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Before the

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

NOMINATIONS

Thursday, March 1, 2018

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Thursday, March 1, 2018

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

The committee met, pursuant to notice, at 9:30 a.m. in Room SD-G50, Dirksen Senate Office Building, Hon. James Inhofe presiding.

Committee Members Present: Senators Inhofe [presiding], Wicker, Fischer, Cotton, Ernst, Sullivan, Perdue, Cruz, Graham, Sasse, Reed, Nelson, McCaskill, Gillibrand, Blumenthal, Donnelly, Hirono, Kaine, King, Heinrich, Warren, and Peters.

1 OPENING STATEMENT OF HON. JAMES INHOFE, U.S. SENATOR
2 FROM OKLAHOMA

3 Senator Inhofe: The meeting will come to order.

4 The committee meets today to consider the nomination of
5 Lieutenant General Paul Nakasone to be Commander of the U.S.
6 Cyber Command and Director of the National Security Agency
7 and Chief of the Central Security Service. That's quite a
8 bit of stuff there.

9 Also, Dr. Brent Park to be Deputy Administrator for
10 Defense Nuclear Nonproliferation at the National Nuclear
11 Security Administration; and Ms. Anne Marie White to be
12 Assistant Secretary of Energy for Environmental Management.

13 We thank you for joining us this morning.

14 Also, at the appropriate time, we would invite you to
15 introduce your families, which I have already had the honor
16 of meeting.

17 It's standard procedure and it is a requirement of this
18 committee to ask certain questions, so I'd like to ask seven
19 questions, and if you would just vocally come out with a yes
20 or no at the same time.

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

23 General Nakasone: I have.

24 Dr. Park: Yes.

25 Ms. White: Yes.

1 Senator Inhofe: And will you ensure that your staff
2 complies with deadlines established for requested
3 communications, including questions for the record in the
4 hearings?

5 General Nakasone: Yes.

6 Dr. Park: Yes.

7 Ms. White: Yes.

8 Senator Inhofe: Will you cooperate in providing
9 witnesses and briefers in response to congressional
10 requests?

11 General Nakasone: Yes.

12 Dr. Park: Yes.

13 Ms. White: Yes.

14 Senator Inhofe: Will those witnesses be protected from
15 reprisal for their testimony in briefings?

16 General Nakasone: Yes.

17 Dr. Park: Yes.

18 Ms. White: Yes.

19 Senator Inhofe: Do you agree, if confirmed, to appear
20 and testify upon request before this committee?

21 General Nakasone: Yes.

22 Dr. Park: Yes.

23 Ms. White: Yes.

24 Senator Inhofe: Do you agree to provide documents,
25 including copies of electronic forms of communication, in a

1 timely manner when requested by a duly constituted
2 committee, or to consult with the committee regarding the
3 basis for any good-faith delay or denial in providing such
4 documents?

5 General Nakasone: Yes.

6 Dr. Park: Yes.

7 Ms. White: Yes.

8 Senator Inhofe: Okay. And lastly, have you assumed
9 any duties or undertaken any actions which would appear to
10 presume the outcome of the confirmation process?

11 General Nakasone: No.

12 Dr. Park: No.

13 Ms. White: No.

14 Senator Inhofe: All right.

15 General Nakasone, if confirmed, you will become the
16 first Commander of the U.S. Cyber Command as a unified
17 combatant command. Creating the unified command is an
18 important step, but much work remains for you to do,
19 especially with regard to centralizing the responsibilities
20 currently spread across three different agencies. We have
21 DOD, we have FBI, and you have DHS.

22 Another one of your top priorities, if confirmed, must
23 be ensuring that Cyber Command readiness. If the services
24 do not deliver their required tools, capabilities and
25 personnel, we are in danger of a hollow cyber force.

1 Two days ago Admiral Rogers was repeatedly questioned
2 by this committee on the role of the Cyber Command and
3 specifically his command's response to the Russian
4 disinformation campaign around our 2016 presidential
5 elections. Unfortunately, the partisan propensity to
6 discredit our president consumed over half of that hearing.
7 Hopefully that's not going to happen again today. It would
8 be a disservice in two ways.

9 First, it assumes that Cyber Command action would be
10 the only response to the Russian disinformation campaign
11 when, in reality, it should be a whole-of-government
12 approach, especially given that disinformation is just part
13 of the threat that Russia poses to the United States. If
14 confirmed, it will be your responsibility to provide insight
15 and recommendations to policymakers on the whole-of-
16 government approach to respond to these attempts.

17 Secondly and perhaps more problematic for the
18 committee's role today, the full scope of the U.S. Cyber
19 Command, the stated mission of the Cyber Command is to
20 defend the homeland, defend military computer networks, and
21 develop and employ military cyber capabilities. That is a
22 robust task, and the committee should ensure that General
23 Nakasone is fully vetted on all aspects of that command.

24 The National Defense Strategy makes it clear that if
25 renewed Great Power competition with Russia and China leaves

1 every domain, including cyber, contested without coercion
2 across the entire government, that we will remain at a
3 significant disadvantage.

4 By the way, we had three of the senators with me over
5 the past 13 or 14 days actually looking into this. We are
6 in the area of the South China Sea, where we had a growing
7 threat from China and some things that we were not even
8 aware of prior to going there.

9 Dr. Park, you've been nominated to oversee the NNSA's
10 mission to detect, secure, and dispose of dangerous nuclear
11 and radiological material. If confirmed, the committee
12 expects you to address the proliferation of nuclear and
13 radiological materials among both state and non-state
14 actors, develop technologies to detect nuclear and
15 radiological proliferation worldwide, and to collaborate
16 internationally to secure the safe expansion of global
17 nuclear energy.

18 And, Ms. White, if confirmed, you will be responsible
19 for the safe and timely cleanup of our nuclear waste.
20 Unfortunately, the environmental office of DOE has been
21 plagued with management issues, safety concerns, and
22 continuous technical challenges. You've got your work cut
23 out for you there.

24 Senator Reed?

25

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

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

4 I would like to welcome our witnesses and congratulate
5 them for their service already and for their willingness to
6 serve in the Department of Defense and other agencies.

7 Let me also recognize your families, who are such an
8 important part of your contribution to the nation. Thank
9 you all.

10 General Nakasone, your service as the Commander of
11 Cyber Command's National Mission Force, Commander of the
12 Army Cyber Command, and the Commander of Joint Task Force
13 ARES, which targets ISIS Internet propaganda and recruiting,
14 in addition to your extensive experience in intelligence,
15 makes you a highly qualified individual to serve as Director
16 of the NSA and Commander of CYBERCOM.

17 If confirmed, the challenges that you will face include
18 disrupting and exposing cyber-enabled information operations
19 conducted by Russia and other countries. As Admiral Rogers
20 pointed out, the Russians are conducting these operations as
21 we speak, and we have to do something. Working with other
22 stakeholders, you have to develop whole-of-DOD and whole-of-
23 government approaches to cyber and information warfare; and
24 establishing deterrence policy and capabilities that will,
25 in time, help to prevent significant nation-state cyber and

1 information warfare attacks against the United States.

2 These are no small tasks, but it is more important now than
3 ever that these threats to our national security are
4 confronted head-on and not ignored.

5 Dr. Park, you are nominated to be the Administrator for
6 Defense Nuclear Nonproliferation, the primary role in the
7 National Nuclear Security Agency for controlling the spread
8 of nuclear material around the world and promoting its
9 peaceful use. In that regard, this committee will look to
10 you as the point person for ensuring countries that want to
11 develop peaceful uses of nuclear energy are technically
12 capable of doing so, while assisting the International
13 Atomic Energy Agency with the ability to conduct monitoring.
14 Nuclear nonproliferation remains vital to maintaining our
15 national security and global stability. If confirmed, we
16 will be asking you to give us your forthright assessment on
17 nuclear proliferation concerns in the Middle East, North
18 Korea, and around the world.

19 Ms. White, you are nominated to serve as the Assistant
20 Secretary of Energy for Environmental Management. If
21 confirmed, it will be your responsibility to oversee the
22 large and complex cleanup operations involving former
23 defense production sites at the Department of Energy. Since
24 the cleanup program began more than 25 years ago, the
25 majority of the less complex sites have been completed.

1 Current cleanup operations require much more care due to
2 their complexity. These include sites like Hanford,
3 Washington, which has some 55 million gallons in 177
4 underground tanks; and Los Alamos, New Mexico, which is
5 resuming plutonium disposal operations at the Waste
6 Isolation Pilot Plant after an accident four years ago.

7 You will be challenged to complete these projects
8 quickly and efficiently, under the tight budget constraints
9 required by your obligation to serve as a steward of
10 taxpayer dollars. If confirmed, we will look to you to give
11 us regular updates on your progress on these issues, while
12 ensuring you have clear lines of communication to the states
13 where these operations take place.

14 I would again like to thank the nominees for your
15 willingness to serve, and I thank you very much for your
16 service to our nation. Thank you.

17 Senator Inhofe: Thank you, Senator Reed.

18 What we're going to do now is have opening statements.
19 We're going to try to confine them, as close as you can, to
20 5 minutes. Your entire statement will be made a part of the
21 record, and we won't count the time against you as you
22 introduce your family.

23 We're going to start with General Nakasone.

24

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1 STATEMENT OF LIEUTENANT GENERAL PAUL M. NAKASONE, USA,
2 TO BE GENERAL AND DIRECTOR, NATIONAL SECURITY AGENCY/CHIEF,
3 CENTRAL SECURITY SERVICE/COMMANDER, UNITED STATES CYBER
4 COMMAND

5 General Nakasone: Senator Inhofe, Ranking Member Reed,
6 and distinguished members of the committee, I am honored to
7 appear before you today regarding my nomination as
8 Commander, U.S. Cyber Command and Director of the National
9 Security Agency, Chief Central Security Service.

10 I want to thank President Trump, Secretary Mattis, and
11 General Dunford for their confidence in nominating me for
12 these important positions.

13 Let me also thank my wife Susan for being here. I owe
14 much of my success to her love and support --

15 Senator Inhofe: Raise your hand, Susan, so we know who
16 you are. There we are.

17 General Nakasone: -- throughout nearly 25 years of
18 marriage, 19 moves, and numerous deployments.

19 Susan and I are also joined today by our children
20 Sarah, David, and Joseph. Our son Daniel, our eldest son,
21 is in college today taking his midterms. We are
22 exceptionally proud of all of them.

23 I want to thank Admiral Mike Rogers for his 36 years of
24 commissioned service to our nation. Admiral Rogers has led
25 Cyber Command and the NSA during a time of incredible

1 transformation and rapid growth. I thank him and his wife
2 Dana for all they have done in service to our nation.

3 For the past 10 years, I have had the privilege to
4 lead, plan, and execute Joint and Army cyberspace operations
5 supporting national, Combatant Command, and service
6 missions. In this decade I have seen incredible growth in
7 the cyber capacity and capabilities within the Department of
8 Defense. From the stand-up of our cyber mission force to
9 the daily operations conducted by Joint Task Force ARES, we
10 are rapidly maturing our cyber forces.

11 When I first started working cyber operations, these
12 operations were often just concepts, and when conducted,
13 performed ad-hoc by technical specialists on loan from other
14 organizations. Today this is not the case. Now, a mature
15 and highly capable cyber force is built and in the fight,
16 aggressively defending our network, conducting daily
17 operations against adversaries, and strengthening the combat
18 power and lethality of U.S. forces around the world.

19 This swift growth represents tremendous opportunity,
20 and if confirmed, I plan to continue this impressive
21 progress.

22 But I've also seen cyber threats to our nation grow
23 exponentially, and adapt just as quickly. From adversaries
24 conducting exploitation of our networks, to the harnessing
25 of social media platforms for false messaging, to targeting

1 our elections, to destructive attacks, the Department and
2 our nation face significant challenges in this ever-growing
3 domain.

4 These challenges have taught me several important
5 lessons over this past decade.

6 First, that operating and aggressively defending our
7 networks is a foundational mission. Our network is our
8 weapons platform.

9 Second, I've learned that we need to impose costs on
10 our adversaries to ensure mission success by persistent
11 delivery of cyberspace effects in defense of our nation and
12 in support of our combat forces.

13 Third, I've learned that defending the nation in
14 cyberspace is a team effort, requiring a whole-of-nation
15 approach -- government, military, industry, and academia --
16 as well as international coalition partnerships.

17 The fourth and most important of these cornerstones, I
18 have learned that while technology drives change in
19 cyberspace, it's the people -- the soldiers, the sailors,
20 the airmen, the Marines, the Coast Guardsmen, along with our
21 civilians -- who guarantee our success. Our people demand
22 and deserve the best leadership, training, and equipment to
23 do their mission.

24 I recognize that Cyber Command and the National
25 Security Agency are two unique and vital organizations with

1 their own identities, authorities, and oversight mechanisms.
2 I am committed to leading both with vision, with drive, and
3 with purpose for the future. Cyberspace is dynamic, and
4 adaptive approaches are always needed to solve the new
5 challenges constantly emerging.

6 Finally, I sit before you today with the understanding
7 that we are at a defining time for our nation and our
8 military. Near-peer competitors are posturing themselves,
9 and threats to the United States' global advantage are
10 growing. Nowhere is this challenge more evident than in
11 cyberspace.

12 With this in mind, if confirmed to lead U.S. Cyber
13 Command and the National Security Agency, I will ensure our
14 military commanders and national decision-makers can call
15 upon an aggressive and globally dominant cyber force with
16 the capability and capacity to defend us at home and apply
17 pressure on our adversaries abroad.

18 In closing, I am deeply honored to be considered for
19 these leadership positions. If confirmed, I look forward to
20 working with the committee and the entire Congress to ensure
21 we leverage our opportunities and also address our
22 challenges.

23 Senator Inhofe, Ranking Member Reed, thank you for the
24 opportunity to be here this morning. I look forward to
25 answering your questions.

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[The prepared statement of General Nakasone follows:]

1 Senator Inhofe: Thank you, General.
2 Dr. Park?
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1 STATEMENT OF DR. BRENT K. PARK, TO BE DEPUTY
2 ADMINISTRATOR FOR DEFENSE NUCLEAR NONPROLIFERATION, NATIONAL
3 NUCLEAR SECURITY ADMINISTRATION

4 Dr. Park: Chairman Inhofe, Ranking Member Reed,
5 distinguished members of the committee, it is a tremendous
6 privilege to appear before you today. I am honored to have
7 this opportunity to serve my country and wish to thank
8 President Trump and Secretary Perry for having placed their
9 confidence in my ability to lead the NNSA's Office of DNN.

10 Mr. Chairman and the members of the committee, if you
11 will permit me, I will introduce my family, my wife, Min
12 Park, of 23 years, and my two daughters, Clara and Ella, who
13 are with us; and watching from afar are my parents in
14 Nevada. And finally, I would like to thank my close friends
15 and colleagues for their support and good counsel during the
16 confirmation process.

17 Mr. Chairman, the United States has long been a leader
18 in the global effort to combat nuclear proliferation.
19 NNSA's Office of DNN leads those efforts, securing nuclear
20 material around the world, building international
21 partnerships to raise barriers against the illicit transfer
22 of proliferation-sensitive technologies or materials, and
23 eliminating highly enriched uranium and separated plutonium.

24 If confirmed, my top priority will be to continue
25 executing DNN's crucial mission, supporting the President's

1 objectives of achieving and maintaining a balance between
2 the promotion of legitimate nuclear commerce and controlling
3 the spread of weapons-usable material, equipment,
4 technology, and expertise.

5 Mirroring NNSA Administrator Lisa Gordon-Hagerty's
6 recent testimony, these objectives cannot be accomplished
7 without people. If confirmed, maintaining the core
8 competency of the workforce across the enterprise will also
9 be one of my highest priorities.

10 A significant portion of the NNSA workforce,
11 specifically scientists, engineers and technicians, are
12 approaching retirement in the next five years. To retain
13 critical nuclear nonproliferation and weapons expertise, and
14 cross-train the workforce, I will work to ensure that we are
15 able to employ the brightest and the best by recruiting,
16 retaining, and growing the highly skilled workforce needed
17 to strengthen the nation's security against nuclear threats.

18 For more than 20 years, and most recently as the
19 Associate Director at Oak Ridge National Lab, my
20 professional life has been dedicated to the nuclear security
21 enterprise. I have led and managed the complex
22 interdisciplinary science and engineering programs and
23 formulated transformational R&D, built on sound business and
24 operational experience. My work has included collaboration
25 with the U.S. national defense, homeland security, and

1 intelligence communities in the application of advanced
2 technologies to meet national security requirements.

3 As the Director of the DOE/NNSA Remote Sensing
4 Laboratory, I led the efforts to advance and field cutting-
5 edge technologies in support of counterterrorism and
6 radiological incident response for the nation. To lead
7 NNSA's DNN office, if confirmed, would be the highest honor
8 of my career.

9 Mr. Chairman, defense nuclear nonproliferation, and
10 indeed the nuclear security enterprise, is at a crossroads.
11 Should I be confirmed, I will work tirelessly with my NNSA,
12 DOE, and interagency counterparts to ensure the United
13 States continues to lead in the global efforts to combat
14 nuclear proliferation and terrorism.

15 Again, I thank you for inviting me to appear before
16 this committee today. I am prepared to answer any questions
17 you have now and, if confirmed, to address questions that
18 you may have in the future.

19 [The prepared statement of Dr. Park follows:]

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1 Senator Inhofe: Thank you, Dr. Park.
2 Ms. White?
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1 STATEMENT OF ANNE MARIE WHITE, TO BE ASSISTANT
2 SECRETARY OF ENERGY FOR ENVIRONMENTAL MANAGEMENT

3 Ms. White: Senator Inhofe, Ranking Member Reed, and
4 members of the committee and professional committee staff,
5 thank you for the opportunity to appear before you as the
6 President's nominee to be Assistant Secretary of Energy for
7 Environmental Management at the Department of Energy. My
8 warmest thanks to your respective staff for taking the time
9 to share the issues of concern regarding environmental
10 management and for outlining expectations of me in the role
11 of EM-1, a role that involves fulfilling our moral
12 obligation to provide a cleaner, safer, healthier
13 environment by having a clear plan of action to address our
14 nation's environmental legacy challenges from World War II
15 and the Cold War.

16 I am honored to appear before the committee and thank
17 President Trump and Secretary Perry for displaying their
18 confidence in me through nomination to this important
19 position. Should the United States Senate honor me with its
20 confirmation, I look forward to working together with you
21 and your staff to resolve the demanding issues that confront
22 the nation by safely reducing environmental and cost risk
23 and delivering meaningful results that protect the U.S.
24 taxpayer.

25 I would like to introduce Scott Anderson to the

1 committee. Scott is my best friend, strongest advocate, and
2 greatest supporter. I also thank my close friends and
3 colleagues for being here today.

4 My Master's degree is in nuclear engineering, and I was
5 fortunate enough to have graduated at a time when the
6 environmental field was relatively new and rife with
7 opportunities for innovation and development. With my
8 degree, a creative and curious mindset, and an appreciation
9 for our environment, I determined the nuclear cleanup field
10 was a good fit for me.

11 I began my career performing physical cleanup work in
12 the field. My strategy was to learn the environmental
13 business bottom up rather than top down. This has been
14 instrumental in developing my understanding, from multiple
15 vantage points, of the complex challenges facing the
16 Department in its environmental management mission.

17 It is important to note, this work is not without some
18 level of risk. The women and men in the field implementing
19 plans and delivering projects are of primary importance at
20 the EM sites. Without these individuals in the field,
21 dressing out in protective gear and doing difficult physical
22 work, there would be no cleanup and no risk reduction.
23 Maintaining and further building trust with the workforce
24 that we rely on to address our nation's environmental legacy
25 challenges will be a focus throughout my tenure.

1 My early career experience in the field was informative
2 and provided a sound basis to help me form my consulting
3 firm. Since founding my firm, my years working within the
4 commercial and government nuclear industry and the mentoring
5 from well-respected industry experts have helped me grow
6 into an experienced leader and innovative problem solver.

7 For the past 25 years, I have consulted with
8 commercial, government, and international organizations
9 solving complex problems here at home and abroad. I have
10 worked at a number of EM sites, providing me with direct
11 experience addressing the difficult technical and
12 stakeholder issues the Department faces while driving
13 forward the cleanup mission.

14 Through the years I have had the good fortune to work
15 and collaborate with a wonderful group of smart, technically
16 savvy peers to cost-effectively solve seemingly intractable
17 problems. This was done through teamwork, innovation,
18 ingenuity, and optimization. Over the course of my career,
19 I have been able to work on, visit, and understand some of
20 the world's great nuclear and environmental challenges.
21 Therefore, I consider this potential key leadership position
22 at DOE-EM to be an opportunity to maximize my private sector
23 experience and knowledge to assist the Department in
24 mitigating risk and working toward eliminating existing
25 environmental liabilities.

1 Should I be confirmed, accountability to safely meet
2 responsibilities, commitments, and milestones will start
3 with me, and I will further expect Federal staff and our
4 contractors to deliver results that will protect the
5 investments made by the hardworking American taxpayers. I
6 further commit to you that I will communicate and work
7 closely with this committee, the conscientious staff within
8 the Department, Congress, Native American tribes,
9 regulators, local communities, and the dedicated site
10 workforce to set priorities that will have current and
11 lasting positive impact on the overall EM program.

12 Senator Inhofe, Ranking Member Reed, and members of the
13 committee, thank you again for this opportunity to appear
14 before you as the President's nominee for Assistant
15 Secretary of Energy for Environmental Management. I look
16 forward to answering your questions as you consider my
17 nomination.

18 [The prepared statement of Ms. White follows:]

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1 Senator Inhofe: Thank you, Ms. White.

2 Be informed that we have votes coming up at 11:45, and
3 so probably by noon we're going to try to finish this
4 hearing.

5 And then also there will be some people leaving, both
6 Democrats and Republicans, for a short time because we are
7 also meeting with another committee at the same time,
8 including myself. So this will be a little bit of an in and
9 out.

10 We'll have 5-minute rounds. Is that okay with you?

11 Senator Reed: Sure.

12 Senator Inhofe: Okay.

13 General Nakasone, the mission of Cyber Command, as I
14 said in my opening statement, is to defend the homeland,
15 defending military computer networks, and developing and
16 employing military cyber capability.

17 As the combatant commander, you are an operational
18 command that has got to operate within the authorities that
19 you are given. You are not responsible for developing cyber
20 policy but are responsible for executing the established
21 policy.

22 Russia used online media, as was called to our
23 attention, to try to influence and degrade our election
24 process in 2016, which has nothing to do with you, but I
25 have a question to ask you, General Nakasone. Two days ago

1 Admiral Rogers was asked multiple times about who is
2 responsible and what our response should be to another
3 attack by Russia on our elections. There are a lot of
4 options that we could do in response -- sanctions, counter-
5 attack, and more. If this happened again, can you walk us
6 through how the government could respond to this and what
7 your role would be in that decision-making process, what
8 your role would be?

9 Use your mic.

10 General Nakasone: Senator, thank you. In terms of my
11 responsibility, my role, if confirmed as Commander of U.S.
12 Cyber Command, that is to provide a series of options to our
13 civilian leadership for their determination whether or not
14 actions would be taken against an adversary. In this case,
15 the case that you laid out, the ultimate response,
16 obviously, resides with the President for that decision, and
17 Congress. But in terms of response and the responsibility
18 for our critical infrastructure at this time, that process
19 rests with Department of Homeland Security.

20 What I would say in terms of the options that I would
21 provide, obviously they are focused on cyber options, but
22 there are probably a wide variety of different options that
23 should be considered. Deterrence in this space could come
24 from a number of capabilities that our nation provides.

25 Senator Inhofe: Thank you.

1 Admiral Rogers, two days ago when he was testifying, he
2 said -- and this is a quote -- he said, "We are not where we
3 need to be with respect to the structure and organization of
4 the whole-of-government approach to cyber attacks on the
5 homeland."

6 Now, we talked about this before, and you've been
7 addressing this with the FBI, DHS, and DOD. Do you have any
8 ideas for improvements that we could make structurally in
9 this process?

10 General Nakasone: Senator, when I look at the
11 structure that's laid out today and the role of DOD, the
12 Federal Bureau of Investigation, and Department of Homeland
13 Security, each with their unique authorities and their
14 unique capabilities, I'm struck that what we must do with
15 this structure is improve the crosstalk, the coordination,
16 the sharing that goes on. If you consider today that 90
17 percent of our networks are within the private sector, that
18 that private sector is likely to be the first indicator of
19 some type of intrusion or attack, the importance of being
20 able to share that information rapidly amongst all three
21 players to ensure that we understand what is going on and
22 being able to address it is paramount.

23 So I come back to this very, very close coordination
24 that must be improved as we look at the three different
25 elements.

1 Senator Inhofe: Okay. I wouldn't expect you to come
2 up with results because this has been a problem that's been
3 there since we established the program.

4 Dr. Park, I want to just get a comment from you having
5 to do with the Iran deal that was made under the Obama
6 Administration. Several of the most important provisions to
7 deter the regime from becoming a nuclear state contained
8 sunset clauses set to expire in just a few years.

9 Dr. Park, how can the U.S. mitigate proliferation
10 potential in Iran after these provisions expire in a few
11 years? Do you have any ideas on that?

12 Dr. Park: So, Senator, it requires an international
13 partnership working closely with the IAEA to make sure
14 whatever they do in terms of operating nuclear reactors and
15 so on are strictly monitored. We have been developing, in
16 fact advancing proliferation detection systems out of DNN
17 office, and we will work closely with all the stakeholders
18 to make sure they comply with all the rules and regulations
19 imposed on them.

20 Senator Inhofe: Okay. That's very good.

21 Ms. White, I do have a question for you, but what we're
22 going to try to do is stay on schedule. So it will come
23 from one of the other members here shortly.

24 Senator Reed?

25 Senator Reed: I'll try to ask the question of Ms.

1 White. In fact, let me start with Ms. White.

2 Ms. White, the Hanford site, can you tell us very
3 quickly what do you expect where the progress can be made
4 there the most quickly? Because it is one of the most
5 significant and expensive sites.

6 Ms. White: The Hanford site is very complex. There
7 are numerous challenges there, from tank waste to some of
8 the waste management issues. One thing I like to consider
9 when I'm looking at these problems is that there's a very
10 long time scale involved in all things nuclear, so we need
11 to make sure we make decisions that are timely, that are
12 technically underpinned and cost underpinned. That's the
13 kind of decision-making I would be applying to not only
14 Hanford but all of our great environmental challenges we
15 face across the complex.

16 Senator Reed: Thank you very much.

17 General Nakasone, the National Defense Science Board
18 Task Force, the Defense Science Board Task Force made
19 recommendations to develop campaign plans essentially to go
20 after deterrence, or be prepared to go after key assets of
21 our opponents, such as the wealth of Putin oligarchs, their
22 financial transactions, corruption in Iran, information
23 issues with respect to Russia, China, and North Korea.

24 Do you agree with those recommendations?

25 General Nakasone: Senator, I do agree with the

1 recommendations. I thought the Defense Science Board, as
2 they laid out both what we should hold at risk and also the
3 idea of resilience and the continuing challenges of
4 attribution, were three critical points that I think come
5 together and speak to the larger issue.

6 Senator Reed: Are you -- are we preparing such plans,
7 detailed campaign plans with respect to these potential
8 issues?

9 General Nakasone: So, Senator, given the open nature
10 of this conference, let me simply state yes.

11 Senator Reed: Okay. But, as I think the Chairman
12 indicated, any of these plans, to be executed, require the
13 civilian approval by the SecDefs, and then ultimately the
14 President.

15 General Nakasone: That is correct, Senator.

16 Senator Reed: In terms of the critical infrastructure,
17 so much of it is privately held, and there are variable
18 degrees of attention paid by the private sector to these
19 cyber issues, which I think leads us to significant
20 vulnerabilities. Is that your assessment also?

21 General Nakasone: Senator, I would say that there are
22 varying degrees of resilience within our critical
23 infrastructure today, yes.

24 Senator Reed: And I know you're not the lead agency.
25 That, I presume, would be the Department of Homeland

1 Security. But you will be participating in the all-of-
2 government approach to this. Are you satisfied with the
3 level of effort, the speed? Are we getting our act together
4 quickly enough to face these potential threats?

5 General Nakasone: So, Senator, in my current
6 responsibilities as Commander of Army Cyber, I don't have as
7 robust a picture as I need to, and certainly, if confirmed,
8 that's one of the things I would look at. I would offer as
9 a general statement I'm never satisfied with defense of
10 anything, so I think we have to take a hard look every
11 single day.

12 Senator Reed: Thank you, sir.

13 Dr. Park, at present, the government of Saudi Arabia is
14 tendering offers to build nuclear reactors for electricity
15 production. After the first Iraq war, we learned and
16 discovered that the Iraqis were using their civilian program
17 to actually develop nuclear weapons. As a result, IAEA
18 developed the additional protocols that they call the gold
19 standard. We have engaged in transfer of technology to the
20 Emirates in particular, and they in fact did adhere to the
21 gold standard. Do you believe that Saudi Arabia should also
22 adhere to the additional protocols?

23 Dr. Park: Senator, generally speaking, first and
24 foremost, in any of the nuclear weapons -- nuclear
25 technology transfer, we need to achieve the highest

1 standards when it comes to the nonproliferation from host
2 countries. Having said that, we need to be realistic and
3 practical to make sure that we get to provide the leadership
4 in actually overseeing some of these operations, mainly
5 because there are other countries, as you know, that can
6 provide similar technologies to Saudi Arabia or other
7 countries that may be interested in nuclear reactors, for
8 example.

9 This is critical. That's the only way we can actually
10 provide assurances to our leadership and protect the United
11 States and our allies and partners.

12 Senator Reed: But it strikes me that we've already
13 entered into an arrangement with the Emiratis, who are our
14 close colleagues in everything we do in the Middle East. I
15 just got back from Jordan. They do, in fact, adhere to
16 these additional protocols. We insisted upon it, I think,
17 with the transfer. Why should we make the same insistence?
18 Because if we don't, we're lowering the threshold of
19 proliferation, even if it's symbolically lowering it.

20 Dr. Park: So, Senator, from the technology standpoint,
21 we are actually improving constantly what we can do to
22 monitor and verify that they are complying. In terms of the
23 negotiation details, I don't have any details at this point
24 in time.

25 Senator Reed: Thank you very much.

1 Thank you, Mr. Chairman.

2 Senator Inhofe: Senator Sullivan?

3 Senator Sullivan: Thank you, Mr. Chairman.

4 To all the nominees, congratulations, and your
5 families. I know it's not always easy on the families, so I
6 want to thank the families as well. We appreciate all of
7 your desire to serve our nation in these important
8 positions.

9 General Nakasone, I want to start with you. We've had
10 a number of hearings in this committee on cyber strategy, or
11 the lack thereof, which I think is probably the more
12 pertinent issue. One of the things that's come out -- and
13 this is in the Obama Administration, the Trump
14 Administration, civilians, military -- is that it's been
15 common knowledge, in open hearings by the way, that our
16 adversaries who use cyber attacks against us clearly see
17 that the benefits of doing these kind of attacks outweigh
18 the costs, meaning that a pretty broad consensus is that we
19 really haven't retaliated hardly at all, whether it's Iran,
20 North Korea, Russia, China.

21 We had a hearing last year, about a year-and-a-half
22 ago. General Clapper was on his way out as DNI. He
23 publicly stated in an open hearing that the Chinese attack
24 on the Office of Personnel Management, when they stole 22
25 million files -- I'm sure they stole yours and mine and

1 others who had SF-86s, 22 million -- and I asked him did we
2 retaliate against China? He said no, no.

3 So can you give me your thoughts on this? We seem to
4 be the cyber punching bag of the world, and it's common
5 knowledge. We have officials who have come before this
6 committee in an open session saying nope, we get hit and we
7 don't retaliate. We don't retaliate against the Russians,
8 the North Koreans, the Chinese.

9 What's your thought on that, and should we start
10 cranking up the cost of the cyber attacks on our nation?

11 General Nakasone: Senator, I'd offer three thoughts to
12 your question. The first thought is a strategy, a doctrine,
13 critical for us to be able to set the framework not only for
14 how we operate but also as a message to our adversaries as
15 well.

16 Senator Sullivan: But do you think we have that right
17 now? What do you think our adversaries think right now? If
18 you do a cyber attack on America, what's going to happen to
19 them?

20 General Nakasone: Basically, I would say right now
21 they do not think that much will happen to them.

22 Senator Sullivan: They don't fear us.

23 General Nakasone: They don't fear us.

24 Senator Sullivan: So, is that good?

25 General Nakasone: It is not good, Senator.

1 Senator Sullivan: So will you work to change that, if
2 confirmed?

3 General Nakasone: Senator, if confirmed, and as the
4 policy is worked, I would certainly provide input as an
5 operational commander.

6 To my second point --

7 Senator Sullivan: By the way, I think you'd have
8 broad-based support on this committee, Republicans and
9 Democrats, if you said that, if that was part of your
10 strategy.

11 General Nakasone: Secondly, Senator, what I would
12 offer is that right now as this space develops, the
13 cyberspace develops, the longer that we have inactivity, the
14 longer our adversaries are able to establish their own
15 norms, I think that is very, very important that we realize
16 that.

17 And then the final piece I would offer is that we
18 should always think of cyberspace not necessarily as only
19 being a cyber response. We have tremendous capabilities in
20 our nation. Being able to leverage those capabilities is
21 something we should always think about.

22 Senator Sullivan: And maybe that's overt, maybe that's
23 covert, but I would agree with you on that.

24 Well, I think we need guidance in terms of a broader
25 cyber strategy, and if confirmed, we're going to be relying

1 on you a lot for that. But I think deterrence has to be a
2 key part of that.

3 Dr. Park, I want to turn to you. As you probably know,
4 SOCOM recently took over the lead in the counter-WMD mission
5 from STRATCOM. And as you know, the interagency cooperation
6 with regard to this mission, which is probably, when you
7 think about it, at least from my perspective, the most
8 important mission that our U.S. military and interagency
9 Federal officials undertake, do you think we have enough
10 interagency cooperation within the counter-WMD mission? DOE
11 obviously plays an important role.

12 And let me ask just another question that's a little
13 bit unrelated, but I want to get that in before I run out of
14 time. Given the recent news that North Korea was able to
15 proliferate chemical weapons technology and chemical weapons
16 to Syria, does it concern you that the North Koreans will
17 use these same proliferation networks to potentially
18 proliferate nuclear materials and technology?

19 So, two questions.

20 Dr. Park: Senator, on the last question first, it's
21 deeply disturbing. In fact, we're very concerned about
22 DPRK's intent and past behavior in transferring technologies
23 and selling technologies. If confirmed, the office I would
24 be responsible for would be doing its very best to monitor
25 the activities, especially when it comes to the nuclear

1 materials, but also when it comes to other supporting
2 technologies that might be used.

3 Going back to your first question, we have a very
4 robust engagement, interagency engagement amongst the
5 different parties. Especially NNSA has been playing a very
6 critical role in equipping Special Forces and other
7 departments with the latest technologies. Although it would
8 not be part of my office, within NNSA there is an office
9 called N80, a counterterrorism office, and it does a
10 fantastic job in terms of actually coordinating and sharing
11 experiences. There are exercises that we undertake to make
12 sure the responders are adequately trained. Yes, we need
13 proof. Yes, we need more support.

14 Senator Sullivan: Thank you.

15 Thank you, Mr. Chairman.

16 Senator Inhofe: Senator Peters?

17 Senator Peters: Thank you, Mr. Chairman.

18 And thank you to our witnesses for being here today and
19 your willingness to serve in these very, very important
20 positions.

21 General Nakasone, I'd start with you. First off, I
22 want to say I appreciated the opportunity to talk at length
23 on some of these issues in my office. I appreciate that
24 attention and, if confirmed, look forward to continuing to
25 work very closely with you on some of the things that we

1 talked about.

2 The one issue in particular that we had a chance to
3 talk about was some of the recruiting challenges for cyber
4 professionals, and also the need to make sure that if we're
5 dealing with a whole-of-government approach, that all
6 Federal agencies have the ability to have top-tier cyber
7 professionals. We talked about a possibility of having a
8 joint duty program, similar to the joint forces in the
9 military where different branches have an opportunity to see
10 how the different branches work so we don't have silos
11 between different military services. The same could occur
12 for the civilian force as well.

13 I'm very involved in autonomous vehicles, as we talked
14 about in my office, so that's certainly going to be critical
15 infrastructure as all of these cars are going to be
16 interconnected and they're going to have to have expertise
17 at the Department of Transportation and at NHTSA that may
18 not have been at that level in the past but certainly they
19 could learn a great deal from interacting with the military
20 services and your command in particular.

21 If you could talk a little bit about how a joint
22 service program might work, how that's something that might
23 add to our ability to have people kind of cross-pollinating
24 great ideas that they can bring back to their respective
25 agencies.

1 General Nakasone: Senator, thank you. When we think
2 about cyberspace, a lot of times we think only of
3 technology. But what underpins technology is our talent,
4 and you hit the point in terms of being able to cross-
5 pollinate this talent.

6 In the military we think about it in the active and the
7 reserve component, but critically within our civilian force-
8 - and 20 percent of our teams are made up of civilians --
9 the ability to go to other places to serve, to learn, to be
10 able to experience this is very, very important to us. So
11 as we look across agencies, as we look to bring greater
12 partnerships amongst our agencies, I think joint duty
13 programs would be an area that we certainly could explore
14 based on the benefits to both organizations.

15 Senator Peters: I appreciate that. We also talked
16 about how you were interested in bringing highly skilled
17 individuals into the military, perhaps at a direct
18 commission at a higher rank. I know there's a pilot program
19 that's going forward that you have been involved with.

20 Could you give us a sense of how that pilot program is
21 going, and do you need any additional support from Congress
22 to expand direct commissioning programs that would bring in
23 highly trained cyber professionals, perhaps at a higher
24 rank?

25 General Nakasone: Let me first begin with a thank you

1 to the committee for all the work that has been done to
2 provide a number of different programs. You hit on the
3 direct commissioning program, Scholarship for Service,
4 advanced individual pay. These are all different elements
5 that have been critical for us.

6 Specifically with regards to the direct commissioning
7 program today, what we have seen in the Army is we need
8 greater constructive credit. So if you are a high-end big
9 data or forensics malware analyst, being able to get more
10 credit for that service to bring you at a higher rank will
11 allow us to probably bring in a higher level of talent.
12 This is an early program. We've started it roughly within
13 the past 90 days. That's the early results that we've seen,
14 Senator.

15 Senator Peters: And finally, I was struck by a talk
16 that you did in 2016 at which you discussed the very highly
17 successful Army recruiting commercial that you termed a
18 breadcrumb, where you challenged folks to solve a problem.
19 Could you talk a little bit about that, and is that
20 something that you think we should expand?

21 General Nakasone: The credit goes to the Army
22 recruiting agencies that have done this. But our idea was
23 let's appeal to our young people in a way that they know
24 that they should be experiencing what life is like for us.
25 We hid a code in the commercial, and that code was if you

1 saw it allowed you to log on to a site, and it allowed you
2 to try to solve a puzzle.

3 We've had over 8 million people try to solve this
4 puzzle, and less than 100,000 have been able to do it. So
5 that's the type of talent that we're looking for, and that's
6 the type of originality, that's the type of action that we
7 think will attract our best and brightest to be part of our
8 force, to be part of the greater Department of Defense, to
9 be part of national service.

10 Senator Peters: Thank you.

11 Dr. Park, a question related to research and
12 development of technologies that will give us breakthroughs
13 in order to better identify potential violations of
14 treaties. And I'm thinking about the JCPOA in particular,
15 which allows the IAEA to use modern technologies, which is a
16 fairly open-ended concept. So over the next few years there
17 could be tremendous advances in our ability to detect
18 potential violations.

19 My question to you is do you agree that the NNSA has a
20 role in pushing for these breakthroughs, and what sort of
21 priority would you place on that, if confirmed?

22 Dr. Park: Senator, NNSA, especially out of the R&D
23 office within DNN, has been pushing the envelope on getting
24 the latest technologies incorporated into the sensors that
25 we use for proliferation detection, nuclear proliferation

1 detection, and we work closely with the military branches
2 and IC members. I'm confident that our continuing efforts
3 incorporating the latest and the greatest, using the
4 different types of materials, will actually make our
5 verification efforts more successful. So I appreciate your
6 support in the R&D area.

7 Senator Peters: Great. Thank you.

8 Senator Inhofe: Senator Sasse?

9 Senator Sasse: Thank you, Mr. Chairman.

10 Congratulations to you all. Thanks for your
11 willingness to serve.

12 General, you know that I'm a big fan of yours, and our
13 country is blessed to have you in this new role, so this
14 isn't a hostile question to you. But I want to go back to
15 your exchange with Senator Sullivan. We're 31 years into
16 cyber war, but we're 4 years into regular attacks against
17 the United States, to which we publicly admit we don't
18 respond, or we don't respond in any way that's sufficient to
19 change behavior.

20 Your exchange with Senator Sullivan is the most
21 important thing that will happen on Capitol Hill today. We
22 have hundreds of hearings around here. Eighty percent of
23 them are fake. Ninety percent of them are pointless. Lots
24 and lots of questions that we ask, and they all seem like
25 they're equal because they're questions and they go on and

1 on and senators pontificate.

2 What you just said was that you agree with Admiral
3 Rogers, I think, right? Admiral Rogers earlier this week
4 said Russia has not received any response from the U.S.
5 sufficient to change their behavior. That's what he said.
6 Do you agree?

7 General Nakasone: It has not changed their behavior.

8 Senator Sasse: And three years ago at the OPM hack we
9 had Obama intelligence chiefs up here, primarily before the
10 Homeland Security Committee, and we asked them the exact
11 same questions: Is there any response from the United
12 States Government that's sufficient to change the Chinese
13 behavior? And they said absolutely not.

14 Do you think there's any reason the Chinese should be
15 worried about U.S. response at the present?

16 General Nakasone: Again, I think that our adversaries
17 have not seen our response in sufficient detail to change
18 their behavior.

19 Senator Sasse: So this is ultimately not the
20 responsibility of uniformed military to bear the brunt of
21 the, hopefully, rightful anger and ire of the American
22 people, but their government is failing them. At the top,
23 at the executive, and at the legislative level, we are not
24 responding in any way that's adequate to the challenge we
25 face. We face in cyber war, if we're just playing cyber

1 defense, we have an asymmetric threat against us because
2 we're the biggest, most advanced economy in the world, we
3 have the most electronics, and 90 percent of our critical
4 infrastructure is in the private sector. So we stand to
5 absorb attack after attack after attack unless we have
6 offensive cyber capabilities.

7 We do have the capabilities. The problem is not
8 technical. But if we had the will and the strategy and
9 adjacent to cyber response a sense that diplomatic tools and
10 kinetic responses were all on the table. Why should the
11 American people have any confidence in their government
12 right now in the area of cyber war?

13 General Nakasone: Again, Senator, I would offer from
14 my comments previously. We have to think of this broadly.
15 How are we going to respond? It's not necessarily always
16 within the military or the cyber realm that we're going to
17 do it. But obviously, offering a response in terms of being
18 able to -- an adversary to determine that this is a behavior
19 that we don't accept is important.

20 Senator Sasse: And again, let's distinguish among
21 three different groups that have culpability here. The NSA
22 and CYBERCOM and DOD need to present options. We need to
23 have a technically trained workforce that's able to respond,
24 and we need leadership that can be strategic enough to lay
25 out a menu of options. But ultimately, the top of the

1 executive branch and a legislature that's responsible for
2 oversight is where the people should be angriest.

3 But if you were going to assess blame right now --
4 don't put it on the legislature because somebody else will
5 ask you a hard question in response to that. But clearly,
6 the oversight in this body is woefully inadequate. But at
7 the top of the DOD world, and at the handoff to civilian
8 leadership, what does that conversation look like right now
9 where a menu of options is presented, and then what happens
10 next, and when will we be more urgent?

11 General Nakasone: Senator, you offer a number of
12 different questions that right now in my current role I
13 couldn't give you an informed response. What I think has to
14 happen is, obviously if confirmed, I provide a series of
15 cyber and military options that's considered by the
16 Secretary of Defense and ultimately the President. But this
17 is only a realm of one portion of our deterrence, and others
18 will have to bring the whole-of-government piece of what we
19 might offer, Senator.

20 Senator Sasse: When we're in the classified space and
21 we talk about overmatch in every other domain, we know we've
22 got lots and lots of challenges. In the cyber space, are
23 our problems primarily technical, or are they primarily
24 strategic and will?

25 General Nakasone: Senator, I would offer that we have

1 a number of different capabilities, and I don't think that
2 our problems are either of those. I think that what we have
3 to do is continue to determine what is the best way forward
4 here, what fits within our national strategy, and then act
5 on that, Senator.

6 Senator Sasse: I'm out of time. But again, I want to
7 reiterate that our country is blessed to have you in this
8 new role. You're clearly going to be confirmed. Lots of
9 people around here, including me, have great confidence in
10 you. But I do want you to know, I think there is bubbling
11 up in this body a little more seriousness about the urgency,
12 and I hope that at DOD and at NSA we feel that urgency in
13 response. Thank you, sir.

14 Senator Inhofe: Great statement, Senator.

15 Senator Hirono?

16 Senator Hirono: Thank you, Mr. Chairman.

17 I'll start by asking all three of you the same two
18 questions that I ask nominees to all of the committees on
19 which I serve. The first question is -- these are just yes
20 or no answers. I'll start with Dr. Park, and then General
21 Nakasone and Ms. White, to respond.

22 First question. Since you became a legal adult, have
23 you ever made unwanted requests for sexual favors or
24 committed any verbal or physical harassment or assault of a
25 sexual nature?

1 Dr. Park: No.

2 Senator Hirono: General?

3 General Nakasone: No.

4 Ms. White: No.

5 Senator Hirono: Second question. Have you ever faced
6 discipline or entered into a settlement related to this kind
7 of conduct?

8 Dr. Park: No.

9 General Nakasone: No.

10 Ms. White: No.

11 Senator Hirono: Thank you.

12 General Nakasone, Admiral Rogers of Cyber Command
13 testified before this committee earlier this week that the
14 authority, and therefore the responsibility for preventing
15 ongoing Russian interference with our upcoming elections,
16 lies with the Department of Homeland Security, not with
17 Cyber Command. Do you agree?

18 General Nakasone: Senator, as it is laid out today,
19 the responsibility for the critical infrastructure of the
20 electoral system does reside within the responsibility of
21 DHS.

22 Senator Hirono: Just with the critical infrastructure?

23 General Nakasone: The electoral system as being part
24 of that critical infrastructure.

25 Senator Hirono: So what about the content of various

1 kinds of misinformation that is promulgated by Russia to
2 interfere with our elections? Who has responsibility to
3 stop those?

4 General Nakasone: Again, Senator, in the construct
5 that we have today, the electoral system falls within the
6 responsibility of the Department of Homeland Security.

7 Senator Hirono: So what I'm trying to get at is what
8 constitutes the electoral system. If the main
9 responsibility lies with Homeland Security and all of its
10 components relating to elections, then I just want to
11 clarify that that is not a responsibility that Cyber Command
12 has, in your understanding.

13 General Nakasone: That is my understanding. It begins
14 with the states, who have overall responsibility for their
15 electoral process, and then falls within DHS as the overall
16 critical infrastructure lead for that area.

17 Senator Hirono: So in your view, the Department of
18 Homeland Security is the appropriate department to ask
19 questions about what they are doing to prevent the
20 continuing Russian attacks on our elections, of all the
21 departments that we could ask that question of?

22 General Nakasone: Certainly, Senator, they do have the
23 lead for that.

24 Senator Hirono: Thank you.

25 Now, you've been asked some questions about our non-

1 response to various cyber attacks, and particularly the
2 state-sponsored cyber attacks. So where does the
3 responsibility lie to develop a whole-of-government strategy
4 to respond to cyber attacks, particularly state-sponsored
5 cyber attacks?

6 General Nakasone: An overall strategy, Senator, I
7 would offer would emanate from the executive branch. In
8 terms of what the Department of Defense would do, obviously,
9 is plan for certain responses and, if directed, conduct
10 those activities.

11 Senator Hirono: So when you say the executive branch,
12 do you mean the President of the United States should be the
13 person that convenes all of you to develop a whole-of-
14 government strategy as to how to respond to these ongoing
15 cyber attacks, particularly the state-sponsored cyber
16 attacks?

17 General Nakasone: Obviously, the National Security
18 Council, Senator, would probably be the lead that would do
19 that today.

20 Senator Hirono: Do you know if that's what's happening
21 right now, that they are taking the lead to develop such a
22 strategy? Because we do not see it.

23 General Nakasone: Senator, in my current
24 responsibilities, it's not something that I'm aware of
25 today, but if confirmed it's certainly something that I

1 would lean into.

2 Senator Hirono: That's good.

3 When Admiral Rogers was here, there were some questions
4 as to what he would consider to be priorities that he would
5 advise his successor -- that would be you -- to address, and
6 I wanted to follow up with you.

7 If confirmed, what is number one on your list of
8 priorities for CYBERCOM to accomplish under your leadership?

9 General Nakasone: Senator, it begins with readiness.
10 We've built a force now, 133 teams. These teams are
11 approaching the full build. So we have to be able to
12 measure their readiness, can they do their mission, are
13 their personnel, equipment, training right that they can
14 continue to do their missions in the future. I think this
15 readiness element is the number-one priority that I would
16 look at, Senator.

17 Senator Hirono: Since my time is running out, I'm
18 probably going to want to follow up with you because there
19 are all kinds of issues relating to this, and this is also
20 for Dr. Park, because you have a lot of retirements
21 happening in your bailiwick, soon to be. So I'm really
22 concerned about how you're going to ensure that you get the
23 right kind of people. Particularly, Dr. Park, you said that
24 you would ensure that you get the best and the brightest,
25 and I don't know how you're going to ensure that when we

1 have competition for the best and brightest talent from the
2 private sector.

3 Thank you very much, Mr. Chairman.

4 Senator Inhofe: Thank you.

5 Senator Perdue?

6 Senator Perdue: Thank you, Mr. Chair.

7 General, congratulations on your nomination, and thank
8 you for the time we personally spent earlier this week. I'm
9 very impressed with your record. Thank you so much for your
10 decades of service, sir.

11 I have a question on organization. In late August --
12 and we talked briefly about this -- President Trump
13 announced that the Cyber Command would be elevated to a
14 unified command. But we know that Section 1642, the 2017
15 NDAA, is clear that it would only be executed once the
16 Pentagon studied the split from NSA and certified it would
17 not pose, and I quote, "an unacceptable risk to the
18 mission."

19 What's your opinion coming into this job, and how will
20 you help us? Will you make a recommendation about that
21 possibility of splitting NSA and Cyber Command, or is that
22 something you already have an opinion on?

23 General Nakasone: Senator, I don't have a predisposed
24 opinion on this. I think we begin with the question:
25 What's best for the nation? And I think that's critical for

1 us to consider. Is it best for the nation that the National
2 Security Agency and U.S. Cyber Command stay together under
3 one leader? Or is it time now that we think about a
4 separate National Security Agency and a separate combatant
5 command?

6 The Congress has laid out a series of conditions upon
7 which both the Secretary of Defense and the Chairman must
8 attest to. If it's to split, I would imagine, if confirmed,
9 that among the early things that I would do is make that
10 assessment and in the first 90 days provide that to the
11 Secretary of Defense for his consideration, and the Director
12 of National Intelligence.

13 Senator Perdue: Thank you, sir. Let's also talk about
14 with regard to the first 90 days. At some point in a
15 classified environment, I would personally like to see the
16 committee have you come back and talk about the menu of
17 options that you will provide to the President once you get
18 to that point, the potential menu of options for deterrence
19 and for measured response.

20 One of the questions we have right now before Admiral
21 Rogers was here earlier is the definition of an act of war.
22 In cyberspace, I'm not comfortable that we have today a
23 clear understanding of what constitutes an act of war, and
24 there are people who have testified before this committee
25 that have said when we look back upon this time and the

1 actions taken by some of these near-peer competitors out
2 there, and others, that some of these actions will rise to
3 the level that will be defined as an act of war. Do you
4 agree with that?

5 General Nakasone: Senator, as we think about an act of
6 war and we think about response, ultimately this is a policy
7 decision upon which civilian leadership will make that
8 determination. In terms of what I see my role would be, if
9 confirmed, that is to provide a series of options
10 capabilities for civilian leaders to consider to utilize or
11 not utilize in the future.

12 Senator Perdue: And my last question goes to the
13 organization of services within the military, the
14 integration with corporate America, and integration with the
15 government. When we look at DOD, DHS, FBI, in your mind
16 coming into this job, one of the challenges I think you're
17 going to have, with the technology rapidly growing, is how
18 do we leverage our position here in limited resources from
19 the human capital point of view using technology to stand up
20 to the pressures and the quantum leaps that we see our near
21 competitors realizing today?

22 So the question is, how do we prepare for that? Does
23 artificial intelligence, does technology, do robotics or
24 some of these technological developments allow us to develop
25 the same sort of leadership role or create a delta between

1 our capabilities and our competitors, like we have in the
2 kinetic world?

3 General Nakasone: Senator, your question strikes at a
4 chord for me because I think it talks to our national
5 defense strategy, which really emphasizes partnerships and
6 alliances. What we have learned in the Department of
7 Defense, and particularly within the Army, is the fact that
8 to stay abreast of what's going on in the technology sphere,
9 you have to look broader than your service, you have to look
10 broader than the services.

11 So partnerships that we have been able to utilize with
12 Defense Digital Service or Defense Innovation Unit
13 experiment have been extremely powerful for us to get a
14 better feel for what's going on in the private world where
15 all this technology explosion is taking place, expose our
16 soldiers and civilians to that, provide an ability for them
17 to leverage that, and also for private industry to
18 understand that the talent that we have here and the
19 missions that we're working here are critically important
20 for the security of our nation.

21 Senator Perdue: So you agree that competing hacker to
22 hacker, so to speak, is not a strategy that will win against
23 someone like the People's Republic of China, and that
24 technology is going to have to play a role in it.

25 The Defense Innovation Board concluded late last year

1 some similar findings, they presented some of the similar
2 findings. My question is do you agree with that? And then
3 two, how do we assure that the individual services all have
4 a similar level of proficiency as they develop their own
5 individual capability? And in your role, will you help
6 coordinate that?

7 General Nakasone: So, Senator, to your first question,
8 I do agree with the idea that we have to leverage
9 technology. This is not a heavy, labor-intensive country.
10 We've always leveraged technology for our benefit.

11 In terms of how we do this across the services, there
12 are wonderful ideas that are in the Navy, the Air Force, the
13 Army, the Marines on doing this. I think one of the roles
14 that I would play, if confirmed, is to make sure that we
15 have a very, very high bar for innovation, that we have a
16 very, very high bar for those unique individuals that can
17 play a critical role in developing the technologies that our
18 nation will need in the future.

19 Senator Perdue: Thank you, sir.

20 Thank you, Mr. Chairman.

21 Senator Inhofe: Thank you, Senator Perdue. Let me ask
22 you a question. Are you able to stay for a few minutes and
23 preside while I go? Thank you very much.

24 Senator Perdue presiding.

25 Senator Gillibrand?

1 Senator Gillibrand: Thank you, Mr. Chairman.

2 General Nakasone, when we spoke yesterday, I asked you
3 to look into this issue of the 13 Russians who have been
4 indicted by the Department of Justice. Obviously, the
5 military and the entire country considers election
6 infrastructure critical infrastructure, and I know you've
7 already answered my colleagues that your job as Commander of
8 Cyber Command is to give the President options but not to
9 create policy, and I also understand that you agreed with
10 some of the testimony of Admiral Rogers yesterday that we
11 aren't doing quite enough to prevent.

12 One of the things we raised yesterday was about the
13 National Guard potentially bridging the gap in authorities
14 and jurisdictions between an attack on our country and
15 systems that are operated at the state and local level. Do
16 you see a potential role for the Guard in addressing this
17 issue?

18 General Nakasone: So again, Senator, coming back to
19 it, if this is the policy decision and what's laid out in
20 terms of what we will follow, I'm certain that the National
21 Guard and working within that construct could be of
22 assistance.

23 Senator Gillibrand: Yesterday we also spoke about how
24 to build and retain a cyber mission force that addresses our
25 strategic needs. In our Personnel Subcommittee, we are

1 currently looking at whether our cyber force should be
2 approached different from other communities in the military.

3 From your experience as Army Cyber, what do you think
4 the services and Cyber Command could be doing to develop and
5 retain this workforce, and how could we better use the
6 Reserve component to develop an agile workforce?

7 General Nakasone: So, Senator, I can speak to the
8 first part of your question on what the services might do
9 from my own experiences within the Army. There were true
10 critical decisions that the previous Chief of Staff for the
11 Army made. One was to develop a schoolhouse, but the second
12 one was to develop a branch, a cyber branch.

13 Why is that so critical? Because young people can come
14 in and understand that they will work cyber their entire
15 career. Someday they'll come as a second lieutenant and
16 rise all the way to commanding Army Cyber. I think that's a
17 critical piece, and I think that as we mature across the
18 Department that's one that will be looked at very carefully.

19 In terms of the second piece with regard to what we
20 might do to continue to attract people to join and stay
21 within our force, the work that the committee has done to
22 date to offer incentives, to offer capabilities for us to
23 pay for certain skills like computer languages, forensics
24 and malware, and tool development, critical to what we're
25 doing, to look at direct commissioning, to look at other

1 programs such as graduate school or scholarship for service,
2 these are all individual programs that collectively show a
3 dynamic element of our force that I think is very, very
4 attractive to our young people.

5 Senator Gillibrand: Now I'd like to ask Ms. Anne Marie
6 White. The Office of Environmental Management's mission
7 includes managing radioactive waste. Therefore, I want to
8 ask you about the nearly 150 shipments of high-level liquid
9 nuclear waste from Canada that is being trucked through
10 Buffalo and Syracuse, New York, to Savannah in South
11 Carolina. The agency you hope to lead approved these
12 shipments based on data showing that trucking solid nuclear
13 waste can be done safely. However, this waste is in liquid
14 form.

15 If, God forbid, there is an accident with just one
16 truck and a single drop gets into a city's water supply, it
17 could completely destroy it; whereas if powder spilled, it
18 could be retrieved with limited contamination. I am
19 seriously concerned that the Office of Environmental
20 Management approved these transports, and I'm concerned that
21 the communities through which this waste may transit are not
22 fully informed and won't know how to handle a spill.

23 Don't you think that before DOE transports liquid
24 nuclear waste for the first time, we and the surrounding
25 communities should be fully prepared and ready to handle any

1 potential spills?

2 Ms. White: I have not been fully briefed on that
3 particular issue, but I can share with you that in my
4 experience stakeholder engagement, stakeholder outreach, all
5 of these things are fundamentally important to our ability
6 to complete our mission safely and cost effectively, and I
7 can commit to you that I will work closely with your staff,
8 this committee, and all the interested stakeholder parties,
9 because communication on these issues is very, very
10 important.

11 Senator Gillibrand: Thank you. Do you agree that the
12 properties of solid substances are different than those of
13 liquid substances? And if you do, do you think that these
14 shipments should be halted until DOE completes a new
15 environmental impact statement that takes into account the
16 properties of liquid nuclear waste?

17 Ms. White: So, there is a difference between liquid
18 and solid. I agree with that, absolutely. What I can
19 commit to you is that, if confirmed, I will look into this
20 issue, get a better understanding of the pathway so far and
21 the path forward, and keep you informed.

22 Senator Gillibrand: Thank you.

23 Dr. Park, one of the primary responsibilities of the
24 Deputy Administrator for Defense Nuclear Nonproliferation is
25 to lead DNN as it works to prevent nuclear and radiologic

1 proliferation and terrorism threats worldwide. In January,
2 President Trump waived sanctions on Iran under the JCPOA but
3 threatened not to do the same again unless Congress put
4 forth legislation to rewrite the agreement to meet his list
5 of demands.

6 If the U.S. were to pull out of the JCPOA, how would
7 that impact international nuclear safety and worldwide
8 nonproliferation efforts?

9 Dr. Park: Senator, keeping the region safe is one of
10 the key challenges for not only the U.S. but for its allies
11 and partners; in fact, globally, and doing everything that
12 we can. Out of the DNN office we have a very specific
13 challenge in providing the latest and the greatest
14 technologies to make sure we know what they're doing, and we
15 are ready to partner with the other stakeholders, closely
16 supporting State Department colleagues. But again, we are
17 ready to provide the best technologies to do our part at
18 NNSA.

19 Senator Perdue: [presiding] On behalf of Senator
20 Inhofe, Senator Graham?

21 Senator Graham: Thank you.

22 Mr. Park, you mentioned in your opening testimony --
23 and I think you're very qualified for your job, so
24 congratulations on the nomination -- that one of the goals
25 is to make sure we do not proliferate nuclear weapons or

1 materials. Is that correct?

2 Dr. Park: Yes, Senator.

3 Senator Graham: Are you aware of an agreement between
4 the United States and Russia entered into in the early 2000s
5 where we would dispose of 34 metric tons of excess weapons-
6 grade plutonium, and they would do the same?

7 Dr. Park: Yes, Senator.

8 Senator Graham: Okay. And under that agreement -- and
9 that's enough weapons-grade plutonium to make well over
10 10,000 warheads. Are you aware of that?

11 Dr. Park: Yes, Senator.

12 Senator Graham: Okay. Under that agreement, the
13 United States was going to convert their weapons-grade
14 plutonium into MOX steel, turn a sword into a plowshare.
15 Are you familiar with that program?

16 Dr. Park: Yes, I'm aware.

17 Senator Graham: And the Russians were going to dispose
18 of their 34 metric tons through a fast breeder reactor. Is
19 that correct?

20 Dr. Park: Yes.

21 Senator Graham: In 2001 we entered into that
22 agreement. Are you aware of that?

23 Dr. Park: Yes.

24 Senator Graham: In 2007, construction of the MOX
25 facility began. Are you aware of that?

1 Dr. Park: Yes.

2 Senator Graham: In 2010, there was an amendment to the
3 original agreement where we would provide \$400 million to
4 support Russian plutonium disposition and reaffirmed our
5 decision to turn our weapons-grade plutonium into MOX steel.
6 You're aware of that?

7 Dr. Park: Yes.

8 Senator Graham: Are you aware that there's a MOX field
9 plant in France?

10 Dr. Park: Yes, I'm aware.

11 Senator Graham: And this is where you take weapons-
12 grade plutonium, dilute it down, and make it commercial
13 fuel. Is that correct?

14 Dr. Park: One of the options, yes.

15 Senator Graham: Okay. But the agreement was between
16 us and Russia, reaffirmed in 2010.

17 In 2014, the Obama Administration made the decision to
18 stop the MOX program and put it in cold standby status. Are
19 you familiar with that?

20 Dr. Park: Some theories thereof, Senator.

21 Senator Graham: Yes. Well, and Congress rejected that
22 by funding \$345 million for continued MOX construction.

23 So here is my question to you. Will you go to Savannah
24 River site and come back and tell this committee how much of
25 the plan is completed, in your opinion?

1 Dr. Park: If confirmed, I will make that one of the
2 highest priorities in my early stages.

3 Senator Graham: All right. The people on the ground
4 at Savannah River site say it's nearly 70 percent complete,
5 and I'll show it to you.

6 The Russians have basically withdrawn from this
7 agreement. Is that correct?

8 Dr. Park: Yes. They suspended it two years ago.

9 Senator Graham: And the reason they suspended it, for
10 the committee, is that we changed our decision to dispose of
11 plutonium through the MOX program to dilute and dispose,
12 which would put it in New Mexico, and the Russians said that
13 was not the deal.

14 Have you talked to the New Mexico delegation about
15 whether or not they would receive this material?

16 Dr. Park: I'm not at a point where I can actually have
17 that type of conversation.

18 Senator Graham: All right. Well, they haven't -- I
19 would urge you to do that. I would also urge you to listen
20 to what the contractor can do to make the MOX program
21 cheaper and more efficient. I would like for you to get
22 back with me about the viability of an alternative to dilute
23 and dispose. Would you do that?

24 Dr. Park: If confirmed.

25 Senator Graham: Okay, thank you.

1 Do you agree with me that this agreement to dispose of
2 34 metric tons of weapons-grade plutonium was an historic
3 nonproliferation agreement?

4 Dr. Park: It was certainly one of the most important
5 events, yes.

6 Senator Graham: I would say it's the most important
7 that I know of, and it would be in our interest to maintain
8 this agreement, if possible. Do you agree with that?

9 Dr. Park: Yes.

10 Senator Graham: Okay. Since you're in charge of
11 nonproliferation, that's a good answer.

12 [Laughter.]

13 Senator Graham: So, what I'd like you to do is report
14 back to the committee can we do it cheaper, is the
15 contractor willing to give maybe a fixed-price contract, how
16 much of the program is actually complete in your estimation,
17 is the dilute and dispose option viable, how much does it
18 cost, what kind of laws would you have to change to make
19 sure that happened, and could they be changed? In other
20 words, give me a reasoned response to a new plan. Would you
21 agree to do that?

22 Dr. Park: If confirmed, I'll do my best.

23 Senator Graham: All right. Thank you. I'm sure you
24 will, and I think you're very qualified.

25 To the committee, we've talked about this a lot. I

1 cannot believe that we're going to change course when the
2 facility is 70 percent complete, pick up a new idea that's
3 been poorly vetted, if vetted at all, walk away from an
4 agreement that would dispose of plutonium on both sides,
5 Russia and the United States, that could create 10,000 more
6 heads if not disposed of without thinking this through, and
7 I appreciate what this committee has done to reject this
8 arbitrary decision to stop production and construction.

9 So, thank you, Mr. Park, look forward to working with
10 you.

11 Dr. Park: Thank you, Senator.

12 Senator Perdue: On behalf of Senator Inhofe, Senator
13 King.

14 Senator King: Thank you, Mr. Chairman.

15 I want to pick up from Senator Sasse and Senator
16 Sullivan. Our entire defense enterprise is designed for
17 peace. It's designed to preserve the peace and deter war.
18 History tells us that the surest way to war is to not be
19 prepared. John F. Kennedy wrote his senior thesis at
20 Harvard in 1940 called "While England Slept," and it was an
21 analysis of England's feckless non-preparation during the
22 '30s in the face of the German buildup of their war machine
23 and how that, in fact, in effect, encouraged Hitler to
24 pursue his aggressive policies, which led to the deaths of
25 55 million people over the course of the next five years.

1 We are either at war now or on the brink of war, and
2 the war is in cyber, and it's a multi-front war, and it's a
3 complex war. As my colleagues have pointed out, we don't
4 have a strategy for dealing with that war, and especially we
5 don't have a strategy for deterring that war.

6 Back when I was a kid, the motto of the Strategic Air
7 Command was "Peace is Our Profession," because we had those
8 airplanes and those bombs in order to preserve the peace, to
9 deter aggression. In fact, the deterrence theory kept us
10 out of a nuclear war, an unthinkable nuclear war for some 75
11 years.

12 My concern now is -- and I realize, General Nakasone,
13 you're the operational guy. But we've got to confront this
14 issue, and this isn't a criticism of the current
15 administration. The prior administration did not confront
16 it either. As has been pointed out repeatedly today, we are
17 under attack, and our adversaries feel no consequences.
18 They fear no results. They fear no response. And until we
19 deal with that, we are going to continue to be under attack,
20 and what concerns me is that the attacks are going to
21 escalate, and at the time we see a devastating attack on our
22 energy system, our financial system, our electrical grid,
23 it's going to be, then, too late, because we are going to be
24 severely damaged in this country not only through cyber but
25 the physical consequences will be catastrophic.

1 So I hope that when you are confirmed, and I believe
2 you will be, that you will carry this message into the
3 highest councils of the United States Government. In fact,
4 under an amendment passed to the National Defense Act in
5 2017, you are charged with a partial responsibility to
6 report to the Secretary of Defense to develop just the kind
7 of strategy and doctrine that we're talking about.

8 I don't have the Secretary of Defense sitting where you
9 are today. I don't have the President sitting where you are
10 today. So you are bearing the brunt of this message. But
11 there could not be, as Senator Sasse said, be a more
12 important issue before this body, and I hope that you will
13 take upon yourself the responsibility not simply to be the
14 person who executes policy but the person who assists in the
15 formation of policy. As a warrior, you know best the power
16 and importance of deterrence and that this is at the essence
17 of our entire defense enterprise.

18 Will you carry that message back with some passion,
19 General?

20 General Nakasone: Senator, if confirmed, I certainly
21 will.

22 Senator King: I believe that there can be no more
23 important aspect of your job. There are plenty of other
24 aspects of the job, and we've talked about them today --
25 when to split the two agencies, when to change the two-hat

1 arrangement. But I just can't stress enough how important
2 this is, because as long as we maintain a strictly defensive
3 posture, we are inviting aggression, and that aggression is
4 going to continue. We saw it in 2016. It's going to
5 continue both in the realm of our democracy and our
6 political system, but it's also going to continue in other
7 ways as well. So I deeply hope that you will make that part
8 of your mission when you're confirmed.

9 One thing that I hope you will get back to us on -- and
10 this is a different subject, and this would be subsequent to
11 your confirmation, perhaps in the first six months or so --
12 is an analysis or a report to us on the issues of
13 recruitment and retention in both Cyber Command and NSA.
14 This is an area where people are the most important asset,
15 and I fear that, for a number of reasons, whether it's the
16 slowness of the clearance process, whether it's the way the
17 bureaucracy works, we're not going to be able to recruit and
18 retain the crucial people that we need. Do you believe this
19 is part of what you're going to pursue?

20 General Nakasone: I shall, Senator, if confirmed.

21 Senator King: Thank you.

22 Dr. Park, I appreciate your work. I'm over time, but I
23 certainly believe we face serious proliferation risks,
24 particularly in North Korea, Iran. Pakistan, I think, is of
25 concern. You're coming into this job at a crucial period,

1 and I'm delighted with your background and qualifications
2 and hope you will pursue it relentlessly.

3 Dr. Park: Will do, Senator.

4 Senator King: Thank you, Dr. Park.

5 Senator Perdue: On behalf of Senator Inhofe, Senator
6 Cruz?

7 Senator Cruz: Thank you, Mr. Chairman.

8 Thank you for being here. Thank you for your service
9 and your testimony.

10 General Nakasone, in your judgment, what do you see as
11 the greatest cyber terrorism or cyber security threats that
12 we're facing right now?

13 General Nakasone: Certainly, Senator, the discussions
14 we've had this morning with regards to the challenges, the
15 vulnerabilities within our critical infrastructure are among
16 the top concerns that I have.

17 Senator Cruz: Some time ago, I chaired a hearing in
18 the Science and Space Subcommittee of the Commerce Committee
19 on artificial intelligence. It was the first congressional
20 hearing on artificial intelligence. We heard testimony at
21 that hearing that one of the real threats as AI expands and
22 as more and more decision-making is done in sector after
23 sector of the economy through AI that cyber terrorism would
24 occur, hacking into a big data dataset, not denying service,
25 not bringing the system down, but far more subtly, simply

1 changing the data in the big data dataset so the AI
2 algorithms reached the wrong results.

3 How serious do you assess threats of that kind, and
4 what can be done to secure against them?

5 General Nakasone: So, Senator, previously we thought
6 only of securing our networks, and what we have certainly
7 learned is the fact that securing our data, which I would
8 say is the coin of the realm -- our data is critical. Think
9 of the dangers that are posed if our data is manipulated,
10 whether or not it's in our financial, our health, our
11 national defense records, very critical for what we're
12 doing. But also think of the security of our weapons
13 systems that go with it, the code that underlies our
14 platforms, the code that underlies the critical capabilities
15 that our Army, Navy, Air Force and Marines rely on.

16 In terms of what must be done, I would offer that we
17 have to think more broadly in terms of a defense in-depth
18 strategy as we look to the future. You highlighted the
19 challenges of AI. Just as critical as AI might be for a
20 terrorist, it's critical for us to be able to verify code or
21 to be able to have the capability to verify the integrity of
22 our data.

23 So I do see this as one of the areas that both has
24 tremendous positive impacts for our nation but one that we
25 must be able to understand the limitations and the

1 consequences as well.

2 Senator Cruz: One of the challenges the services have
3 faced over time is attracting a talent pool with the
4 expertise, with the background to compete and compete
5 effectively on a global stage, particularly when you're
6 competing with companies in Silicon Valley that can offer
7 mountains of money.

8 What can and should we be doing better to ensure that
9 we have the top talent working to secure us from cyber
10 threats?

11 General Nakasone: Senator, I think it's important that
12 we play to our strengths. The number-one strength that I
13 have found in Army Cyber is emphasizing our mission. We
14 have a unique mission. There's no one in the private sector
15 that has the responsibility for defending the nation. We
16 have a very, very unique mission, and I think that resonates
17 with young people today.

18 But I also think we have to have an approach to
19 recruiting people that is dynamic, that tries different
20 ideas, that has unique partnerships, that is able to
21 leverage ideas that may not be traditional within our
22 military sphere, and I think that's important because the
23 space that we operate in is changing every single day. So
24 why shouldn't our ideas change just as rapidly?

25 Senator Cruz: Let's talk a moment about international

1 corporate espionage. I recently met with a CEO of a major
2 Texas company who described significant concerns about
3 researchers who were Chinese nationals working with the firm
4 and potentially stealing American intellectual property, and
5 what they were finding is that their research midway through
6 suddenly became the subject of Chinese patent applications,
7 and the CEO I think has significant concerns that that's a
8 direct act of corporate espionage.

9 How serious do you assess that threat, and what can be
10 done to stop state actors from targeting American businesses
11 and companies?

12 General Nakasone: Senator, I have recently read a lot
13 of material with regards to espionage and the stealing of
14 our secrets. One area that we're very, very focused on is
15 the defense industrial base. We are concerned. We should
16 be concerned based upon what our adversaries have planned
17 and what they've been able to do in the past.

18 We have to look at a more comprehensive approach to
19 securing it. What are the responsibilities of the private
20 sector? What needs to be written into a contract? What do
21 we need to do to ensure the integrity of the networks and
22 the data that are out there? These are all elements of what
23 I would say is a very, very important strategy that we must
24 pursue.

25 Senator Cruz: And one final question, if I may, for

1 Dr. Park.

2 Nuclear proliferation remains a serious threat. How
3 seriously do you assess the threat of North Korean
4 proliferation to Iran or to other hostile actors, and what
5 should we be doing to prevent that?

6 Dr. Park: On a scale of 1 to 10, probably 11. This is
7 one of those important challenges that we have to work with
8 international partners to address. It's both regional, but
9 it's got global implications, and we need to do everything
10 possible to contain the situation and reverse their nuclear
11 development efforts.

12 Senator Cruz: Thank you.

13 Senator Inhofe: [presiding] Thank you, Senator.

14 Senator Blumenthal?

15 Senator Blumenthal: Thanks, Mr. Chairman.

16 I thank all three of you for your service to our
17 nation.

18 General, when I questioned Admiral Rogers -- and I join
19 you in saluting his service to our nation -- about the
20 indictment that was returned just a couple of weeks ago
21 against 13 Russians and three Russian entities, he professed
22 that he had not read it, or at least as of that time had not
23 read it. When you and I spoke yesterday, you indicated that
24 you have read it. I think you would join me in the view
25 that it is profoundly alarming and chilling as a picture of

1 Soviet warfare -- I'm sorry, Russian warfare against the
2 United States in the style of the Cold War as conducted by
3 the Soviet Union. They sent spies, in effect, to this
4 country who traveled freely. They hired thousands of
5 experts in the Internet agency, the Internet Research Agency
6 that they built, they spent millions of dollars through
7 Russian oligarchs who are associates of Vladimir Putin.
8 They called it "informational warfare." They used the term
9 "warfare."

10 Would you agree with me that that kind of attack on our
11 nation is an act of war?

12 General Nakasone: Senator, as we consider an act of
13 war, at the end that is a policy decision. I would offer
14 that in terms of if I was confirmed, what I would need to do
15 is offer a series of options of capabilities that senior
16 policymakers might consider in terms of responding or not
17 responding.

18 Senator Blumenthal: And what kind of response is
19 appropriate to that kind of information warfare? Isn't some
20 kind of response necessary in the cyber domain?

21 General Nakasone: As we consider a response, obviously
22 the decision rests with the executive branch and/or Congress
23 in terms of what that response will be. Whether or not we
24 respond in the cyber domain or another domain, I think the
25 most important thing is we want the behavior to change.

1 Senator Blumenthal: We want them to pay a price.

2 General Nakasone: We want them to pay a price. We
3 want the behavior to change.

4 Senator Blumenthal: And Admiral Rogers admitted freely
5 that their behavior is not changing right now, in essence
6 because they are paying no cost for this kind of continued
7 meddling in our democratic process. Would you agree?

8 General Nakasone: Certainly, and that corresponds with
9 what the Director of National Intelligence has recently said
10 in open testimony as well, Senator.

11 Senator Blumenthal: So you would agree.

12 General Nakasone: Yes.

13 Senator Blumenthal: Let me ask Dr. Park, in your
14 responsibilities for preventing and reversing proliferation
15 of weapons of mass destruction, your responsibilities would
16 include chemical weapons. As you know, Syria recently
17 conducted a chemical weapons attack that seriously harmed
18 and probably killed a number of its own people. On
19 Wednesday the New York Times reported on a yet-to-be-
20 released United Nations report that links North Korea's
21 shipments of supplies to Russia that can be used for its
22 production of chemical weapons.

23 I'm going to ask that that article be made a part of
24 the record.

25 Senator Inhofe: Without objection.

1 [The information referred to follows:]
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1 Senator Blumenthal: Do you believe that the continued
2 use of chemical weapons in Syria poses a threat to our
3 service members there? And do you believe we have to take
4 action against both Syria and North Korea if the equipment
5 and instruments and supplies are being supplied by North
6 Korea to Syria?

7 Dr. Park: Senator, in terms of what we should do in
8 terms of taking any actions, that's up to the appropriate
9 entities within the government.

10 On the use of chemical weapons, it's a serious concern.

11 Senator Blumenthal: Well, will you recommend action
12 that can be taken against North Korea?

13 Dr. Park: We will provide as much information and data
14 available for the decision-makers to use to take appropriate
15 actions. The DNN does provide information related to
16 smuggling efforts throughout the world by working with our
17 international partners, and to that extent we will collect
18 and process the advice of the decision-makers.

19 Senator Blumenthal: Well, I'm concerned that I'm not
20 hearing from you the same alarm about Syria using chemical
21 weapons as you expressed in your advance policy questions
22 about ISIS using chemical weapons.

23 Dr. Park: My only constraint is because of the role
24 that I would be having, it's not related to actually what I
25 call actionable side of what the U.S. Government might do

1 with this type of information. But I do share your concerns
2 to the highest degree possible.

3 Senator Blumenthal: Thank you.

4 Thanks, Mr. Chairman.

5 Senator Inhofe: Thank you.

6 Senator Cotton?

7 Senator Cotton: Thank you, Mr. Chairman.

8 Thank you all.

9 General, I want to speak at a high level about the
10 threats we face from emerging technologies, especially from
11 China. Winston Churchill said once that the fate of the
12 world would have been very different in 1945 if the Soviet
13 Union had held a nuclear monopoly and not the United States.
14 Rather than use nuclear weapons to end World War II and then
15 to extend the security umbrella around the rest of the
16 world, the Soviet Union would have used that weapon to
17 dominate, subjugate, or annihilate its adversaries.

18 His point there was that there are certain kinds of
19 technologies that are so revolutionary, so breakthrough that
20 there really is no effective counter if you don't have the
21 immediate technology in hand. Some you can fight back
22 against.

23 So, for instance, in 1939-1940, when the Finns were
24 fighting off the Soviet Union, they had very few, if any,
25 anti-armor weapons. They invented the Molotov cocktail,

1 named sarcastically after the Soviet foreign minister.
2 That's just what it is. The Molotov cocktail was thrown
3 into the exhaust of a Soviet tank. The point that Churchill
4 made, though, is that the nuclear weapon that the United
5 States had perfected and the Soviet Union did not was so
6 radically different that if the Soviet Union had had it,
7 they would have used it to either subjugate or annihilate
8 the rest of their adversaries.

9 Looking at artificial intelligence and quantum
10 computing, how would you rank that threat to the United
11 States? And if perfected by our adversaries before we have
12 it, especially China, is it more like an incremental
13 breakthrough or a novel innovation like the tank or like
14 precision-guided munitions, or is it more like nuclear
15 technology?

16 General Nakasone: Simply put, Senator, I would
17 characterize it as what you may roughly know as a revolution
18 in military affairs. I mean, this is a game-changer for our
19 adversaries if they get to artificial intelligence, if they
20 get to quantum computing before we're there. This is why
21 it's so critical that we continue our research, continue our
22 work towards it, continue our applications.

23 Senator Cotton: Is it the kind of thing, though, that
24 if you had a breakthrough -- again, the breakthrough would
25 likely come from China -- that it would either substantially

1 impair or even completely over-match our other advantages in
2 the air and space, in the maritime domain, or in the nuclear
3 domain? It would essentially neutralize those advantages
4 that we have against a threat like China?

5 General Nakasone: I think also, Senator, to agree with
6 your statement, I think it would also provide a capability
7 for their economic element that would be incredibly powerful
8 that would certainly give them a leap ahead.

9 Senator Cotton: So that would be a very bad thing.
10 What would be your main suggestions to ensure that does not
11 happen, that we don't let China race ahead of us in the
12 struggle to master artificial intelligence and quantum
13 computing?

14 General Nakasone: We must continue our research, we
15 must continue our funding of it, we must continue the
16 development of our young people for science, technology,
17 engineering, mathematics. Those are all elements that I
18 think are important, to include the work that's being done
19 today by others in the private sector to raise concern and
20 to raise awareness of what needs to be done.

21 Senator Cotton: How can you, presuming your
22 confirmation, compete with the American private sector and
23 China, whether it's the so-called private sector or their
24 government-sponsored enterprises, for the very best talent?
25 Obviously, you can't pay nearly as much as what private-

1 sector employers in the United States can pay or what the
2 Chinese government is willing to pay to master this
3 technology. So how can you compete to make sure you get the
4 very best talent, which in this domain is probably the
5 number-one asset?

6 General Nakasone: Senator, I think it begins with,
7 again, emphasizing the mission. What is of appeal that you
8 would want to work at a place like the National Security
9 Agency or U.S. Cyber Command? It's the defense of the
10 nation.

11 And then I think the second piece of it is you have to
12 have the outreach. Where is this research taking place?
13 Where are the academic breakthroughs happening? How do we
14 make sure that we have a presence there?

15 And the third point is obviously to be able to
16 cultivate that talent. It's not that we need everybody, but
17 we need the top talent that's willing to come and to work on
18 these very, very important missions for our nation.

19 Senator Cotton: Okay. Thank you, General. We'll have
20 time in the future at the Intelligence Committee as well,
21 but I do want to say here in this public setting that one
22 very important part of the mission at the NSA that I hope
23 you'll prioritize is the protection of our own systems and
24 our own information against the loss to malevolent actors,
25 either through negligence or through espionage. Thank you.

1 Senator Inhofe: Senator Warren?

2 Senator Warren: Thank you, Mr. Chairman.

3 Thank you to our witnesses for your willingness to
4 serve.

5 General Nakasone, the organization you were nominated
6 to lead, Cyber Command, was given the job of countering ISIS
7 efforts to use the Internet to recruit, to spread its
8 ideology, to move money, to coordinate its forces. Former
9 Deputy Secretary of Defense Bob Work described CYBERCOM's
10 efforts to stop ISIS as "dropping cyber bombs." And judging
11 by public reporting, we were at least somewhat successful in
12 this effort.

13 But while we were focused on ISIS, Russia was using
14 this same technology to undermine our democracy here at
15 home. From what I understand, this was not an especially
16 expensive or technologically sophisticated effort. It was a
17 unit of hackers that were amplified by a troll factory in
18 Moscow. And yet, U.S. defenses were totally inadequate.

19 General, what can we learn from our operations against
20 ISIS that we can apply to efforts to protect and defend
21 against Russian style cyber attacks moving forward?

22 General Nakasone: The first thing I would offer,
23 Senator, what we have learned in the battle against ISIS is
24 that rapidly you have to be able to change your
25 methodologies. We started slow against ISIS and didn't have

1 a lot of tremendous success early on. But then the momentum
2 picked up as we continued to operate in cyberspace,
3 understand the intelligence, understand the targeting,
4 understand the capabilities that had to be developed.

5 The second thing that I would offer, Senator, that I
6 have personally learned is the power of information. How do
7 you provide impact to an adversary that no longer holds
8 geographic terrain? It's a messaging component that we were
9 able to work, particularly in support of U.S. Central
10 Command and U.S. Operations Command, the task force. But
11 bringing this ability to amplify a message to an adversary
12 is able to counteract what they're able to do.

13 Senator Warren: Thank you, General. You know, it's
14 deeply disturbing that you start your answer by saying it's
15 important that we act with speed when we're sitting here
16 more than a year after it has become widely known that
17 Russia hacked into American election systems to try to
18 influence the election and we still have not taken
19 aggressive action.

20 I understand that the Department of Homeland Security
21 is the lead agency for election security. But, General, if
22 confirmed, you will command the most elite cyber security
23 professionals in our government, and a key part of your
24 mission will be to defend the United States and its
25 interests against cyber attacks of significant consequence.

1 As a result, I'm concerned that an attack on our
2 democratic processes meets this definition of significant.
3 So, General, if confirmed, what are you prepared to do to
4 make sure that the U.S. is prepared to defend against
5 Russian style cyber attacks designed to interfere in the
6 2018 and 2020 elections?

7 General Nakasone: Senator, if confirmed, my initial
8 actions would be what are the options that I might be able
9 to provide to the Secretary of Defense and the President
10 that might be utilized when a decision is made to counteract
11 what an adversary has done to our nation.

12 Senator Warren: So you're telling me we don't even
13 have a decision to respond yet? Is that what you just said?

14 General Nakasone: Senator, what I said is that in
15 terms of being confirmed with regards to the authorities
16 that I would have that are existing today would be to
17 provide a series of actions upon which the Secretary of
18 Defense or President could leverage in response to an
19 adversary's actions.

20 Senator Warren: Well, I think it's clear that we need
21 to be vigilant to prevent this from ever happening again.
22 And if confirmed, we're going to need you, General, to help
23 lead this fight.

24 Let me ask one more question about cyber readiness. In
25 the 2017 Defense authorization bill, this committee directed

1 the Pentagon to elevate Cyber Command as an independent,
2 stand-alone command and gave you some unique service-like
3 authorities to train and equip your own force. The only
4 other combatant command that has similar authorities is the
5 Special Operations Command. But it took SOCOM many years to
6 grow that responsibility and to begin effectively executing
7 on those authorities. Given the cyber threats that we face,
8 General, I'm concerned that we don't have the luxury of
9 waiting years for CYBERCOM to be able to do the same.

10 So let me ask, if confirmed, what is your plan for
11 maturing the CYBERCOM operation to accomplish the functions
12 that the military services currently provide, and what does
13 your timeline look like? I realize we're out of time, but
14 if he can have just a little bit to answer here.

15 General Nakasone: Senator, I think that we should
16 begin with what have we learned from SOCOM in understanding
17 how they've been able to utilize these service-like
18 authorities. What are the things that we'd be able to
19 transfer to U.S. Cyber Command, if confirmed, that I could
20 leverage?

21 In terms of a timeline, I can't give you a timeline in
22 terms of my experience to date. That's something I would
23 say I would need to assess if confirmed, to come back and
24 have that discussion with the committee.

25 Senator Warren: Well, I can't underline the urgency of

1 the moment enough. We know that the Russians hacked us in
2 2016, and they're coming back after us in 2018. We can't
3 let the perfect be the enemy of the good here. We've got to
4 move.

5 Thank you, Mr. Chairman.

6 Senator Inhofe: Thank you.

7 Senator Donnelly?

8 Senator Donnelly: Thank you, Mr. Chairman.

9 I want to thank all the families who are here with us
10 today, Dr. Park, Lieutenant General Nakasone, Ms. White.

11 General, it is quite clear to me that the Russians are
12 using cyberspace as a cheap and easy way to try and tear our
13 country apart. They worked really hard to disrupt our
14 elections in 2016, and they're working just as hard to do it
15 again this upcoming November. Many sources, including the
16 Director of National Intelligence, the Commander of U.S.
17 Cyber Command, expect we'll see continued cyber disruptions
18 not only of our elections but of our military, our IT, our
19 businesses, and our country.

20 The Russians are landing clean shots against us in
21 cyberspace, and we don't seem to be on the field. So as we
22 look at this, not only are the Russians a concern but North
23 Korea, Iran, China, and other non-state actors like ISIS.

24 General Nakasone, if confirmed, how do you plan to
25 thwart these efforts? What is the battle plan to fight

1 back?

2 General Nakasone: So, Senator, in terms of a multitude
3 of adversaries, I would begin with, if confirmed, we'd have
4 to look at a series of options that would need to be
5 developed. We are working now today --

6 Senator Donnelly: Do you have any of that series of
7 options lined up right now?

8 General Nakasone: So, for some adversaries, yes, we
9 do.

10 Senator Donnelly: What options are we using against
11 the Russians?

12 General Nakasone: So, in this forum, given the nature
13 of it, I'll defer from that just given the unclassified
14 element. But that's one of the areas that I think Admiral
15 Rogers spoke to on Tuesday that was being worked. In my
16 current position, that's not something that I'm responsible
17 for at this time. But if confirmed, that's obviously one of
18 the early areas that I would look into.

19 Senator Donnelly: Have you yet been instructed -- you
20 haven't been confirmed yet. Have you been instructed by
21 anyone in regards to here's the battle plan we're looking to
22 take against the Russians to move forward against them?

23 General Nakasone: Senator, in my current position it
24 is not one of the areas that I'm focused on at Army Cyber.
25 I'd have to defer that to Admiral Rogers, the current

1 commander.

2 Senator Donnelly: Well, as we look at this, I want to
3 ask you another question about plans to fight back against
4 these threats, and that's what we were talking about. Do
5 you have any offensive plans that you've put together, not
6 only thwarting the attack but going on offense? You're not
7 in the position yet, but have you started to put together
8 any plans of your own from watching everything that's gone
9 on, to take the fight to them as opposed to just trying to
10 play defense at every corner?

11 General Nakasone: Senator, we certainly have a series
12 of offensive plans. I will not go into them here today, but
13 there are plans that have been developed.

14 Senator Donnelly: Are we communicating clearly to our
15 adversaries in a language that they understand that the
16 costs of these actions will outweigh the benefits that
17 they're receiving? At this time, in the cost versus benefit
18 analysis, I think it's overwhelmingly on the benefit side
19 for the Russians and for others. Has there been any effort
20 to indicate to our adversaries, that you know of, that there
21 will be costs, that the costs will be coming, that there is
22 a plan, and that we plan to move forward with it?

23 General Nakasone: Senator, I know of no plan yet. But
24 again, with my responsibilities, I would defer to others
25 that are working on the Russian piece of it, sir.

1 Senator Donnelly: Do you know of any clear plan at the
2 present time guiding how we respond to cyber attacks by the
3 Russians or by anybody else, either nationally or within
4 DOD?

5 General Nakasone: Senator, again, in my current
6 responsibilities, not having the responsibility for Russia,
7 I'm not aware of that, but that is one that should be asked
8 of those who are working on it, Senator.

9 Senator Donnelly: Dr. Park, you have done many
10 extraordinary things in your career. You've worked on
11 nonproliferation. You've worked on nuclear disarmament.
12 You met in the past with my predecessor, Senator Lugar, who
13 has been such an extraordinary leader on this during his
14 career here in the Senate. I mentioned to you that I
15 visited a facility named after him in Tbilisi, in Georgia,
16 trying to work on efforts to protect our country from the
17 transmission of nuclear materials.

18 So the question I have for you, sir, is I'd like to get
19 your thoughts on how to strengthen our nonproliferation and
20 our nuclear deterrent efforts.

21 Dr. Park: So, Senator, quickly, I appreciate the
22 support. Senator Lugar's work has been the foundation for
23 what we have today, and because of his leadership, we're
24 able to create the partnerships that are meaningful,
25 international partners, and we can sustain, and at the same

1 time we continue to push the envelope of science and
2 technology side of what we do. Verification is a key to
3 nonproliferation efforts. You have to be able to verify,
4 and we focus on the verification side of our business
5 through R&D efforts. So we keep pushing that area.

6 Senator Donnelly: Thank you.

7 Mr. Chairman, thank you, sir.

8 Senator Inhofe: Thank you, Senator.

9 Senator Reed, do you have any further comments?

10 Senator Reed: No, sir.

11 Senator Inhofe: All right.

12 Thank you very much, I say to our three witnesses.

13 Ms. White, you got off pretty easy there.

14 We thank you very much for your patience and for your
15 testimony and for what you've contributed to this nation so
16 far.

17 And we are adjourned.

18 [Whereupon, at 11:20 a.m., the hearing was adjourned.]

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