, and I sent to the Secretary of Defense, February
21 the 6th. And one of the things that we ask is that the
22 National Mission Teams, which are part of U.S. Cyber
23 Command's Cyber Mission Force, should be ordered to prepare
24 to engage Russian cyber operators and disrupt their
25 activities as they conduct clandestine influence operations

1 against our forthcoming elections.

2 Would you enter that into the record, Mr. --

3 Senator Inhofe: Without objection.

4 [The information referred to follows:]

5 [COMMITTEE INSERT]

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1 Senator Nelson: Now, Admiral, let me ask you. Is
2 there any question in your mind that they have -- they, the
3 Russians --

4 Admiral Rogers: Russians.

5 Senator Nelson: -- have conducted these kind of
6 activities against our past election?

7 Admiral Rogers: No, sir.

8 Senator Nelson: Okay. And, in an answer to Senator
9 Reed, you had said, "Yes, if the Russians were successful,"
10 as if there was some doubt in your mind that they had been
11 successful. That's not the case --

12 Admiral Rogers: No, sir, I apologize. The point I was
13 trying to make -- the quote that Senator Reed used was from
14 the strategy, where it talked about acts of "significant
15 consequence." And I was trying to get to the "consequence"
16 --

17 Senator Nelson: Okay. So --

18 Admiral Rogers: -- piece of the plan.

19 Senator Nelson: So, we have been attacked, and there
20 are a lot of us that feel like we are still being attacked
21 and that we're going to be attacked, particularly with
22 regard to our elections, which we consider as critical
23 infrastructure. And let the record note that you nodded
24 affirmatively. So, what's the holdup?

25 Admiral Rogers: Well, I'd say there's a series of --

1 and again, this is much broader than the DOD, much broader
2 than Cyber Command -- Department of Homeland Security is
3 overall responsible for this -- the election infrastructure
4 within the segments that private -- that have been
5 identified as critical infrastructure. They're the sector
6 lead. In fact, I've had this conversation with the
7 Secretary of Homeland Security within the last couple of
8 weeks about what we're doing to try to generate insights and
9 knowledge to try to help their effort in their leadership
10 role.

11 Senator Nelson: Let me be appropriate and respectful
12 --

13 Admiral Rogers: What?

14 Senator Nelson: -- but let me interject, please,
15 because time is fleeting.

16 Admiral Rogers: Sir.

17 Senator Nelson: Let's get -- so, for someone who is
18 looking out for the common defense of this country to say,
19 "Well, they've got the lead, and this is that, but I'm the
20 Cyber Commander, and it's going to be a combatant command"
21 -- that doesn't cut it over here.

22 Admiral Rogers: Yes, sir. The challenge for us is, we
23 have this thing called the law and the legal framework that,
24 right now, shapes what DOD can and cannot do.

25 Senator Nelson: So --

1 Admiral Rogers: I'm not trying to minimize that. It

2 --

3 Senator Nelson: -- what do you need --

4 Admiral Rogers: -- certainly impacts me --

5 Senator Nelson: -- Admiral --

6 Admiral Rogers: -- as an operational commander.

7 Senator Nelson: -- what do you need, as the commander,

8 to say, "Go after and punish these guys that are trying to

9 tear apart our critical infrastructure"? What do you need?

10 Admiral Rogers: So, I'd need a policy decision that

11 indicates that there is specific direction to do that. And

12 then I would need -- again, I'd have to tee up -- the normal

13 way we work this process, I would then be tasked to tee up

14 some specific options. And I'd rather not go into the

15 specifics of any of that. And they would be reviewed by the

16 Secretary, the chain of command. The Secretary ultimately

17 would make a recommendation to the President as what he, the

18 Secretary's, views are here, and then, based on that, we'd

19 be given specific direction, potentially, and specific

20 authority.

21 Senator Nelson: So, you need a direction and specific

22 authority from the White House.

23 Admiral Rogers: Right. The President ultimately would

24 make this decision --

25 Senator Nelson: From the President.

1 Admiral Rogers: -- you know, in accordance with a
2 recommendation, in my experience, from the Secretary of
3 Defense. And others. I would assume the Department of
4 Homeland Security and others would be --

5 Senator Nelson: So, the chain of command --

6 Admiral Rogers: Yes, sir.

7 Senator Nelson: -- is what you need.

8 Admiral Rogers: Sir.

9 Senator Nelson: All right.

10 Let the record reflect that we have written to the
11 Secretary of Defense, February the 6th, and would appreciate
12 an answer.

13 Thank you, Mr. Chairman.

14 Senator Inhofe: Thank you.

15 Senator Perdue.

16 Senator Perdue: Thank you, Mr. Chairman.

17 And, Admiral, thank you for your --

18 Admiral Rogers: Sir.

19 Senator Perdue: -- decades of service. I remember
20 your testimony last year. You've been nothing but
21 consistent, talking about speed and agility. I hope, in
22 retirement, you'll find a way to continue to nudge us toward
23 that goal.

24 I've got a question to follow up on a couple of
25 questions we've already had today. And recently the Defense

1 Science Board -- last year, actually -- concluded -- and
2 there's a quote here, "For at least the next decade, the
3 offensive cyber capabilities of our most capable adversaries
4 are likely to far exceed the United States ability to defend
5 key critical infrastructures." Sir, do you agree with that
6 conclusion?

7 Admiral Rogers: I mean, we were a part of that effort
8 with the DSB. There is no doubt that, for right now, I
9 would argue, technology favors the offense vice the defense.
10 I mean, just what you're -- the scope of what you're trying
11 to defend, the scope of potential vulnerabilities or -- boy,
12 it keeps you awake at night.

13 Senator Perdue: So, the ability to preclude it is
14 minimal. And you mentioned, last year --

15 Admiral Rogers: Well, "preclude it," from a technical
16 standpoint.

17 Senator Perdue: Yes.

18 Admiral Rogers: But, then that gets into the whole
19 broader question about, Are there other activities that
20 could be brought to bear that would convince --

21 Senator Perdue: Well, that's my next question --

22 Admiral Rogers: -- you know, on --

23 Senator Perdue: -- is deterrence.

24 Admiral Rogers: Yes, sir.

25 Senator Perdue: You talked, last year, about

1 deterrence. And so, has our ability to deter these types of
2 activities -- you know, a nuclear attack, we deter by having
3 the threat of mutual annihilation, right? So, in the cyber
4 space, what is our deterrence capability today, relative to
5 where we were a year ago? And is it adequate to defend
6 against intrusion?

7 And I want to add to that, specifically, with -- we've
8 had these questions about election. In your mind, are we
9 capable -- the United States -- of defending our election,
10 this coming year?

11 Admiral Rogers: Now, I'm not an expert on the
12 electoral system, as a whole. I haven't personally looked
13 at it as a target, so to speak, and asked myself --

14 Senator Perdue: But, that -- doesn't that speak to the
15 issue? I mean, I know Homeland Security is charged with
16 that.

17 Admiral Rogers: Right.

18 Senator Perdue: But, is their capability up to your
19 capability, in Defense? And then you get inside DOD, you've
20 got -- each service has their own growing capabilities. So,
21 the question I have -- and we've all talked around it here
22 -- is, So who's really in charge of getting the highest and
23 best deterrence, detection, and preclusion capabilities
24 regarding, let's just say, an election, as one part of our"
25 --

1 Admiral Rogers: So, in our constitutional structure,
2 States largely have overall responsible for the execution of
3 an election process. Within the Federal Government, the
4 Department of Homeland Security is overall responsible for
5 providing government resources to assist the States in the
6 execution and defense of that structure. Again, that is a
7 DHS lead role. So, I don't -- in my role as Cyber Command,
8 I'd be the first to admit, I'm not talking to individual
9 State officials about, "Walk me through what your structure
10 is, give me your assessment of where you think you are."
11 I'm trying to generate insights and knowledge now that help
12 inform this with a readiness to -- if directed, to
13 potentially do more.

14 Senator Perdue: You interact with DHS --

15 Admiral Rogers: Oh, yes, sir.

16 Senator Perdue: Okay.

17 Second thing, following up on the deterrence
18 capability. What are the menu of options that you, in the
19 Department of Defense, can give the President, should he so
20 choose to respond to the cyberattacks, if we -- if we have a
21 deterrent, then the question is, Is there a like response,
22 similar response? And what are the menus -- what's included
23 in the menu for the President?

24 Admiral Rogers: So, the first point I would make is,
25 number one, merely because someone comes at us in cyber

1 doesn't mean we should automatically default to a, "We have
2 just to respond in kind." I have always urged, We need to
3 think more broadly, look at the full range of levers and
4 capabilities, as a Nation, that we --

5 Senator Perdue: Have we ever responded in kind?

6 Admiral Rogers: Oh, there are certain specific steps
7 that have been taken over the course of the last couple of
8 years. Again, to have an argument about -- Is it sufficient
9 or not? But, there have been some specific steps taken.

10 And again --

11 Senator Perdue: Well --

12 Admiral Rogers: -- I would rather not get into that --

13 Senator Perdue: I understand that, and I wouldn't ask
14 that in open --

15 Admiral Rogers: -- publicly.

16 Senator Perdue: -- an open hearing. But, it's pretty
17 obvious to me, as one Senator sitting here, that the
18 diplomatic efforts here are failing, that the activity is
19 really one-sided --

20 Admiral Rogers: Right. We're not where we need to be,
21 or where we want to be. I don't think there should be any
22 --

23 Senator Perdue: No, and I want to -- I now want to
24 about, What can we do about it? And that is -- go back to
25 speed and agility. We're going to be about 1.8 million

1 cyberwarriors short over the next 5 years. There's a --

2 Admiral Rogers: As a nation --

3 Senator Perdue: -- as a country, both -- in all three
4 of these -- FBI, DHS --

5 Admiral Rogers: Right.

6 Senator Perdue: -- and DOD. So, the question is --
7 we're not going to win that war against China, for example,
8 in terms of the ability to put cyberwarriors in the field.
9 The question is, Where does -- where do technology and,
10 like, artificial intelligence come to bear? And where are
11 we climbing that hill, in terms of -- if this were a
12 trigger puller, we'd stand up a number of soldiers against
13 their soldiers, and all that. That's a historical -- that's
14 the --

15 Admiral Rogers: Right.

16 Senator Perdue: -- the last war. The future war may
17 be, you know, how to -- who's got the best minds focused on
18 artificial intelligence, robotics, et cetera, et cetera?
19 Just on this specific case, where are we, in terms of
20 artificial intelligence? And how is that going to help us
21 face the shortfall in cyberwarriors over the next 5 years?

22 Admiral Rogers: So, we're clearly looking at, What are
23 the technical applications and capabilities out there that
24 enable us to optimize the human capital piece of this, that
25 are also -- I'm also interested in the fact guys as -- to

1 your point, we are not going to Industrial Age our way out
2 of this --

3 Senator Perdue: Right.

4 Admiral Rogers: -- with, Well, it's just hire 10,000
5 more people.

6 Senator Perdue: Right.

7 Admiral Rogers: That's not going to get us --

8 Senator Perdue: Right.

9 Admiral Rogers: -- where we need to be. And that's
10 not a sustainable strategy. Therefore, among the things
11 we're looking at -- and we're not the only ones -- so, How
12 can you apply technology to help overcome the human capital
13 piece?

14 The other point I would make is, again, don't just
15 focus on cyber versus cyber. How do we bring this broader
16 range of capabilities in place to convince actors out there
17 -- nation-states, criminals, nonstate actors -- "You don't
18 want to engage in this behavior, either because you're not
19 going to succeed or because, quite frankly, even if you do
20 succeed, the price you will pay will far exceed any benefit
21 you might gain"?

22 Senator Perdue: Yeah.

23 Admiral Rogers: That's where we've got to get to.

24 Senator Perdue: Yeah. Agree. Thank you, Admiral.

25 Thank you, Mr. Chairman.

1 Senator Inhofe: Senator Shaheen.

2 Senator Shaheen: Thank you, Mr. Chairman.

3 And, Admiral Rogers, thank you for your service. We
4 will miss you when you retire.

5 I want to follow up on both Senators Reed and Nelson's
6 questions about the 2016 election and the action of the
7 administration. I just want to be clear. As I understand,
8 you said that President Trump has never ordered CYBERCOM to
9 take any action to defend or thwart Russian attempts to
10 meddle in the elections this fall. Is that correct?

11 Admiral Rogers: So, I said I've never given -- I've
12 never been given any specific direction to take additional
13 steps outside my authority. And I have taken the steps
14 within my authority, you know, trying to be a good proactive
15 commander. Because my view is --

16 Senator Shaheen: But, no one from the administration
17 has asked you to take any additional steps. Is that
18 correct?

19 Admiral Rogers: I haven't been granted any, you know,
20 additional authorities, capacity, capability. No, that's
21 certainly true.

22 Senator Shaheen: I understand that to be a
23 confirmation of what I just said. Is that correct?

24 Admiral Rogers: I thought that's what -- I apologize.

25 Senator Shaheen: Okay.

1 Admiral Rogers: All right.

2 Senator Shaheen: It's come to my attention that the
3 Department of Defense contracts with IT companies that share
4 sensitive source code data with Russia and other hostile
5 governments while they do business overseas, and that this
6 practice risks exposing sensitive underlying codes within
7 our national security platforms to hostile governments.
8 And, as I understand, there aren't any safeguards, like
9 disclosures, to protect against these risks. Can you
10 confirm whether that's the case and what the role of
11 CYBERCOM is in ensuring the safety and integrity of DOD's
12 platforms?

13 Admiral Rogers: Right. So, first, I have no -- Cyber
14 Command has no direct role with non-DODIN -- with civilian
15 users here, if you will. Now, having said that, I'm aware
16 of this issue, and we have worked with others in the
17 Department to try to address, "Okay, so what are some of our
18 key vendors and providers doing, here?" There have been
19 several incidents where I've actually bore -- dug into
20 execution-level, "Walk me through exactly what you've done
21 with your code. Walk me through exactly who had access to
22 it. I want to compare this version that you tell me you
23 shared with them versus what we currently are using within
24 the DOD." I've done that in a couple of instances.

25 But, your point goes to -- and several of you have

1 raised it already -- going to a broader dialogue about, What
2 should the nature of the relationship be between the
3 Department and its key infrastructure in this digital world
4 that we're living in? And it just forces us to step back
5 and look at things very differently, to me. We never used
6 to think about things, 10 years ago, about, "Who are you
7 sharing source code with? You know, who are you doing your
8 testing with?" In the world we're living in now, those are
9 the kinds of discussions that we've got to have. "Who are
10 your supply-chain providers?"

11 Senator Shaheen: So, who has the responsibility to
12 decide that? If it's not CYBERCOM, is it the Secretary of
13 Defense?

14 Admiral Rogers: So, the Defense Security Service has
15 overall responsibility within the DOD for the interaction
16 with our cleared defense contractors from a cybersecurity
17 perspective. And I will partner with DSS. The FBI is also
18 involved here. One of the discussions that currently I'm
19 raising within the Department is -- experience teaches us, I
20 think, we need to step back and ask ourselves, Do we have
21 this model optimized? And I won't go into the specifics,
22 but there's a specific scenario we're working our way
23 through right now that I'm trying to use as an example of:
24 This is why we need to make some fundamental change. And
25 I'm glad to talk about that in a closed --

1 Senator Shaheen: So, should CYBERCOM have that
2 responsibility, or should someone else have it?

3 Admiral Rogers: I don't know. Part -- quite frankly,
4 one of my challenges, you just look at the things we've
5 talked about in the last 40 minutes, where you have said to
6 me, "Hey, why doesn't Cyber Command to do this? Why doesn't
7 Cyber" -- and I'm going -- the challenge for us is about
8 prioritization, aligning mission with resources, and trying
9 to figure out what's our role with a broader set of
10 partners? And so, one of the points I try to make within
11 the DOD is, "Be leery about viewing Cyber Command as the
12 end-all/be-all for everything." If we try to do everything,
13 we're going to suboptimize ourselves, so we need to focus on
14 one of the priority areas.

15 Senator Shaheen: And that makes sense to me, but the
16 concern I have is, Who's in charge? And, unless there's
17 somebody who's responsible for coordinating activities for
18 dealing with what Homeland is doing and what Cyber Command
19 is doing and what DOD is doing and what the White House is
20 doing, nobody's going to be in charge. And --

21 Admiral Rogers: Yes, ma'am.

22 Senator Shaheen: And so, it seems to me that that's a
23 challenge that we have right now. And, as you look at what
24 our both defensive and offensive strategy is around cyber
25 for the United States, do you believe that we have those --

1 that strategy in place? And could you articulate that,
2 either now or in a closed --

3 Admiral Rogers: I mean, I believe --

4 Senator Shaheen: -- in a way that we can understand?

5 Admiral Rogers: -- I believe we have a structure in
6 place, with well-defined responsibilities, but, as we said
7 previously, my argument would be, I think experience is
8 showing us that we need to be mindful -- while we understand
9 that structure, is it generating the outcomes that we want?
10 And my answer would be, We're not where we need to be. So,
11 that would argue, doing more of the same is not necessarily
12 going to generate different outcomes. Even as I acknowledge
13 I have a narrowly defined role, but I try to, along with
14 others, act as a, "Look, we need to focus on this area."

15 Senator Shaheen: Well, I would certainly agree. I
16 don't think a structure and a strategy are the same thing.
17 And, while we may have a structure in place, it doesn't seem
18 to have produced a strategy that's easily understandable.

19 Admiral Rogers: Ma'am.

20 Senator Shaheen: Thank you.

21 Thank you, Mr. Chairman. That's a statement. I'm not
22 asking for a response.

23 Senator Inhofe: Senator Fischer.

24 Senator Fischer: Thank you, Mr. Chairman.

25 Good morning, Admiral. It's nice to see you.

1 Admiral Rogers: Ma'am.

2 Senator Fischer: Admiral, the NDS highlights Cyber's
3 importance, I think, quite a bit. And how does that
4 National Defense Strategy's prioritization of long-term
5 strategic competitions with Russia and China impact
6 CYBERCOM's mission?

7 Admiral Rogers: So, I like the fact that the strategy
8 expressly calls out cyber as a domain. The strategy also
9 expressly calls out the fact that we've got peer competitors
10 and near-peer competitors in here that we have -- within the
11 cyber arena, that we have to be capable of dealing with. I
12 also like the fact that the strategy specifically calls out
13 competition -- trying to remember the phrase -- it's
14 "competition below conflict" -- at a level below conflict,
15 you know, the so-called gray area -- which I think is very
16 powerful. That gray area goes to many -- much of the
17 discussion we've had so far this morning. This activity
18 that is occurring, short of armed conflict, if you will,
19 that is generating strategic advantage for others and not in
20 our best interests. I like the fact that the strategy
21 acknowledges we are living in a world where this is now
22 becoming the norm, and we have got to figure out how we're
23 going to deal with this.

24 Senator Fischer: And, as we look at that continuing
25 focus with our peer competitors -- with Russia and China --

1 I think that means we're going to have to do more with less,
2 and we may see less of a focus on other areas, where, in the
3 past, CYBERCOM's been very focused, whether it's with the
4 global terrorists or with Iran and their proxies. So, with
5 those tradeoffs, I think that brings a lot of risk. How do
6 you propose that CYBERCOM and the Department are able to
7 handle that type of risk?

8 Admiral Rogers: So, within the last year, I and others
9 made an argument, and the Secretary bought off on it, where
10 I said, "Look, we need to increasingly treat Cyber Command
11 as a high-demand, low-density resource, where we have to
12 acknowledge there's not enough capacity to do everything we
13 want." So, we need a prioritization of a risk-based model
14 about how we're going to allocate our capabilities. And
15 we've got to continually reassess this, just like we do with
16 ballistic missile defense, with ISR, with SOF forces. We
17 shouldn't be viewed any differently.

18 And so, we put a new process in place. I just made an
19 argument, and was granted authority, to reallocate some of
20 our capability against some of the challenges you've already
21 talked to me about within the last 40 minutes or so. That
22 didn't exist -- a year ago, that process didn't exist. It
23 wasn't envisioned. The thought was the cyber forces that we
24 had created would be permanently aligned. I argue that's
25 not just going to -- there's just not enough. It's not

1 going to get us where we need to be.

2 Senator Fischer: Do you see that increased focus on a
3 high-end fight -- is that primarily going to impact the
4 training, or is it going to impact operations?

5 Admiral Rogers: It's probably a combination of both.
6 I don't necessarily view it as a binary --

7 Senator Fischer: Either/or.

8 Admiral Rogers: -- one or the other. The positive
9 side -- you know, as I said, I've been in command almost 4
10 years. In those 4 years, I haven't run into a situation
11 where we didn't have some level of capacity and expertise --
12 or some level of capability or expertise. The challenge is
13 capacity. It's, "Okay, I can deal with this in a reasonable
14 level of places, but if I get into something larger, that
15 becomes a challenge."

16 Now, no one should think for one minute -- I am proud
17 of the capability Cyber Command has, and I am confident in
18 our readiness to execute our mission, even as I acknowledge
19 that there's challenges.

20 Senator Fischer: Okay. When you -- when you're
21 talking about capacity, you're building a 6200-strong Cyber
22 --

23 Admiral Rogers: Right.

24 Senator Fischer: -- Mission Force.

25 Admiral Rogers: Sir.

1 Senator Fischer: How adequate do you believe that
2 force is going to be compared to the threat that we're
3 seeing today?

4 Admiral Rogers: So, that was based on an assessment --
5 boy, it's almost 10 years ago now, when we did the
6 groundwork about, What do we think the structure --

7 Senator Fischer: But, that hasn't really changed.

8 Admiral Rogers: No. So, what we said was, Let's build
9 the force out. So, as I said, we'll complete the buildout
10 by the end of the fiscal year. The argument I'm trying to
11 make now is, So based on the 8 years of actual runtime, that
12 suggests to me that the way that we've structured some of
13 the teams, I would like to change. And I told the services,
14 "I will leave this alone until you complete the mission
15 generation." But, what that -- once that's done, I'd like
16 to retool this a little bit, because I think we can take
17 advantage of the lessons of the last 8 years. I think it
18 also argues, we're probably going to need some level of
19 additional capacity over time. And that's something I'll be
20 talking to my successor about. I think that's going to be a
21 key thing for him during his time as -- in command.

22 Senator Fischer: It seems like we -- we hear this over
23 and over again, a lot of the same challenges. And I realize
24 the NDS is out now, and it's presenting us with a strategy.
25 But, it's frustrating sometimes, on our side, that -- I

1 don't know if we're seeing much progress.

2 A last question for you. I was a little confused by an
3 earlier statement, so I wanted to clarify that. You have
4 testified, in the past, that you do not support creating a
5 special corps or service focused on cyber.

6 Admiral Rogers: Yes, ma'am, that's true.

7 Senator Fischer: Okay. Thank you very much.

8 Senator Inhofe: Thank you.

9 Senator Blumenthal.

10 Senator Blumenthal: Thank you, Mr. Chairman.

11 Admiral, thank you for your service. We will miss you,
12 as others have said.

13 Have you read the Special Counsel's indictment against
14 13 Russians and several Russian entities?

15 Admiral Rogers: I haven't read the actual indictment.
16 I've seen the media reporting on it. I haven't seen the
17 actual indictment.

18 Senator Blumenthal: Well, I recommend that you do so,
19 sir, with all due respect. For us, as Americans, it is an
20 incredibly chilling, absolutely terrifying account of an
21 attack on our democracy. You refer to it as a series of
22 actions that, quote, "threaten the foundations of our
23 democracy." I think that's a very polite way of putting
24 this act of warfare. In fact, the Russians themselves refer
25 to it as informational --

1 Admiral Rogers: Informational.

2 Senator Blumenthal: -- warfare. That's from them, not
3 from us. And so, I feel a sense of urgency about this
4 ongoing warfare against our democracy that I feel, so far,
5 is not reflected in the response from our Department of
6 Defense. That's one of the reasons why Senators Nelson and
7 Shaheen and I wrote to the Secretary of Defense last week
8 and asked for engagement of Russian cyber operators and
9 disruption of their activities. And I understand from you
10 that your feeling is, you have not been given authority to
11 take additional action. That's correct.

12 Admiral Rogers: Sir.

13 Senator Blumenthal: Have you asked for that authority?

14 Admiral Rogers: No, I have not. I've tried to act
15 within the authority that has been granted to me to be
16 aggressive.

17 Senator Blumenthal: Why have you not asked for
18 additional authority?

19 Admiral Rogers: Because I guess my sense right now is,
20 I'm not sure that the capabilities that I have would be the
21 optimal or only response to this. I think we need to --

22 Senator Blumenthal: It may not be the only response --

23 Admiral Rogers: If I could -- I apologize.

24 Senator Blumenthal: -- but wouldn't you agree that it
25 is a necessary response?

1 Admiral Rogers: It could be a part of a response. I
2 would certainly acknowledge that. I just think we need to
3 step back and look at this very broadly. Because one of the
4 arguments, not just the -- this current piece, but others --
5 is, "Be mindful of falling in the trap that, just because
6 someone comes at us in cyber, that we have to default to
7 immediately going back and doing the exact same thing." I
8 -- and just have -- I've always believed we need to step
9 back and think a little bit more broadly about it, and just
10 don't default. It's because of that, you know, that I have
11 not done that, to date.

12 Senator Blumenthal: Well, for how long, with all due
13 respect, are we going to step back and look broadly at this
14 ongoing attack? I mean, literally last week, in the wake of
15 the Parkland shooting, the bots, the fake accounts, again
16 and again, disrupting, sowing discord, continuing to attack
17 our democracy in ways that most Americans should find
18 absolutely intolerable, may I suggest that seeking that
19 additional authority perhaps is appropriate at this point?

20 Admiral Rogers: Sir. Again, much of what you're
21 asking me -- I'm an operational commander, not a
22 policymaker. That's the challenge for me as a military
23 commander.

24 Senator Blumenthal: Wouldn't you agree with me that
25 the President himself is aware of these attacks and should

1 give you that additional authority?

2 Admiral Rogers: I think the President is certainly
3 aware. Sir, I am not going to tell the President what he
4 should or should not do. I'll use my chain of command to
5 make my recommendations to the Secretary as to, "Hey, sir,
6 hey, within the DOD mission set and within the
7 responsibilities that you have allocated to the Cyber
8 Command, here's what I think we can and should do."

9 Senator Blumenthal: Well, without belaboring this
10 point, would you agree with me that the Russians have been
11 in no way deterred from --

12 Admiral Rogers: Oh, yes, sir, I think that's true.

13 Senator Blumenthal: They're doing it with impunity.
14 They could care less what we think. They're continuing to
15 attack us.

16 Admiral Rogers: Yes, sir.

17 Senator Blumenthal: So, thus far, the response of the
18 United States of America to this ongoing attack has been
19 completely inadequate to --

20 Admiral Rogers: It hasn't changed the calculus, in my
21 sense. It has not --

22 Senator Blumenthal: It has not changed the calculus --

23 Admiral Rogers: -- changed the calculus or the
24 behavior on the part of the Russians.

25 Senator Blumenthal: And it hasn't changed their

1 behavior.

2 Admiral Rogers: Right, that's my sense.

3 Senator Blumenthal: And they have paid no price for
4 meddling in 2016 election or --

5 Admiral Rogers: They haven't paid a price at least
6 that's sufficient to get them to change their behavior.

7 Senator Blumenthal: Well, they haven't paid any price,
8 so far as I can see, have they?

9 Admiral Rogers: You could argue some of the sanctions
10 that were -- that have been imposed -- you could also argue
11 some of the indictments -- again, I don't think it's fair to
12 say nothing has been done, although, again, you're getting
13 way outside my lane as an operational commander, sir.

14 Senator Blumenthal: But, it has been completely
15 inadequate so far.

16 Admiral Rogers: It certainly hasn't generated a change
17 in behavior that I think we all know we need.

18 Senator Blumenthal: Thank you, Mr. Chairman.

19 Senator Inhofe: Senator Hirono.

20 Senator Hirono: Thank you, Mr. Chairman.

21 Admiral Rogers, I do join my colleagues in thanking you
22 for your service, not only in Cyber Command, but also your
23 37 years of service in the military.

24 You have been asked a number of questions about the
25 Russian interference with our elections and questions about

1 who's in charge. And you testified that Department of
2 Homeland Security is the sector lead on combating Russia's
3 -- countering Russia's efforts to tamper with our elections.
4 Now, it seems, to me anyway, that perhaps Cyber Command has
5 the best resources and best equipped to actually do
6 something in this area. You are the operational person.
7 But, you don't have specific authority from the President or
8 the -- or anyone else, for that matter, to go forward. Now,
9 you did also indicate that you are -- I believe you used the
10 word "constant contact" with Department --

11 Admiral Rogers: I said "regular." I said --

12 Senator Hirono: Regular.

13 Admiral Rogers: -- I interacted with them --

14 Senator Hirono: Regular --

15 Admiral Rogers: -- regularly.

16 Senator Hirono: -- contact with Department of Homeland
17 Security. And the sense that we have -- I have -- is that
18 the -- that I wonder what the Department of Homeland
19 Security, which is charged with countering the Russian
20 interference with our elections -- what they are doing. So,
21 since you are in regular contact with Homeland Security,
22 what have you advised DHS to do in this area to counter
23 Russia's interference with our election --

24 Admiral Rogers: What have I advised DHS to do in the
25 execution of DHS's mission? That's not really --

1 Senator Hirono: Yes. Have you given them any advice?

2 Admiral Rogers: That's not really my role, ma'am.

3 Senator Hirono: No, but you are in constant contact.

4 What are you in constant --

5 Admiral Rogers: So, we talk about --

6 Senator Hirono: -- regular contact about?

7 Admiral Rogers: -- "Tell me what you're doing. Tell

8 me how you're organized. What are the capabilities that

9 Cyber Command, for example, could support you with?" Those

10 are the kinds of discussions. I also make sure the

11 information flow, "Are you getting the benefit of the

12 insights that we're generating" --

13 Senator Hirono: So --

14 Admiral Rogers: -- "based on actions that we have

15 taken?"

16 Senator Hirono: So --

17 Admiral Rogers: Those are the kinds of --

18 Senator Hirono: -- with regard to those kinds of

19 conversations, then is Homeland Security doing what they

20 need to be doing to counter Russian interference, continuing

21 interference with our elections?

22 Admiral Rogers: You need to talk to them, ma'am. I

23 don't have full knowledge of everything the Department of

24 Homeland Security is doing here. Therefore, it would be --

25 Senator Hirono: Yes, I understand that.

1 Admiral Rogers: -- it would be an ill-formed opinion

2 --

3 Senator Hirono: I get that.

4 Admiral Rogers: -- on my part to assess their
5 performance.

6 Senator Hirono: So, I'm trying to get at -- with all
7 the resources and the awareness that you have, what kind of
8 specific advice you have given to Homeland Security, because
9 we do not get the impression that they are doing what's
10 adequate to -- definitely to counter anything that the
11 Russians are doing, certainly not to the point where they
12 will stop doing it.

13 Admiral Rogers: Right.

14 Senator Hirono: So, I hope that, at some point, in
15 some other committee or in this committee, we'll be able to
16 ask those kinds of questions of the Homeland Security
17 Secretary, because what they're doing to -- with our
18 elections does have an impact on national security. And, as
19 you say, they are seeking to undermine our institutions.

20 I would also like to join Senator Ernst in her focus on
21 the Department of Defense fully utilizing the cyber
22 capabilities of our Reserves and National Guard. That's
23 just a statement. And I think you concur with that.

24 As you leave your command, I am wondering, What would
25 be your suggestion that your successor, you know, focus on

1 as he or she -- it'll probably be a he -- take over Cyber
2 Command? What are the things that you would want the new
3 person to focus on?

4 Admiral Rogers: So, "You're in" -- this is what I
5 would say to the individual, assuming the nominee is
6 confirmed, "You're inheriting a structure that reflects
7 choices we made 8 to 10 years ago. We need to step back and
8 ask ourselves, Is the structure optimized for today and
9 tomorrow? And how do we take the lessons of the last 8
10 years, where we've done a whole lot of activity on the
11 defense, in the offense, working with the private sector?
12 There are insights there that I think we can harness to look
13 at, How do we evolve the structure?" I'd also argue, we
14 need to step back -- and you have raised this with me
15 already this morning -- how do we better work the DOD role
16 and the defense industrial base and the cleared defense
17 contractors? We've got to get a different dynamic here.
18 We've got to look at that differently. And then, more
19 broadly, Cyber Command -- and again, it goes to some of the
20 points you've raised -- Cyber Command, in its role,
21 partnering with others, how do we do this in a much more
22 integrated way? That'll be something that I hope maybe I
23 can continue to provide opinions on in my next life.

24 Senator Hirono: Yes, how to get an integrated
25 structure for speed and agility. So, you have different

1 departments: DHS, FBI, Treasury. Who should take the lead
2 in creating this integrated structure?

3 Admiral Rogers: Well, that's, you know, clearly the
4 role of the administration within the executive branch.
5 That's their task. And I know they're working their way --
6 again, DOD, we're going to support this. There's an ongoing
7 review right now on this same question. So, we'll see what
8 comes out of that.

9 Senator Hirono: Is there something that Congress can
10 do to enable one entity, one of these agencies, to take the
11 lead in integrating our structure?

12 Admiral Rogers: I'd -- you know, I'd prefer to give
13 the executive branch a chance to say, "So, tell me what you
14 think the plan is." Now, I -- I'm not trying to minimize
15 the role of the Congress. Please, Senator, that's not what
16 I'm trying to say.

17 Senator Hirono: Thank you.

18 Thank you, Mr. Chairman.

19 Senator Inhofe: Senator Heinrich.

20 Senator Heinrich: Thank you, Mr. Chairman.

21 Admiral Rogers, this committee has long expressed
22 concern about the lack of an effective doctrine to help
23 deter cyberattacks before they happen. The FY18 NDAA
24 specifically directed the development of a national cyber
25 doctrine. Why don't we have one yet? We've been talking

1 about this for years.

2 Admiral Rogers: Right. So, I don't want to speak for
3 others. I flatout can't tell you why. The point I'm trying
4 to make, as the Commander, is, "Hey, we need this," that
5 there would be value, not just for Cyber Command, not just
6 for the Department of Defense, but for the Nation as a
7 whole. As I've said, there is an ongoing effort right now.

8 I hope this is going to generate some of the points that
9 you make. I think it's frustrating to all of us. It's not
10 because of willful ignorance or neglect or negligence, but
11 we clearly haven't put ourselves where we need to be.

12 Senator Heinrich: Is it even possible to achieve cyber
13 deterrence when we don't have some sort of public-facing
14 articulated cyber doctrine that gives our enemies pause?

15 Admiral Rogers: Well, I think deterrence has multiple
16 components, from capabilities to a sense of, you know, what
17 we can and can't do, and what we will and won't do. So, I
18 would also argue, Let's not think of what --

19 Senator Heinrich: So we have some inherent deterrent
20 --

21 Admiral Rogers: Right.

22 Senator Heinrich: -- value in our capabilities.

23 Admiral Rogers: Yes, sir.

24 Senator Heinrich: If we had an articulated doctrine --

25 Admiral Rogers: That would also help --

1 Senator Heinrich: -- that drew some -- you know, that
2 pointed out that there would be consequences, would that
3 increase our deterrent ability?

4 Admiral Rogers: I think that would increase it, but I
5 also -- the -- I apologize -- the other point I wanted to
6 try to make was, But don't think a strategy, in and of
7 itself, is the panacea. I think --

8 Senator Heinrich: Sure.

9 Admiral Rogers: -- it's an important --

10 Senator Heinrich: Yeah.

11 Admiral Rogers: -- component of where we --

12 Senator Heinrich: Absolutely.

13 Admiral Rogers: -- where we need --

14 Senator Heinrich: We need tools.

15 Admiral Rogers: -- to be, but it's the tools and the
16 underpinning, as well. Once you get that framework, then
17 it's, So what do you do to actually get to actionable
18 outcomes?

19 Senator Heinrich: So, right now, as my colleagues
20 pointed out, the Russian state continues to use bots, they
21 continue to --

22 Admiral Rogers: Right.

23 Senator Heinrich: -- use trolls and other, basically,
24 information warfare tools to sow division in this country --

25 Admiral Rogers: Yes, sir.

1 Senator Heinrich: -- to sow doubt. Has our response
2 been adequate to create any sort of visible deterrence to
3 those activities?

4 Admiral Rogers: It clearly has not changed their
5 calculus. It's not changing their behavior.

6 Senator Heinrich: I think that draws just sort of a
7 fine point on -- we need to be doing everything we can right
8 now to increase that deterrent value, because it's not being
9 effective.

10 Let's take a hypothetical for a moment. Tomorrow,
11 there's a nation-state cyberattack against our power and
12 energy sector. It results in power outages, it results in
13 oil and gas pipelines shutting down. Take a moment and
14 assume that the other decisionmakers, folks at DHS as well
15 as the administration, are in agreement that this is a
16 hostile nation-state attack, and who it's coming from. The
17 White House wants to respond in the cyberdomain immediately.

18 Without talking about what that looks like, are you ready?

19 Admiral Rogers: It -- there are so many variables in
20 what you -- so, who's the actor? What kind of capability
21 was used? What specifically are we looking to defeat or
22 overcome? It's one of those -- I apologize --

23 Senator Heinrich: Are you confident in your tools and
24 your team to be able to respond immediately?

25 Admiral Rogers: It -- the tools are optimized for

1 specific actors and specific -- and again, I apologize, I
2 don't want to get into the specifics of --

3 Senator Heinrich: I don't want to give you specific
4 actors, but you know --

5 Admiral Rogers: Right. But, the capabilities are
6 optimized for specific actors and specific configurations,
7 in many ways. So, there are so many variables -- the other
8 thing in all this is, you know, time. It's one of the
9 reasons why I think we've got to get a much more integrated
10 day-to-day approach to this. Because one of my challenges
11 is: Look, my experience as a military commander teaches me,
12 doing discovery learning while I'm moving to contact -- I'm
13 being told, "Hey, I want you to forestall the following
14 adversary." If the first time I've dealt with this
15 potential adversary is in the scenario you've outlined, then
16 I'm doing a lot of discovery learning as I'm going to
17 contact. That's --

18 Senator Heinrich: Let's make --

19 Admiral Rogers: -- not optimal.

20 Senator Heinrich: -- the assumption that it's somebody
21 we've been planning for for a --

22 Admiral Rogers: Right.

23 Senator Heinrich: -- long time.

24 Admiral Rogers: Then that's a little different
25 scenario. And again, it depends on the --

1 Senator Heinrich: You mentioned --

2 Admiral Rogers: -- specifics, but --

3 Senator Heinrich: -- a few in your --

4 Admiral Rogers: Yes, sir.

5 Senator Heinrich: -- initial testimony.

6 Admiral Rogers: That there are capabilities for us.

7 Senator Heinrich: Okay.

8 You have talked for years about, sort of, your top
9 three cyber concerns: critical infrastructure, data
10 manipulation, and attacks from nonstate actors. Just
11 quickly, compare how you think we're doing on those three,
12 versus how you viewed them, from a risk point of view, when
13 you first took this job. How has it changed?

14 Admiral Rogers: So, first, critical infrastructure.
15 There's greater recognition of the problem set, which is
16 good. I'm not spending a lot of time, now, saying, "Hey,
17 this is something we need to be focused on." But, I would
18 still argue it's uneven. Some segments, very advanced,
19 doing some great work. Other segments, not so much.

20 The second area was -- I apologize -- was data
21 manipulation. My argument would -- "Boy, are you watching
22 that unfold now in the world around us?" It goes to the
23 influence piece. I would argue that has gotten worse,
24 because now you've got a major actor, and they're not the
25 only ones, in the form of the Russians, who -- now it's a

1 conscious part of their strategy, and they're doing it on a
2 regular basis. So, there I would argue we've gotten worse.

3 And the third was --

4 Senator Heinrich: Nonstate actors.

5 Admiral Rogers: -- nonstate actors. That one, that
6 surprised me a little bit, in the sense that, while I've --
7 and I'm not talking criminal, because I would argue criminal
8 activity is still the greatest single segment of activity,
9 from a threat basis, within the cyberspace arena. That has
10 not taken off quite as much as I thought it would, to be
11 honest.

12 Senator Heinrich: I'm over my time. I apologize, Mr.
13 Chair.

14 Senator Inhofe: Senator Kaine.

15 Senator Kaine: Thank you, Mr. Chair.

16 And, Admiral Rogers, thank you so much for your service
17 and your multiple appearances here.

18 I was interested that, in the aftermath of the
19 announcements by Director Mueller of indictments of 13
20 Russian individuals, two Fridays ago, that the President
21 tweeted out -- and I'm just going to use his words; I
22 normally wouldn't use these words, but -- and I'm going to
23 quote him. He said Russia is, quote, "laughing their asses
24 off." And he also said, quote, that "Russia has succeeded
25 beyond their wildest dreams."

1 I think this is going to be chapter in our life where
2 we're going to just have to acknowledge we've been
3 humiliated as a country. Our democracy has been humiliated.
4 We've had our pocket picked. We've lost what may be, you
5 know, the first real cyber war that our Nation has been in.
6 You can characterize it a lot of different ways, but I think
7 it's going to be characterized as a chapter of failure. The
8 U.S. Government failed to protect the U.S. democracy.

9 And I want to ask you, based on your lengthy experience
10 in this position, but really your lengthy experience in
11 service to the country, Where is the source of that failure?
12 Was the failure a failure of imagination? Was it a failure
13 of will? Was it a failure of policy? Was it a failure of
14 structure? Was it a failure of personnel? Was it a failure
15 of leadership? Was it a failure of investment? Was it more
16 than one of those things? We can learn from failure, and we
17 should, so that we --

18 Admiral Rogers: Right.

19 Senator Kaine: -- can improve. But, I think the
20 history of this, especially the 2016 election, which has now
21 led to 19 indictments or guilty pleas by individuals, and
22 another three indictments or pleas by entities. It's going
23 to be viewed as a chapter where the U.S. Government failed
24 the U.S. democracy. And I want your best professional
25 judgment, in what may be your last appearance before the

1 committee in this particular role, as where the source of
2 that failure is, so that we can fix it.

3 Admiral Rogers: So, I don't think there's one single
4 source of failure, but I'll share some thoughts with you.

5 So, first, one of the things that's always struck me
6 is, we -- if you go back several years, we tended to define
7 "critical infrastructure" from a very Industrial Age
8 approach. Hey, does it produce a product or service, an
9 outcome? So, for example, using that methodology, we didn't
10 say to ourselves, our electoral process is a critical
11 infrastructure product. Because we're thinking, there's no
12 product or service, so to speak, that it tangibly generates.
13 I mean, there's votes and outcomes. So, the first thing I
14 was struck by is, we need to rethink, What does critical
15 infrastructure really mean to us in this Digital Age that
16 we're living in?

17 Secondly, I think -- you know, I -- again, I've been in
18 the job for a while. I've been in that part of multiple
19 administrations. I think the thought initially was, We'll
20 go to them, we'll tell them we have awareness of what we're
21 doing, and this will convince them -- and we'll take some
22 initial steps, and we'll convince them that they should
23 stop.

24 Senator Kaine: Underestimating an adversary.

25 Admiral Rogers: Right. And that clearly has not

1 happened. I don't think we anticipated how -- what level of
2 sustained aggressive behavior we were going to see over
3 time, that this wasn't viewed as a one-off, "Hey, it was
4 just about one particular election, one particular outcome,"
5 that clearly we're looking at a nation now who views this as
6 a strategic imperative over time for them, that there's
7 value to be achieved in continuing to do this. I don't
8 think we necessarily initially looked at it that way.

9 And then, the final thing that comes to my mind is --
10 and it's symptomatic of cyber as a whole -- what do you do
11 when we're dealing with a challenge that crosses so many
12 different lines? So, as I said, in our structure, elections
13 are a State process. Cyber capability -- DOD, DOJ, DH- --
14 that's the executive -- that's not State, that's a Federal
15 and it's an executive branch. You look at capability in the
16 private sector, how do we -- one of my takeaways is, cyber
17 is going to force us to think outside the traditional lines
18 that we use in assigning -- in defining problems and
19 aligning resources.

20 Senator Kaine: Let me ask you one more question. I
21 was a mayor and a Governor. Why should mayor -- local
22 officials or State officials today believe that the United
23 States Government will protect the United States democracy
24 in future elections? Because, as I talk to Governors and
25 local officials, they have very grave doubt whether the

1 Federal Government will act in any way to protect the
2 electoral system from attacks such as those that Russia
3 conducted in 2016. Tell them why they should have
4 confidence that the U.S. Government will --

5 Admiral Rogers: Well, first, I don't interact with
6 them, but, as a citizen, my attitude would be, "Look, I hope
7 one of your takeaways is, here, while the system is
8 imperfect and clearly has not achieved the outcomes we want,
9 it is not because there aren't motivated, hard-working
10 individuals trying to do things." And that, hopefully, as
11 you've said, you know, we want to be a learning, adaptive
12 nation, here, where we learn and change over time. And
13 that's what I'm hoping we're going to see in the coming
14 months and years ahead of us. Because this is not a, "All
15 we've got to worry about is -- we'll deal with this in 6
16 months or a year." That's not the way this is going to
17 work, I don't think.

18 Senator Kaine: Thank you, Mr. Chair.

19 Senator Inhofe: Senator McCaskill.

20 Senator McCaskill: I'm going to try to -- I know this
21 ground has gone -- been gone over, but -- first of all,
22 thank you.

23 Admiral Rogers: Yes, ma'am.

24 Senator McCaskill: You've been terrific. I'm a big
25 fan of the work you've done.

1 But, I'm going to try to channel a woman who came up to
2 me at the grocery store not too long ago. She asked me a
3 simple question: "Is Russia at war against our democracy?"

4 What would you have said to her in the grocery store?

5 Admiral Rogers: I -- well, a war is, by definition, as
6 a specific legal document aspect to it. And I'm not a
7 lawyer. What I would probably say to her is, "There
8 shouldn't be any doubt we are in a competition with these
9 guys, and they are trying to use every tool they have to
10 gain advantage. And some of that advantage they want to
11 gain is by undermining our very institutions."

12 Senator McCaskill: That's a lot of words. I said,
13 "Yes."

14 [Laughter.]

15 Admiral Rogers: So --

16 Senator McCaskill: I said, "Yes."

17 Admiral Rogers: I like to talk to people. I
18 apologize.

19 Senator McCaskill: I mean, I've just got to tell you,
20 they came after our democracy.

21 Admiral Rogers: Yes, ma'am.

22 Senator McCaskill: I can't imagine anything more
23 essential to the United States of America than our
24 democracy. So, the next question she asked me, "Are we
25 strong enough and smart enough that we can keep them from

1 doing this again?"

2 Admiral Rogers: Yes.

3 Senator McCaskill: Okay. So, then the next question
4 she asked me -- I said the same thing -- the next question
5 she asked me, "Are we doing that right now?"

6 Admiral Rogers: We're taking steps, but we're probably
7 not doing enough.

8 Senator McCaskill: Okay. So, she wants to know, and I
9 want to know, Why the hell not?

10 Admiral Rogers: Ma'am, I'm not --

11 Senator McCaskill: What's it going to take?

12 Admiral Rogers: I'm an operational commander, ma'am.
13 You're asking me a question that's so much bigger than me.
14 I don't -- I'm not trying to duck this. I'm trying to say,
15 Here's what my role is. And you're --

16 Senator McCaskill: It's a problem --

17 Admiral Rogers: -- asking me something that's --

18 Senator McCaskill: -- it's a problem, Admiral.

19 Admiral Rogers: Oh, I don't deny that --

20 Senator McCaskill: It's a problem.

21 Admiral Rogers: -- for one minute.

22 Senator McCaskill: You know, the notion that this
23 country came after the essence of what we are -- the
24 character and value of our country is all about the
25 democracy -- the notion they came after us, brazenly, and

1 that nobody can sit in that chair and say, "We got this" --
2 you guys can do this. You give our America's military a
3 mission, and nobody is better.

4 Admiral Rogers: Right.

5 Senator McCaskill: The notion that you have not been
6 given this mission to stop this from happening this year is
7 outrageous. It is outrageous. And there's no question that
8 they know we're not coming after them. And, frankly, your
9 response to Senator Reed's question about Cyber Command
10 disrupting their interference, you said, "We have chosen not
11 to engage in the same behavior as Russia." But, defending
12 is not the same behavior as Russia. Preventing and
13 deterring is not the same behavior. They came after us.
14 We're not asking you, "Are you going after them?" We're
15 asking you, "Have you the authority, have you the command to
16 stop them from doing this again to the -- us in 2018?"

17 Admiral Rogers: I cannot operate out of the DOD
18 information network, ma'am, on a daily basis. I do not have
19 the authority to do that. I don't have the legal authority
20 to defend a State's voting infrastructure --

21 Senator McCaskill: Well, I'll tell you, Admiral
22 Rogers, if there -- if you don't have the authority to
23 defend our voting structures, then we've -- we've got the
24 ability to fix that. Correct? I believe, Mr. Chairman and
25 Ranking Member, we have the ability to fix the law to give

1 you the authority to protect our voting systems. Because I
2 guarantee you, the Secretary of State of Missouri doesn't
3 have an ability to go after Russia.

4 Admiral Rogers: Right. Yes, ma'am

5 Senator McCaskill: I mean, they could harden, but they
6 can't go after them. The only entity that can go after
7 Russia is the United States military. That's the only one.

8 And the fact -- I mean, effectively -- I mean, maybe
9 Department of Homeland Security can help around the edges,
10 but their primary mission is not to go after a foreign
11 nation. It is, in fact, to protect the homeland.

12 Admiral Rogers: But, again, I would argue, think --
13 respectfully, think beyond just cyber and responding in
14 kind. There's a whole -- economic, politi- -- there's a
15 whole breadth of tools that we could potentially apply here
16 to try to shape the Russians' behavior and their choices. I
17 would just urge us, "Don't default to, We've got to go after
18 them in cyber." I'm not arguing that cyber isn't a
19 potential part of a broader strategy. I'm not trying to say
20 that --

21 Senator McCaskill: I just never thought I'd --

22 Admiral Rogers: -- for one minute.

23 Senator McCaskill: -- see the day -- honestly, I never
24 thought I'd see the day that Russia would go after the heart
25 of our country.

1 Admiral Rogers: Ma'am.

2 Senator McCaskill: Ever. And that we would be sitting
3 here parsing words about whether or not we've got this. I
4 want somebody with your experience and your courage and your
5 tenacity -- I want somebody to sit in that chair and say to
6 the United States of America, "We've got this."

7 Admiral Rogers: Ma'am.

8 Senator McCaskill: And until we have that moment,
9 Russia is winning. And that is disgusting.

10 Admiral Rogers: Yes, ma'am.

11 Senator McCaskill: Thank you, Mr. Chairman.

12 Senator Inhofe: Senator King.

13 Senator King: Thank you, Mr. Chairman.

14 Guess what question I'm going to ask?

15 [Laughter.]

16 Admiral Rogers: Yes, sir. Would this be a Russian --
17 associated with Russia?

18 Senator King: It would be. And a deterrence-related
19 question.

20 Admiral Rogers: Yes, sir.

21 Senator King: On December 23rd of 2016, the Congress
22 passed the National Defense Authorization Act. In it was a
23 section that required the Secretary of Defense to file a
24 report, on just the questions we've been talking about,
25 within 180 days, which was June of 2017, about the

1 definition of a "cyberattack," what would be the response.
2 It talks about operational authorities -- what operational
3 authority is delegated to the United States Cyber Command
4 for military cyber operations, how the Law of War applies,
5 the whole -- a whole list. The purpose of the amendment,
6 which was in the law, which is in the law, was to establish
7 a clearly articulated doctrine of response in this kind of
8 situation. I'm asking you, as an operator, have you been
9 asked -- have you been tasked with drafting any part of the
10 response to this requirement, which --

11 Admiral Rogers: I've been --

12 Senator King: -- by the way, is now in --

13 Admiral Rogers: I've been part of the --

14 Senator King: -- month eight?

15 Admiral Rogers: -- part of the dialogue about
16 responding, particularly on the operational piece of this,
17 in terms of overall responsibility. This is -- the Office
18 of the Secretary of Defense has the responsibility for --

19 Senator King: But, I'm asking, Is anybody --

20 Admiral Rogers: -- replying --

21 Senator King: -- working on this? We're 8 months in
22 -- we're 8 months late now.

23 Admiral Rogers: I apologize. I don't know the
24 specifics of the timeline for --

25 Senator King: But, were you given a deadline, saying,

1 "We need this by June of" --

2 Admiral Rogers: I was --

3 Senator King: -- "2017?"

4 Admiral Rogers: -- part of this. I don't remember --

5 I honestly don't remember if we were given a -- can I take

6 this one as a -- an action to --

7 Senator King: Yeah, but here's --

8 Admiral Rogers: -- get back --

9 Senator King: -- here's what's frustrating, is -- Here

10 we are, still talking about this issue, when the Congress

11 made a specific instruction to the Secretary of Defense, and

12 the President, by the way, was then required to respond to

13 the Congress within 180 days from that report that should

14 have been coming in June of 2017, hasn't come. So, you

15 know, we're way late, and we --

16 Admiral Rogers: Yes, sir.

17 Senator King: -- keep talking about this. You and I

18 have been in probably a dozen or 15 hearings on this, and we

19 don't seem to be any further ahead than we are -- were

20 before. And the problem, as you've testified today, and I

21 think quite accurate and repeatedly, until we have some

22 clearly articulated doctrine of response to these kind of

23 attacks, they're going to continue. If all we do is try to

24 patch our software --

25 Admiral Rogers: Right.

1 Senator King: -- they're going to continue. And you
2 know that, and I know that. What's it going to take? Is it
3 going to take the destruction of the electric grid or the
4 financial system in order for us to finally get to the point
5 of taking this seriously?

6 Admiral Rogers: Like I said, sir, there is an ongoing
7 -- I'm -- and I'm participating in this. I just --
8 apologize -- I just don't know the specific timelines here.
9 I'm --

10 Senator King: Yeah. And I'm not -- I understand
11 you're an operational guy, but you have to understand our --
12 you're the nearest thing that we have --

13 Admiral Rogers: I've got it. I know my --

14 Senator King: You're lucky enough to be here today.
15 But, this is serious business. And --

16 Admiral Rogers: Yes, sir.

17 Senator King: And -- well, let me turn to some -- a
18 little more specific question that I think underlines what
19 we're talking about here. What would happen today if you,
20 on your way back to your office, got a call and said the
21 U.S. financial system has been taken down, all the computers
22 on Wall Street are off, the markets are in chaos? I don't
23 mean from a policy point of view. I'm --

24 Admiral Rogers: No, no.

25 Senator King: -- talking about --

1 Admiral Rogers: In terms of --

2 Senator King: -- what would be the execution? Who's
3 in charge? What would the results be?

4 Admiral Rogers: So, DHS would have overall
5 responsibility for the provision of Federal support in
6 response to this. My role would be: help to make sure I
7 understand, number one, who was the actor. So, can we
8 identify who did this? Because if I'm going to respond, I
9 have to know who I'm responding to or what I'm responding
10 to. So, one of my first questions, as Cyber Command, would
11 be, Let's make sure we understand what's the
12 characterization of activity, who's the actor, what did they
13 do --

14 Senator King: Who would take the lead? Who's in
15 charge?

16 Admiral Rogers: -- how did -- DHS would have overall
17 responsibility.

18 Senator King: DHS would be in charge?

19 Admiral Rogers: Sir.

20 Senator King: Do -- have you -- do you -- have you
21 war-gamed this?

22 Admiral Rogers: Yes, sir. In fact, I made it a broad
23 reference it -- the finance sector, for example, the
24 scenario you posture here, I've -- we've actually undertaken
25 some very good tabletops, specifically, as I reached out to

1 DHS and the financial sector. And, "Look, we have got to
2 get down execution-level work here, team." So --

3 Senator King: Well, that's -- and you --

4 Admiral Rogers: -- we have done --

5 Senator King: -- repeated talk about integration. And
6 what worries me is that -- whether anyone is in charge. And
7 I guess a followup is, Do we have a serious red-team, war-
8 game process to be sure we're not surprised about how to
9 react when one of these things happens?

10 Admiral Rogers: I don't know if I'd use the phrase "we
11 have a serious red team." Do I -- is this part of our
12 mission responsibility? Yes. Is this something we train
13 and exercise against? Yes. Is this something we
14 continually assess, looking for indicators of this type of
15 activity before it occurs? Yes.

16 Senator King: Well, I want to thank you. This may be
17 our last --

18 Admiral Rogers: Sir.

19 Senator King: -- time to talk about this. And thank
20 you for your service and your straightforward response,
21 always. And just leave you -- and you know, I hope, as you
22 leave this job, you will leave a memo behind that says, "We
23 are not adequately prepared. We need a doctrine. We need
24 it to be publicly available. We need our adversaries to
25 know that, if they strike us in this realm, they're going to

1 be struck back." And it may not be cyber. I mean, as you
2 say --

3 Admiral Rogers: Right. Sir.

4 Senator King: -- it may be a whole range of things.
5 But, right now, we are not -- we have not done that. And I
6 deeply hope that this is something you can take on as a kind
7 of exit interview.

8 Admiral Rogers: Sir.

9 Senator King: Thank you.

10 Thank you, Mr. Chairman.

11 Senator Inhofe: Senator Tillis.

12 Senator Tillis: Thank you, Mr. Chairman.

13 Admiral Rogers, thank you for being back before the
14 committee.

15 Could you just give me a brief description, in your
16 tenure in the current role, where you think things have got
17 -- tell me the positive things that have occurred and the
18 things that you wish you had made more progress on in your
19 time in the Command.

20 Admiral Rogers: So, the positive thing, among the
21 things that jump out at me, it's Cyber's integration with
22 other operational commands, particularly CENTCOM, SOCOM,
23 some things we're doing out in the Pacific with Pacific
24 Command. That has been a real strength. It's something I
25 really -- I knew it was a good day when you have those

1 commanders publicly talking about what Cyber Command is
2 doing. And it's not Cyber Command talking about, "Look at
3 all the great cyber things we're doing. Shouldn't you like
4 what we're doing?" That's been a real process.

5 Some of the command-and-control structures -- JTF Ares
6 that we put in place. How do you build a structure designed
7 to integrate capability so we can generate effects against
8 ISIS -- was a slow start, because we were starting from
9 ground zero, but it has really taken off. That has worked
10 out very, very well.

11 The campaign planning in the structure, from a planning
12 perspective, that we've put in place, particularly that's
13 been a focus for us over the last calendar year, that -- oh,
14 that's just some great work. That really sets the
15 foundation for the future and gets cyber into a much more
16 traditional, "Hey, look, we're no different in our mission
17 set than CENTCOM is in what they're -- in terms of the
18 mechanisms and the framework they're using to plan, or what
19 European Command is doing." That's a real positive.

20 If I ask myself, What are the areas where I would --
21 and the force generation. I mean, we're going to beat the
22 timeline for FOC. That took a lot of work by a lot of
23 people. The areas where I -- were not as far along as I
24 wish we were, tool and capability development and who's
25 going to do what. We've still got to work this out between,

1 What's the role of the services and what's the role of the
2 Command? You have give us -- the Congress has given us some
3 acquisition authority. We've started down that road. I
4 think that's a real positive. But, we've got to ask
5 ourselves, So what's the future here?

6 Senator Tillis: Do we have the timelines on
7 acquisition right with the nature of the developing
8 technology? In other words, are we compressing the time to
9 new capabilities to a point that you feel comfortable?

10 Admiral Rogers: So, we're -- we're never where we want
11 to be. But, I like the fact that there's been recognition,
12 we need to do this outside the traditional acquisition
13 framework, which was really built to generate these capital-
14 intensive capabilities that take a decade to develop.
15 That's not our model. That is not what we need. So, I like
16 the recognition of this. It's an area the Secretary's asked
17 me to take a look at over time, so this will be something
18 I'm going to comment on before I leave. I've got some
19 thoughts I want to share on this before I leave.

20 Senator Tillis: How well have you done on personnel
21 recruiting and retention?

22 Admiral Rogers: So, if you look at a uniform --

23 Senator Tillis: As chair of the Personnel
24 Subcommittee, I'm --

25 Admiral Rogers: Right.

1 Senator Tillis: -- particularly interested in other
2 things that we should be doing as we look at the NDA
3 specifically around personnel issues.

4 Admiral Rogers: So, if you look on the uniform side,
5 I'd say we're probably exceeding our expectations. It
6 doesn't mean that it's perfect. The biggest challenge for
7 me in the 4 years has been less the military uniformed
8 component, and the civilian piece is proving to be harder.
9 Retention, recruitment -- part of it also now is the
10 process. When it comes to the military, we've got a lot of
11 people coming to us, many of whom have skills that I can
12 apply in cyber. In the cyber world, it's much more about
13 going out and trying to find people with the right skills.
14 It's a little different dynamic. And so, the civilian piece
15 has probably proven to be harder.

16 Senator Tillis: Well, that's something that we're
17 always interested in, in things that we can do to make that
18 easier. It's very --

19 Admiral Rogers: Yes, sir.

20 Senator Tillis: I can't imagine how you compete with
21 the likes of the firm that I worked with on recruiting and
22 retaining --

23 Admiral Rogers: Right.

24 Senator Tillis: -- some of the top talent. I could go
25 and fill the new capability in 3 months that you could take

1 3 years to do. And I think that we have to continue to look
2 at that. These highly talented people --

3 Admiral Rogers: Right.

4 Senator Tillis: -- want an environment where they're
5 moving at the pace of the threat. And that's the last
6 thing.

7 Since the time you started this role, how would you
8 describe the number and the nature of threats that you're
9 dealing with today versus when you began?

10 Admiral Rogers: State actors have gotten more
11 aggressive, not less aggressive. The breadth of capability
12 in many states that are of concern to us is growing. You
13 can look at the level of -- I mean, we publicly talk about
14 Russia, China, Iran, North Korea -- you look at the level of
15 investment they are making, it is significant.

16 Senator Tillis: And how well -- last question -- how
17 good have you gotten at knowing what we don't know? And
18 I've talked about this before --

19 Admiral Rogers: Right.

20 Senator Tillis: -- in prior committees, the latent
21 capability. There are a lot of people who express
22 frustration because, when we see malign behavior on the part
23 of, maybe, a state actor or some other organization, the
24 idea is to go out with some sort of a proportionate response
25 in the cyber world. The thing that concerns me with that

1 is, we really don't know what we don't know about latent
2 capabilities that could ultimately brought -- be brought
3 back to us. Are we at a point where we have any better or
4 more holistic idea of what the latent threats are out there
5 --

6 Admiral Rogers: I mean, we're --

7 Senator Tillis: -- in private sector or with --

8 Admiral Rogers: Right.

9 Senator Tillis: -- whole of government?

10 Admiral Rogers: I mean, we're better. But, on the
11 other hand, just as a broad --

12 Senator Tillis: They're better, too.

13 Admiral Rogers: Right. Just as a broad operational
14 principle, one of the team -- one of the things I constantly
15 tell our team is, "You must assume we have imperfect
16 knowledge, and we must be capable of acting on imperfect
17 knowledge." So, don't come to me, telling me, "Hey, we
18 think we totally understand." I -- just my experience
19 teaches me, it doesn't always work that way.

20 Senator Tillis: Well, thank you. And again, encourage
21 you to get any feedback to the committee staff --

22 Admiral Rogers: Sir.

23 Senator Tillis: -- in my office on anything that we
24 can do, at least on the recruiting-and-retention piece for
25 any resources going into the NDA.

1 Admiral Rogers: Yes, sir.

2 Senator Tillis: Thank you for your service.

3 Senator Inhofe: Thank you, Senator Tillis.

4 Let me just make one comment here before going on to
5 Senator Peters.

6 I was thinking, all during this, less than
7 complimentary comments have been made. I just returned,
8 last night, from 12 -- 13 days in PACOM. Everyone from
9 Admiral Harris, Shaunessy, all the rest of them, I've talked
10 to, all the way around to and including on the DMZ, between
11 South and North Korea. So, all the principals there. I
12 have to say to you -- and this is at PACOM -- they are very
13 complimentary of the work that you've done and the progress
14 that you've made.

15 Senator Peters.

16 Senator Peters: Thank you, Mr. Chairman.

17 And, Admiral Rogers, wonderful to have you --

18 Admiral Rogers: Senator.

19 Senator Peters: -- here again. And I'll join in
20 saying thank you for your service. We're going to miss you.

21 It's been great having you before this committee, and I've
22 appreciated your attention to this issue, and personally
23 talking to me about a variety of --

24 Admiral Rogers: Sir.

25 Senator Peters: -- issues, as well.

1 I'd like to talk a little bit more about the future of
2 warfare and the future of technology. There's been some
3 questions related to machine learning and artificial
4 intelligence, which is going to change everything, not just
5 in the military space, but in the commercial side. I am on
6 the Commerce Committee, and we recently had a hearing on
7 artificial intelligence and how that's going to change
8 business and commercial activities, in general. And I asked
9 one of the leading executives at one of the leading
10 technology companies in the country, What did he fear most
11 about artificial intelligence? We had a hearing primarily
12 of all the positive aspects of it, but I asked him, What did
13 he fear? And I was actually surprised by his answer. He
14 said his fear was the manipulation of elections and the
15 manipulation of public opinion that can undermine democracy,
16 which I thought was a very interesting response from a
17 leading tech company.

18 And so, I wanted to ask you a bit about that in the
19 Department of Defense, and, more broadly, our posture when
20 it comes to investing in these technologies, and how are we
21 working to increase innovation and work with those
22 commercial companies to integrate it into defense systems?
23 And I guess I'll ask you that question, as well. What do
24 you fear -- if we don't get this right, what is our fear of
25 an adversary acquiring machine learning and AI systems in

1 advance of our own capabilities?

2 Admiral Rogers: From a military's perspective, my
3 concern is, you potentially lose speed and knowledge.
4 That's a terrible combination as a warrior. Like, speed and
5 knowledge are advantages for us, historically. And one of
6 my concerns is, if we're not careful, AI potentially gives
7 opponents speed and knowledge better than ours, if we're not
8 careful. I'm not arguing that's going to happen, but I
9 acknowledge we've got to look at it.

10 What was -- I apologize, Senator -- what was the --

11 Senator Peters: That's all right. That's -- and I
12 guess I want to pick that up, because this technology is
13 moving through the commercial side even --

14 Admiral Rogers: Right.

15 Senator Peters: -- faster than through the military
16 side. So, it -- in the past, oftentimes military research
17 would be a leading factor. That's not necessarily the case
18 here at all. And I'm worried, in particular, about our
19 adversaries that are able to come in and actually buy those
20 technologies, particularly from startup companies.

21 Admiral Rogers: Right.

22 Senator Peters: I'm working right now in trying to
23 fill some of the gaps on the CFIUS process, which is the
24 Committee on Foreign Investment in the United States.

25 Admiral Rogers: Sir.

1 Senator Peters: You basically have foreign entities
2 that buy companies, perfectly legal, get that information,
3 and they use it not just for commercial applications, but
4 also figure out ways to --

5 Admiral Rogers: Right.

6 Senator Peters: -- weaponize that type of technology,
7 as well.

8 So, my question to you is, How can we better integrate
9 the missions of CYBERCOM and the NSA as to it relates to
10 this CFIUS review process? Are you concerned about it?
11 What should we be doing to make sure that we are protecting
12 this intellectual capital that has significant national
13 defense potential?

14 Admiral Rogers: I'm not concerned about the review
15 process, in terms of NSA role and Cyber Command. Again,
16 it's one of the advantages of -- we are so physically
17 colocated to each other.

18 My bigger concern goes to what you've already said.
19 CFIUS, to me, is a reflection of an environment of the past,
20 not today in the future. And it is very clear to me that
21 some nation-states have spent a lot of time studying this
22 CFIUS process, and have developed strategies to overcome it,
23 "Hey, I don't have to worry about buying a corporation
24 outright, it's -- so tell me what your oversea subsidiaries
25 are, and tell me what your providers are, tell me who else

1 has access to this intellectual property, so to speak. I'll
2 acquire that." And things like that, I'm going -- CFIUS is
3 not set up to -- it wasn't what we built it to do. So, I
4 applaud your efforts to -- we need a different construct.
5 Not -- we don't want to get rid of CFIUS, but I need -- I
6 think we need to think about it more broadly, about the
7 national security challenges of foreign investment in areas
8 with national security implications for us.

9 Senator Peters: Is there a role for CYBERCOM to be
10 more actively involved in some of that process, providing
11 information? I mean, you'll be aware of what's happening,
12 things that you're concerned about, but how --

13 Admiral Rogers: Right.

14 Senator Peters: -- how do you see a potential role
15 there, if any?

16 Admiral Rogers: I think it's much more an intelligence
17 -- so, my role in -- on the NSA side, because we're tasked
18 with generating knowledge and insight, is much greater.
19 Cyber Command helps feeds -- feeds that effort, because one
20 of the things we do is, we generate knowledge and insight on
21 the Cyber Command side, based on what we're doing. We're
22 putting out reporting, so that goes into the broader effort.

23 But, it's not a primary mission for Cyber Command. It's
24 much more a primary mission on the NSA side.

25 Senator Peters: Great. Thank you for your testimony.

1 Appreciate it.

2 Senator Inhofe: Senator Warren.

3 Senator Warren: Thank you, Mr. Chairman.

4 And, Admiral, thank you for your --

5 Admiral Rogers: Ma'am.

6 Senator Warren: -- 37 years of service. I --

7 Admiral Rogers: When you say that, I just feel --

8 [Laughter.]

9 Senator Warren: No, no, you should feel proud. Feel
10 strong.

11 You know, you probably picked up on a theme today, that
12 this committee feels a sense of urgency about the Russian
13 threat to our elections. This is not a personal criticism
14 of you.

15 Admiral Rogers: No, I understand.

16 Senator Warren: We're frustrated that this
17 administration has not lived up to its responsibility to do
18 something about the Russian cyber action.

19 Now, you told Senator Blumenthal and Senator McCaskill
20 that not every cyberattack requires a cyber response. So,
21 I'd just like to follow up on that just a little bit here.

22 The Pentagon's Cyber Security Strategy says -- and I'm
23 going to quote it to you -- "In response to certain attacks
24 and intrusions, the United States may undertake diplomatic
25 actions, take law enforcement actions, and consider economic

1 sanctions." So, I want to focus for just a minute on that
2 last piece, sanctions.

3 Congress overwhelmingly passed a law last year that, in
4 part, required sanctions on individuals and companies that
5 knowingly engage in malicious cyberactivities on behalf of
6 the Russian government. Those sanctions include freezing
7 access and restricting travel. The Trump administration has
8 not imposed these required sanctions.

9 Admiral Rogers, I know that this is not your primary
10 responsibility --

11 Admiral Rogers: Yes, ma'am.

12 Senator Warren: -- to impose the sanctions, but I want
13 to ask a different question. What message does it send to
14 Vladimir Putin that the United States has not fully
15 implemented sanctions to counter known Russian cyberattacks?

16 Admiral Rogers: You know, more broadly, the -- not
17 just the sanctions, but more broadly -- my concern is, I
18 believe that President Putin has clearly come to the
19 conclusion, "There's little price to play here" --

20 Senator Warren: Bingo.

21 Admiral Rogers: -- "and that, therefore, I can
22 continue this activity."

23 Senator Warren: Yes.

24 Admiral Rogers: Everything, both as a director of NSA
25 and what I see on the Cyber Command side, leads me to

1 believe that, if we don't change the dynamic here, this is
2 going to continue, and 2016 won't be viewed as something
3 isolated. This is something -- will be sustained over time.

4 So, I think the challenge for all of us is, So what are the
5 tools available to us? And, as the strategy says --
6 diplomatic, economic, some cyber things -- there are tools
7 available to us. And again, I think, in fairness, you can't
8 say nothing's been done. But, my point would be, it hasn't
9 been enough.

10 Senator Warren: It hasn't been enough.

11 Admiral Rogers: Clearly what we've done hasn't been
12 enough. And --

13 Senator Warren: That's right.

14 Admiral Rogers: -- you know, I'm mindful of my role as
15 an operational commander, but --

16 Senator Warren: Yeah. No, I appreciate that. It
17 hasn't been enough. And it doesn't do us any good to have
18 tools in the toolbox if we don't pick them up and use them.

19 You know, Russia will keep trying to interfere in our
20 elections. And, if the Trump administration doesn't fully
21 implement sanctions, then we're not using every tool we can
22 to effectively deter Russia from undermining democracy in
23 the future.

24 Let me ask you one other question, if I can, Admiral.
25 It's clear that the United States needs to step up its cyber

1 game. And I want to follow up on a question from Senator
2 Tillis. We've previously discussed the question of how to
3 build a skilled cyber force. And you said that improving
4 DOD's network defenses and building a cybersecurity culture
5 depends on our ability to attract the most talented people
6 out there. This committee is now considering reforms to the
7 Defense Officer Personnel Management Act, or --

8 Admiral Rogers: Right.

9 Senator Warren: -- DOPMA, another one of our great
10 acronyms -- love to talk about DOPMA -- which governs how we
11 recruit and retain our military officers. So, with that in
12 mind, Admiral, if you could make just one change to DOPMA to
13 help attract the right technical talent for the cyber jobs
14 of tomorrow, what would that be?

15 Admiral Rogers: I'd want to make -- within a military
16 --

17 Senator Warren: Yes

18 Admiral Rogers: -- construct -- and, to be honest, we
19 use the phrase DOPMA, because "DOPE-MA" --

20 Senator Warren: Okay.

21 Admiral Rogers: -- sounds terrible.

22 Senator Warren: I always think --

23 Admiral Rogers: In a military standpoint, it would
24 probably be -- and the services are working their way
25 through this, but I think we want to make sure that we have

1 got a mechanism for a professional cyberforce across a
2 career, that this can't be viewed as something we do --
3 "Hey, we give you training, you do it for a few years, you
4 go do something else, you know, then we bring you back, then
5 you're gone again." That's not going to get us where we
6 need to be. And the services are all -- because they do
7 man, train, and equip -- you know, they provide capability
8 that I, as a joint -- and that includes people and other
9 things -- but that I, as the joint commander, then harness
10 to achieve specific mission outcomes as a joint commander.
11 That would probably be the biggest thing.

12 Senator Warren: Okay. It's actually very helpful to
13 know. I know that the 2017 defense bill gave the Pentagon a
14 lot of flexibility in how to recruit, but I remain concerned
15 that our recruiting system is so focused on recruiting for
16 the military of today that we're not effectively targeting
17 the best talent and best-suited talent to execute the
18 missions we will face tomorrow. And so, how we think about
19 that, I think, is really important.

20 Admiral Rogers: Ma'am.

21 Senator Warren: So, thank you again. Thank you for
22 your service, and thank you for your help.

23 Admiral Rogers: Thank you, Senator.

24 Senator Warren: Thank you, Mr. Chairman.

25 Senator Inhofe: Thank you.

1 It's the Chair's intention to go ahead and close the
2 meeting after a few remarks from the Ranking Member. Is
3 there objection to that?

4 [No response.]

5 Senator Inhofe: All right.

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

7 I have just very specific points I want to clarify.

8 First, there are ongoing Russian direct or inspired
9 cyberoperations against our electoral system, as we speak?

10 Admiral Rogers: Yes, sir.

11 Senator Reed: Yes.

12 Admiral Rogers: Yes, sir. I'm speaking more as NSA
13 than as Commander --

14 Senator Reed: Right.

15 Admiral Rogers: -- of Cyber Command, but yes, sir.

16 Senator Reed: Two, with the authority or the direction
17 of the President of the United States, National Mission
18 Teams can disrupt these attacks at the point of origin. Is
19 that correct?

20 Admiral Rogers: We could be tasked to do that. Again,
21 it depends on the specifics. I don't --

22 Senator Reed: But, it's legal?

23 Admiral Rogers: -- want to overpromise --

24 Senator Reed: It's legal, and it can be done.

25 Admiral Rogers: Sir.

1 Senator Reed: Have you been asked to make a
2 recommendation to -- with respect to deploying these teams?

3 Admiral Rogers: No, but I've certainly provided my --
4 nobody's necessarily directly asked me -- I certainly have
5 provided my opinion in ongoing discussions --

6 Senator Reed: What is your --

7 Admiral Rogers: -- about this.

8 Senator Reed: -- opinion?

9 Admiral Rogers: Again, my comment has been: Be
10 mindful of just defaulting to the cyber piece, here. I'd
11 like us to think about this a little bit more broadly, and
12 I'd like us to think about, So how does this potential cyber
13 piece that Cyber Command could play -- how does it fit into
14 something broader?

15 Senator Reed: So, let's just conclude. You have not
16 been formally asked for a recommendation.

17 Admiral Rogers: No, sir.

18 Senator Reed: You have expressed your opinion to the
19 Secretary of Defense and to the White House about the
20 possible uses of this, but not in any formal way.

21 Admiral Rogers: Yes, sir. I haven't put anything in
22 writing, for example.

23 Senator Reed: And, I guess, final point. And this
24 goes -- do you feel, as a professional officer, you have an
25 obligation to make a formal recommendation to this? Have --

1 Admiral Rogers: I feel that the system provides me the
2 opportunity to provide my recommendation, to provide my
3 insights, to provide my opinions, that people listen to what
4 I have to -- I acknowledge there's other opinions out there.

5 I acknowledge there's other perspectives. But, I feel very
6 comfortable in the fact that there's a -- been a dialogue
7 on this topic, and that dialogue continues.

8 Senator Reed: Thank you, Mr. Chairman, very much.
9 Thank you, Admiral.

10 Senator Inhofe: Thank you.

11 And thank you, Admiral, for your straightforward
12 answers and for the -- your patience on this, perhaps your
13 last event here.

14 We are adjourned.

15 [Whereupon, at 11:15 a.m., the hearing was adjourned.]

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