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Before the

Subcommittee on Personnel

COMMITTEE ON
ARMED SERVICES

UNITED STATES SENATE

HEARING TO REVIEW TESTIMONY ON UNITED STATES SPECIAL OPERATIONS COMMAND AND UNITED STATES CYBER COMMAND IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2020 AND THE FUTURE YEARS DEFENSE PROGRAM

Thursday, February 14, 2019

Washington, D.C.

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

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

Committee Members Present: Senators Inhofe
[presiding], Wicker, Fischer, Cotton, Rounds, Ernst, Tillis,
Sullivan, Perdue, Scott, Blackburn, Hawley, Reed, Shaheen,
Blumenthal, Kaine, King, Heinrich, Warren, Duckworth, and
Jones.
OPENING STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM OKLAHOMA

Senator Inhofe: Our meeting will come to order.

The committee meets today to receive testimony on the posture of the United States Special Ops Command and the U.S. Cyber Command.

I'd like to welcome our witnesses: The Honorable Owen West, whom I met for the first time today; General Tony Thomas, who is planning to retire, somebody told me -- and I think you're far too young to retire, but that's up to you, and particularly, you have two sons that are West Point graduates. You don't need to cut them loose that soon. And then General Nakasone. I appreciate very much the fact that, in the last couple of days, that we've had both open and closed meetings because of the seriousness of the thing we'll be addressing this morning.

So, the Senate Armed Service Committee's top priority is to support the effective implementation of the National Defense Strategy. Central to the NDS is a growing focus on competition with China and Russia, our peer competitors. And, of course, we also, at the same time, don't want to forget about the threat that's posed to us from the terrorist organizations.

Our Special Operations Forces have proven remarkably effective in combating ISIS, al-Qaeda, and other terrorist
groups over the last 17 years. However, these groups remain resilient and continue to pose a real threat to the United States and our allies. At the same time, the military advancements by China and Russia pose new and increasingly complex challenges to our national security.

You know, when you talk to people out in the real world in America, there's this assumption that we have the best of everything. And it's hard to explain, sometimes, that we don't. When we have our Chairman of the Joint Chiefs of Staff talking about how we -- you know, we are actually outranged and outgunned by -- in artillery, and we -- so, anyway, that's -- they are advancing, and ahead of us in some areas.

Another critical component of implementing the NDS is developing robust capabilities to counter growing threats in cyberspace. The Department of Defense is making important progress, including the elevation of the Cyber Command to a fully combatant command and the Cyber Mission Forces achieving full operational capability. Additionally, DOD released a new Cyber Strategy last year that provides a roadmap over how we will operate in cyber domain. I look to our witnesses to describe what investments will be needed to meet these objectives.

Senator Reed.
STATEMENT OF HON. JACK REED, U.S. SENATOR FROM RHODE ISLAND

Senator Reed: Well, thank you very much, Mr. Chairman. And let me join you in welcoming our witnesses for this update on the readiness and the posture of U.S. Special Operations and -- Command and Cyber Command.

And, General Thomas, I'd also like to thank you in an -- for your extraordinary service and your coming retirement after 39 years in service. You've ably led SOCOM during difficult times. You've done it with great energy, great foresight, and great dedication to the men and women you lead. And I thank you for that. Thank you. Also want to thank your family, because they served alongside you, and they continue to serve with you. And nice to see that your sons got good educations, also. So, thank you.

General Nakasone, this is your first time to appear before the committee since Cyber Command's been elevated to a unified command. Congratulations on this. And also your accomplishments, in partnership with NSA and other agencies recently, in combating some of our adversaries in the cyber sphere. Thank you very much, sir.

SOCOM is unique within the Department of Defense as the only functional combatant command with service-like responsibilities for the training, equipping, organizing, and readiness of Special Operations Forces. For that
reason, it's appropriate that the Assistant Secretary of
Defense for Special Operations and Long-Intensity Conflict,
the ASD SOLIC, Owen West joins us today in his role as the
Service Secretary-like official responsible for oversight.
So, welcome, Mr. Secretary. Thank you.

Since passage of the ASD SOLIC reforms contained in the
2017 National Defense Authorization Act, DOD has made
important progress, including hiring additional personnel
and more effectively integrating the ASD SOLIC into
departmental processes related to budgeting, acquisition,
readiness, and personnel management. These efforts are
necessary, but not sufficient, to fulfill the intent of the
SOLIC reforms. Secretary West and General Thomas, I hope
you will provide your assessment of what more needs to be
done and how this committee can continue to support your
efforts.

SOCOM, as a microcosm of the broader Department and
Joint Force, continues to adjust the complex security
environment and the focus of the National Defense Strategy
on great-power competition. This change will have
implications for the Department's management of SOF forces,
their readiness, capabilities, and development, and the
operational authority that they have to undertake. As the
demand for SOF continues to grow, we must also keep in mind
that there are limits to the hardships we can ask Special
Operations Forces and their families to endure. The United States, along with our allies and partners, face an urgent and continuing threat from information warfare attacks by Russia and other foreign adversaries. Russia attacked our democracy in 2016, and we must view these attacks with the same level of seriousness and resolve as a military attack.

While we appear to have had some success in countering Russian interference in the 2018 midterm elections, we should not take this as a sign that we can let our guard down. We must do more to anticipate and counter these increasingly sophisticated attacks, including by ensuring we are properly organized across the U.S. Government and inside the Department of Defense. General Thomas and General Nakasone, your commands sit at the nexus of DOD efforts to operate more effectively in the information environment, and I hope you will give a full assessment of what has been accomplished to integrate capabilities and authorities in this arena, and what gaps remain.

With respect to CYBERCOM, while much progress has been made in the last year, many serious challenges remain. DOD has developed what appears to be a viable cyber strategy and has conducted a serious cyber posture review. This posture review identified gaps in capabilities across the enterprise, and the principal cyber advisors cross-functional team is defining objectives, specific tasks,
resources, and timetables to correct them. When completed, these activities should greatly increase the Department's cybersecurity and the effectiveness of Cyber Command.

The Fiscal Year 2019 NDAA explicitly established that unacknowledged activities in cyberspace conducted below the level of armed conflict are a legal form of so-called traditional military activities. The NDAA also provided authority to the President to take action against sustained campaigns of specific adversaries against the United States, including Russia's malign influence campaign. This legislation, along with a recent presidential directive, provided DOD and Cyber Command with the needed authority to plan and conduct more vigorous actions in cyberspace to defend the country.

To support such operations, Cyber Command has developed an operational concept to employ so-called persistent engagement, in line with the National Defense Strategy. This is an important milestone, which I hope will be -- provide an even more effective model for engaging our adversaries without undue risk of escalation. General Nakasone, I look forward to hearing more about this operational concept.

We have come a long way, but we have a long way to go further. I know, with General Nakasone's leadership, General Thomas's leadership, and soon-to-be-General Clark's
leadership, and with Secretary West, we'll continue forward.

Thank you very much, gentlemen.

Senator Inhofe: Thank you, Senator Reed.

We'd now have opening statements. And we're going to try to confine our remarks to 5 minutes.

And we'll start with you, General Thomas, and work across to General Nakasone.

Okay. All right, I've just been corrected. We're going to start with Secretary West.
STATEMENT OF HON. OWEN O. WEST, ASSISTANT SECRETARY OF
DEFENSE, SPECIAL OPERATIONS AND LOW-INTENSITY CONFLICT

Mr. West: Thank you, Chairman.

Senator Inhofe: Everyone's pointing at you, anyway, so

--

[Laughter.]

Mr. West: Senator Reed, Chairman Inhofe, distinguished
members of the committee, thank you for the opportunity to
testify alongside my partner, General Tony Thomas, on our
global posture for our Nation's Special Operations
enterprise. Tony's command of SOCOM has safeguarded the
Nation for 3 years. I look forward to continued progress,
working with Richard Clark, when he assumes command next
month.

We're honored today to team with General Paul Nakasone,
whose command defends the Nation at the leading edge of the
modern battlefield.

The breadth and capability of our Special Operations
Force is astonishing. In over 80 countries, this vanguard
force tackles our most pressing challenges in the most
hostile environments. In the past 2 years, 23 SOF personnel
have been killed in action, and many more have sustained
life-altering injuries. Representing just 3 percent of the
Joint Force, SOF have absorbed over 40 percent of U.S.
casualties in this time. This sacrifice serves as a
powerful reminder that special operators are in the risk business. Their families carry the burden of individual tragedy so that we might prevent a national tragedy.

This is a unique time to serve the SOF enterprise, because it is an inflection point. First, the Section 922 legislation has reinvigorated the partnership between my office and SOCOM. Second, the National Defense Strategy has challenged all of DOD to increase focus on long-term strategic competition with Russia and China.

The SOF enterprise is in the midst of transformation, something special operators have always done very well. Any transformation starts with people. In November, General Thomas and I issued the first-ever joint vision for the SOF enterprise, challenging professionals to innovate relentlessly in pursuit of decisive competitive advantage. Special Operations should be viewed as an integral point of the Joint Force, designed to quickly and cost-effectively solve risky problems that do not lend themselves to mass or scale.

General Thomas has made tremendous progress in reducing the strain caused by the high operational tempo and demand. At the height of the wars, a large proportion of the force was spending as much time overseas as in the United States. This year, over 90 percent of the force will spend at least twice as much time in the U.S. as they will on deployment.
I'm proud to report to you that our Special Operations Force is neither overstretched nor breaking, but very healthy, poised and eager to defend the Nation against increasingly adaptive foes.

Despite this clear progress, General Thomas and I are concerned about serious ethical failings by some members of our SOF community. These incidents have our full attention. They are totally unacceptable and do not reflect the true nature of the SOF professional.

Finally, I would like to thank General Thomas for 39 years of service, much of it in combat. From 2001 to 2013, he deployed to Afghanistan every year, except for one in which he was wounded in Iraq. His relentless desire to defend the Nation is an inspiration to us all. He epitomizes quiet professionalism as a public official, but, in leading his troops and behind Pentagon doors, he is not shy. He consistently demonstrates blunt intellectual integrity that has personally inspired me. Our Nation will miss him. His wife, Barbara, less so now, and probably less in a year.

Mr. Chairman, I am grateful for the opportunity to testify today, and I look forward to your questions.

[The prepared statement of Mr. West follows:]
Senator Inhofe: Thank you, Mr. Secretary.

Now General Thomas.
STATEMENT OF GENERAL RAYMOND A. THOMAS III, USA,
COMMANDER, UNITED STATES SPECIAL OPERATIONS COMMAND

General Thomas: Chairman Inhofe, Senator Reed, and distinguished members of the committee, I'm grateful for the opportunity to speak to you today on the posture of United States Special Operations Command.

I'm privileged to be here today with Assistant Secretary Owen West as well as my friend and teammate, General Paul Nakasone, from CYBERCOM. Since its inception, we have enjoyed a tremendous relationship with the world-class team at U.S. Cyber Command and have forged the type of partnership, reinforced in combat, that ensures our absolute collaboration and cooperation in our shared mission of defending the Nation.

USSOCOM continues to field the world's most capable Special Operations Forces. We are an integral part of the Joint Force and integrated into every facet of the National Defense Strategy. Our numerous successes over the past years would not have been possible without the support and resources provided by the Congress. And, for that, I thank you.

For the last 18 years, our number-one priority has been the effort against violent extremist organizations. As part of the Joint Force, we continue to be the main effort, or major supporting effort, in Afghanistan, Syria, Iraq, Yemen,
Somalia, Libya, the Sahel, the Maghreb, Lake Chad Basin, and the Philippines. Everywhere ISIS and al-Qaeda and affiliated organizations are, we are relentlessly pursuing them to ensure this country never, ever endures another 9/11. We remain focused on finishing this effort by, with, and through our many coalition partners.

At the same time, again, as part of the Joint Force, we are endeavoring to provide a more lethal and capable Special Operations Force to confront peer competitors. USSOCOM is already well oriented to the challenges of great-power competition, particularly in the competition space short of armed conflict. Our SOF network, integrated with interagency and international partners, is focused on producing unorthodox, yet complementary, capabilities and solutions in support of U.S. policies and objectives. We continue to maintain strong, enduring international partnerships while leveraging authorities in core expertise to convert indigenous mass into combat power to deter, deny, disrupt, and ultimately defeat our adversaries.

To build a more lethal force, strengthen our alliances and partnerships, and reform for greater performance and efficiency, we are reshaping and focusing our current forces and capabilities while simultaneously developing new technological and tactical approaches to accomplish the diverse missions that SOF will face in the future. The
joint SOLIC-USSOCOM SOF vision that Assistant Secretary West mentioned is our guide to move us forward. The emerging security challenges will require SOCOM to be an organization of empowered SOF professionals, globally networked, partnered, and integrated, and relentlessly seeking advantage in every domain for the Joint Force and the Nation.

In addition to our service-like responsibility to man, train, and equip the world's most capable Special Operations Forces, over the past few years USSOCOM has experienced considerable development in our other legislative role as a combatant command. We are currently assigned the role as the coordinating authority for three major global mission sets: counterterrorism, countering weapons of mass destruction, and, recently, messaging/countermessaging. These roles require us to lead planning efforts, continually assess Joint Force progress towards campaign objectives, and recommend improvements or modifications to our campaign approach to the Secretary of Defense. In parallel, USSOCOM has begun pursuing an aggressive partnership with the other combatant commands with global portfolios -- CYBERCOM, here today, STRATCOM, TRANSCOM, and U.S. SPACECOM -- designed to leverage our respective capabilities towards providing more agile solutions to the Department of Defense.

SOF has long -- has a long tradition of solving hard
problems, adapting to changing conditions, and fielding innovative technology and tactics to give us the decisive advantage in combat. We believe that this tradition will continue to serve us well in the future. We are increasing our investments in a wide spectrum of emerging technologies, to include artificial intelligence and machine learning, automated systems, advanced robotics, augmented reality, biomedical monitoring, and advanced armor and munitions development, just to name a few.

We are in the formative stages of establishing an experimental force, which will more coherently focus and integrate our future force development in the pursuit of the required peer-competitor capabilities. Leveraging our proven ability to rapidly develop and field cutting-edge technology flowing from our focus on the tactical edge of combat, this joint experimentation initiative will bring together innovative efforts from across our Special Operations Force tactical formations to ensure that commanders' combat requirements are addressed with the most advanced concepts and equipment available.

Finally, in 44 days, I'm scheduled to relinquish command of the greatest Special Operations Force in history. I know that sounds a bit haughty, but the men and women of USSOCOM back that statement up every day. They represent the best that America has to offer, an exceptionally
dedicated, effective, and resilient group of warriors and problem-solvers. I'd like to publicly thank them for the opportunity to be their teammate. It has been an incredible privilege to serve with them over the course of 39 years of service.

I'd like to also personally thank Command Sergeant Major Pat McCauley, our SOCOM Senior Enlisted Advisor, appearing with me again today, for his service as a critical member of the SOCOM command team. Pat is the epitome of the best that USSOF has to offer, and, in a few short months, will conclude 30 years of faithful and devoted service to the United States Army, United States Special Operations Command, and the Nation. During his distinguished career, he's inspired many by his personal courage on the battlefield, his sage counsel to commanders and leaders at every level of command, and his moral and physical leadership. He represents everything that is great about this Command -- most importantly, our people.

Thanks again for the opportunity to appear before you today. I look forward to your questions.

[The prepared statement of General Thomas follows:]
Senator Inhofe: Thank you, General Thomas.

General Nakasone.
STATEMENT OF GENERAL PAUL M. NAKASONE, USA, COMMANDER, UNITED STATES CYBER COMMAND; DIRECTOR, NATIONAL SECURITY AGENCY; CHIEF, CENTRAL SECURITY SERVICE

General Nakasone: Chairman Inhofe, Ranking Member Reed, and distinguished members of the committee, thank you for your enduring support and the opportunity to testify today about the hard-working men and women of United States Cyber Command. I'm honored to lead them.

I'm also honored to sit alongside these great leaders, Assistant Secretary of Defense West and General Tony Thomas.

For Tony, my congratulations to you and Barb for your steadfast service to our Nation. It's been a tremendous journey for you, and I've enjoyed our close partnership and friendship. My personal best wishes to you, Tony, and your family.

As the Commander of U.S. Cyber Command, I'm responsible for conducting full-spectrum cyberspace operations supporting three mission areas: defend the Nation against cyberattacks, defend the Department of Defense Information Networks, and enable our Joint Force commanders in pursuit of their mission objectives.

In the cyber domain, we are in constant contact with our adversaries, who continue to increase in sophistication, magnitude, intensity, volume, and velocity, and remain a threat to our national security interests and economic well-
being. The National Security Strategy and the National Defense Strategy highlight the return of great-power competition. Beyond near-peer competitors, China and Russia, rogue regimes, like Iran and North Korea, continue to grow their capabilities. Using aggressive methods to conduct malicious cyberspace activities, adversaries have, until recently, acted with little concern for consequences. The Department of Defense Cyber Strategy identifies the need to defend forward during day-to-day competition with our adversaries. This strategy aims to maintain our superiority in cyberspace through protection of our critical infrastructure and networks. At U.S. Cyber Command, we implement the DOD strategy by adopting an approach of persistent engagement, persistent presence, and persistent innovation. This past year witnessed the elevation of U.S. Cyber Command to combatant command status, the opening of our Integrated Cyber Center, and our shift from building the force to the readiness of that force. This progress ensures our ability to execute our mission requirements for the Department in defense of our Nation.

The defense of the 2018 midterm elections posed a significant strategic challenge to our Nation. Ensuring a safe and secure election was our number-one priority and drove me to establish a joint U.S. Cyber Command/National Security Agency effort we called the Russia Small Group.
The Russia Small Group tested our new operational approach. With the organization and direction from the President and Secretary of Defense, the Russia Small Group enabled partnerships and action across the government to counter a strategic threat. Our response demonstrated the value of a tightknit relationship between U.S. Cyber Command and the National Security Agency, bringing together intelligence, cyber capabilities, interagency partnerships, and the willingness to act.

Through persistent engagement, we enabled critical interagency partners to act with unparalleled coordination and cooperation. Through persistent presence, U.S. Cyber Command and the National Security Agency contested adversarial actions, improving early warning and threat identification, in support of the Department of Homeland Security, the Federal Bureau of Investigation, and others.

Beyond the interagency, we partnered and engaged with allies and public and private sectors to build resiliency. For the first time, we sent our cyberwarriors abroad to secure networks outside the DOD Information Network. Our operations allowed us to identify and counter threats as they emerged to secure our own elections and prevent similar threats interfering in those of our partners and allies.

The Russia Small Group effort demonstrated that persistent engagement, persistent presence, and persistent
innovation enables success. Effective cyberdefense requires a whole-of-nation effort. Information-sharing plays a vital role in enabling everyone, including government agencies, to defend their networks. Therefore, we are now sharing computer malware we find during our routine operations with the private sector and the broader cybersecurity community. We have posted numerous malware samples for crowd-sourcing analysis. We believe our actions will have a positive impact on improving cybersecurity globally.

Our actions are impacting our adversaries. Our shift in approach allows us to sustain key competitive advantages while increasing our cybercapabilities. As we review lessons learned from securing the midterm elections, we are now focused on potential threats we could certainly face in 2020.

Looking forward, we need to continue building a warrior ethos similar to our other warfighting domains. Cyberwarriors are, and will continue to be, in constant contact with our adversaries. There are no operational pauses or sanctuaries. We must ensure sufficient capability and capacity, people, technology, and infrastructure, which we are decisively focused on now.

Through persistent presence, we are building a team of partners that enable us and them to act more effectively. The complex and rapid pace of change in this environment
requires us to leverage cyber expertise broadly across public and private sectors, academia, and industry. Therefore, we aspire to increase our effectiveness and capabilities through persistent innovation across these partnerships.

Cyberdefense is a team effort. Critical teammates, such as the National Guard and Reserve, are integral parts of our cyberforce. They provide strategic depth and provide the Nation a reserve capacity of capable cyberwarriors.

Finally, improving readiness continues to be one of my key focus areas. I continue to work with the services and Department to actively measure and maintain readiness, manning, training, and equipping, and certainly an ability to perform the mission.

After a year of change and progress, we see 2019 as a year of opportunity. We have much work ahead as CYBERCOM matures. We assure you that our people merit the trust you have placed in them and that, with your support, they will accomplish the tasks that our Nation expects.

Thank you again for inviting me here today on behalf of U.S. Cyber Command, and for your continued support. I look forward to your questions.

[The prepared statement of General Nakasone follows:]
Senator Inhofe: Thank you, General Nakasone.

First of all, I think we've all pretty much decided that this Commission, the National Defense Strategy Commission, is kind of the blueprint that we are using in this committee. And to start this off, let me address the two levels of threats that we're talking about.

First, of course, the level of threat would be the peer competition that we have out there; then the terrorist element that's out there. It's very alive today.

So, starting off with, maybe, a response from both Generals on the first one, How can SOCOM and CYBERCOM most effectively support our efforts against China and Russia? And talk a little bit about any deficiencies, in terms of resources, that you would be suffering in order to carry out these goals.

General Thomas?

General Thomas: Chairman, you highlight, at the outset, the challenge is to maintain the focus on the counter-violent-extremist effort while shifting to the focus of the National Defense Strategy. I would tell you that it's burdensome, in terms of resources, but something that we can and will manage, going forward. I'm lucky, on two accounts. One, my predecessors had already focused on Russia and China as emerging threats, before the National Defense Strategy, and had already committed resources to
that effort. So, I appreciate the investment that preceded me. I also appreciate some new authorities that have developed in this house which have enabled us to approach this problem differently, but in a -- similarly, the way that we approached the counterterrorism problem. So, resources that enable some unique, unorthodox approaches to peer competitors, especially in that space that we call "competition short of conflict" -- a big arm wave, but a -- arguably, the most important phase of deterrence.

Senator Inhofe: Yes. Thank you.

General Nakasone.

General Nakasone: Chairman, I would offer -- in terms of our ability for near-peer or peer competitors, our most important thing right now is to be able to enable our partners, whether or not those partners are Joint Force commanders in cyberspace or those partners are other members of the interagency. Our work with the Department of Homeland Security and the Federal Bureau of Investigation is a -- an exemplar, I think, of the enabling aspect that we will do against near-peer competitors.

Senator Inhofe: Yeah.

General Nakasone: I would also offer that the FY19 National Defense Authorization Act was critical for us at U.S. Cyber Command. It gave us capabilities and authorities that were important for us as we look to further enable.
That included the ability for us to rapidly deploy elements of our force to the Department of Homeland Security, the ability for us to look at networks that are not part of the Department of Defense network. And the other piece of it that was critical, as Ranking Member Reed mentioned, is the idea of cyber as a traditional military activity. I think those are areas that are going to help us immensely with near-peer competitors.

In terms of our shortfalls and our challenges, the areas that we are very focused on is continuing to ensure that the force that has been built, the force that is ready, the force that will operate has the required infrastructure -- the sensors, the locations, the capabilities -- to address a number of different threats to our Nation.

Senator Inhofe: Appreciate that.

I'm going to read a quote from Dan Coats and ask for a response, Secretary West and General Thomas. He said, "ISIS still commands thousands of fighters in Iraq and Syria, and it maintains eight branches, more than a dozen networks, and thousands of dispersed supporters around the world, and will exploit any reduction in CT pressure to rebuild key capabilities, such as media production and external operations." Do you agree with that? Let's start with you, Mr. Secretary.

Mr. West: Mr. Chairman, I do.
Senator Inhofe: General Thomas?

General Thomas: Mr. Chairman, I do. But, I would add, in context, we have crushed the physical caliphate, so the terrain that ISIS formerly maintained it, they -- a sanctuary and from where they drew their resources -- specifically, oil resources -- has been badly -- you know, badly diminished, but they continue to be a threat. And I agree with the -- the scope of the assessment, as provided by the DNI.

Senator Inhofe: Well, and, you know, we get a variety of reports, in terms of the effectiveness of the various ISIS, al-Qaeda, the terrorist operations. And so, we want to make sure that everyone understands, yes, that peer competitors are important, but so is the other.

Senator Reed.

Senator Reed: Well, thank you very much, Mr. Chairman. And, first, let me join General Thomas in thanking and commending Command Sergeant Major McCauley for your service. Thank you. We all recognize the noncommissioned officers in every service are the backbone and the real -- I think, the winning edge that we have. So, thank you.

Secretary West and General Thomas, if you could elaborate on the challenges that still face you in implementing 922, that would be very helpful to us and, if anything that we can do to help make 922 the whole issue of
creating a service-like Secretary under the ADS SOLIC.

So, Secretary West, please.

Mr. West: Thank you, Senator Reed.

Well, 922 has certainly reinvigorated our relationship, but it's also very timely, because our basic task is to help institutionalize USSOCOM within the Joint Force and in the Pentagon while keeping its unique attributes. But, it also has come along the -- simultaneously with the National Defense Strategy. And so, this year, General Thomas and I have cosigned four separate letters, one of which was to align SOCOM's fiscal strategy to achieve the NDS. This body has been very supportive. I think we are very adequately supported. I think the task is really left up to us to slowly build this business and achieve our objectives.

Senator Reed: Thank you.

General Thomas, your comments.

General Thomas: Senator Reed, I noted at the outset that Owen referred to me as his teammate, which I appreciate, because, technically, he's my boss. In legislation, as you know, affected by this last year, in -- with one of my hats on as -- for the man, train, and equip, service-like responsibilities, he is literally in my chain of command, and we have embraced that, going away. I think that actually integrates us with the Department more optimally. And so, conceptually, we've certainly been able
to drive the relationship, I think, to a much more enlightened level. I hope that it continues to evolve. I think ASD SOLIC provides a critical function for us, for integration with the Department. And, again, it's been a pleasure working with Owen as we've developed out what I think your intent was.

Senator Reed: Thank you.

General Nakasone, again, thank you for your service, particularly your great efforts with respect to the last election and looking forward to the next one. One of the areas is social media. And we've talked about it, and we've talked about it also -- you've talked about it with the Intelligence Committee. There were two independent reports commissioned by the Senate Intelligence Committee that looked at social media, not just particular platforms, but the cross-movement of information on these platforms. Do you think it would be helpful having studies like this for your use? And should we contemplate trying to provide you the authority to do that?

General Nakasone: So, certainly, Senator. What we found with those reports is, it provided a window on the adversary that we hadn't seen. As you know, our focus on intelligence is outside the United States, where -- on foreign intelligence, so that we were able to capture that. But, having the reports that were done, in terms of what was
done within the United States, very, very helpful, in terms of being able to understand exactly what our adversary was trying to do to build dissent within our Nation.

Senator Reed: So, if we could somehow institutionalize that -- maybe the proper format might be through the Intelligence Committee, but those reports are useful to you and complement your direct activities.

General Nakasone: Those reports certainly provided a window on our adversary that was very telling.

Senator Reed: And one of the issues that -- too, that came in the context of social media is the -- is that -- the issue, "Will they voluntarily take steps that are appropriate and necessary?" Now, my understanding is that they do take down sites that have been identified. But, I also don't think they identify to the consumer that these sites were either fraudulent or malign. Is it something that they should be doing, in your view?

General Nakasone: So, Senator, what we were able to do was declassify information about our adversaries, and pass that through the National Security Agency to the Federal Bureau of Investigation. The FBI specifically worked with those social media companies. And so, I would defer to the Bureau, in terms of their ability in -- to do what you had stated there.

Senator Reed: Fine.
Again, gentlemen, thank you for your service.

Thank you very much.

Senator Inhofe: Thank you, Senator Reed.

Senator Fischer.

Senator Fischer: Thank you, Mr. Chairman.

General Thomas, thank you for your service to this country, and congratulations on your retirement.

General Nakasone, thank you for your service to the country, as well.

Over the years, many have talked about deterring adversaries in cyberspace, and the broader question of cyber deterrence is often compared to nuclear deterrence. I've said this before. I don't think that's good comparison at all. You made a similar point in a recent article, where you argued that deterrence in cyberspace results from the employment of cybercapabilities, not the threat of employing them, something you describe as persistent engagement. You mentioned, earlier, that this committee and the White House have provided CYBERCOM with additional authority in the past year. Can you tell us what impact those changes have had?

General Nakasone: Senator, a year ago, I appeared before this committee for my confirmation hearings. In that year, let me just trace, I think, the major elements that have helped our Command be able to be more effective.

First of all, our National Strategy on Cyberspace, the
Department's Strategy on Cyber Posture Review. And then, I think, the key piece that I would offer is the FY19 National Defense Authorization Act. That recognized cyber as a traditional military activity, that provided us the baseline of being able to operate outside of our Department networks and the idea that we would enable other elements of our interagency. Tremendously helpful. And then I would say the last piece is the work of the President to bring a new policy to bear, in terms of how we operated offensively in cyberspace.

Senator Fischer: Have you been able to put your theory of persistent engagement into action?

General Nakasone: Senator, we have. Our number-one priority was the defense of the midterm elections. We utilized all of those capabilities, those strategies, and our new operational concept, persistent engagement, to ensure a secure and safe election.

Senator Fischer: I appreciated your classified briefing on that the other day. I think it was very helpful for members to hear that.

Is it your view that imposing costs on adversaries through persistent engagement -- is that going to have a deterrence effect? And can you -- or do you think there is any connection between a cyber deterrent and also a nuclear deterrent? I saw you shake your head when I mentioned that
in my opening to your question.

General Nakasone: Senator, I would offer that my view on nuclear deterrence is much different than on the idea of cyber engagement and being able to prevent our adversaries from accomplishing their goals. As I mentioned, in nuclear deterrence, the power that a nation-state has is through the threat of the use of the weapons. What we're seeing in cyberspace is, our adversaries are operating below a level of armed conflict every single day to steal our intellectual property, to leverage our personally identifiable information, to challenge our institutions. And this is where I believe being able to operate either to enable other elements of the interagency or operate outside of our national borders against our adversaries is important.

Senator Fischer: I would say, from your comments, you -- and you can correct me on this, but that you don't believe, then, that cyber is a substitution for the deterrence that we achieve through our nuclear enterprise.

General Nakasone: So, I believe that cyber is, overall, one element that our Nation is going to use to achieve deterrent effects against our adversaries, but there are other elements, other powers of our Nation that we will also bear on adversaries that attempt to operate below this level of armed conflict.

Senator Fischer: Last year, I discussed the adequacy
of the size of the Cyber Mission Force with your predecessor, and he testified that, quote, "We're probably going to need some level of additional capacity over time. And that's something I'll be talking to my successor about. I think that it's going to be a key thing for him during his time in command." So, how adequate do you believe the size of the force is compared to the threat that we are seeing today? And how do you measure force adequacy?

General Nakasone: Senator, we're looking at -- as we measure our readiness against what we consider a number of different adversaries, primarily both near-peer and rogue states, we believe that the teams that we've created right now is the building block for that. We are also, as you know, building a series of defensive teams in the Army Reserve and the National Guard that are going to be a strategic depth for us.

My sense, as we continue to operate more, as our adversaries continue to improve, that there will be requirements that will probably be outside the 133 teams that we have right now.

Senator Fischer: Thank you.

Thank you, Mr. Chairman.

Senator Inhofe: Thank you, Senator Fischer.

Senator King.

Senator King: Thank you very much, Mr. Chairman.
General Thomas, when we had the new overall defense and National Security Strategy that put more focus on near-peer competitors or peer competitors, there was a implicit hydraulic effect that efforts were going to go up on the conventional peer competitor, and down on CT. Do you see any reduction in the CT threat around the world, or should it be -- I'd -- the hydraulic effect, it seems to me, is not a good idea, because the -- we, maybe, feel good today, but the CT threat is still there, is it not?

General Thomas: Senator, I think the CT threat is in the throes of transformation. As I mentioned, this time last year, we had just taken Raqqa, the capital of the caliphate, but we still had substantial maneuver operations and challenges to push through to the destruction and the defeat of the physical caliphate. We're much closer now. Somebody played it out to me the other day that if you wanted to put a grasp on it in physical terms, it's twice the size of the base on -- where I'm stationed, MacDill Air Force Base, which is tiny. So, they are down to the last, you know, dozens of square kilometers, in terms of physical --

Senator King: But, the CT threat between 2001 and 2011 wasn't measured in territory, it was in --

General Thomas: Right.

Senator King: -- in terrorist threat. So, that's
still there, isn't it?

General Thomas: Well -- and you're correct. I would offer that, in our efforts to defeat ISIS, we have also greatly diminished their ability to export the threat to the United States and to our Western allies. In, though, the throes of this transformation right now, they still are very dangerous, and they're -- and I could highlight the specific groups that we consider to be external threats to the United States and are truly the -- you know, the -- on it, in terms of our focus. And we're staying on them.

Senator King: And there is a growing CT threat in Afghanistan, is there not?

General Thomas: Sir, I wouldn't label it as growing. In fact, we've made huge progress against ISIS-K, which is the primary external threat in Afghanistan. More regional -- I would offer, more regional instability in Afghanistan of late, but not in the form of external threats.

Senator King: Thank you.

General Nakasone, you've described the progress that you've made in this year. I'm on my way, from here, to a hearing on the security of the electric grid in the Energy and Natural Resources Committee. And it seems to me this is a classic case of cross-jurisdiction. And I'd -- if you could describe your relationship of CYBERCOM and NSA to FBI, DHS, utilities. How do we be sure that what you know and
are able to do is protecting us? Because you don't have jurisdiction within the United States.

General Nakasone: Senator, for the energy sector, the lead for the securing of that critical infrastructure is the Department of Homeland Security. They work very, very closely with the sector-specific lead, which is the Department of Energy. Where we tie in is, we tie in on the U.S. Cyber Command side, providing enabling support to the Department of Energy and the Department of Homeland Security, if requested. Right now, what we are doing is sharing information, sharing information very clearly about what we know about foreign adversaries that may be attempting to get --

Senator King: Do you share that information with the utilities or --

General Nakasone: We share that with the Department of Homeland Security and, specifically, Department of Energy.

Senator King: Let me ask about structure, sharing of information. Is there a regular structure? Is there a -- an organizational chart of these relationships, where you meet regularly, or is it sort of ad hoc?

General Nakasone: We have put into place within the Department of Defense a pathfinder program to look at this element. And so, we've established a regular meeting with the sector security agent, which is the Department of
Energy, working with them and the Department of Homeland Security to share that information regularly.

Senator King: And finally, you've talked with Senator Fischer somewhat about deterrence, and you're talking about a persistent engagement, which is, in effect, telling the adversary we're there. And the question is, How do we change their calculus? Does this -- does your theory of persistent engagement -- I think you used the term "engagement, presence, and pressure, or innovation." Does that -- is that intended, and will it change an adversary's calculus when they come to decide whether to launch a cyberattack on our electric grid or a financial system or elections?

General Nakasone: Senator, we think it will, through two different means. One is through building resilience, in terms of what we're able to provide to our partners and their knowledge of our adversaries, but, two, also imposing a cost on our adversary.

Senator King: That's the -- that's what I want to hear about.

General Nakasone: Yes. So, the ability either to be able to identify where they're operating from, the tools that they're using, to be able to provide that cost that the adversary has to think twice, in terms of, "Can they conduct and exploit -- exploitation or attack against our critical
Senator King: But, you -- the calculus is, "Can they do it?" But, is -- shouldn't there be a calculus, "If they do it, they will be responded to in a forceful way"?

General Nakasone: Certainly, Senator. And I think that comes not only with cyber, but also all the elements of our Nation that can be brought to bear on that adversary.

Senator King: I think that's important. And it doesn't have to be cyber-for-cyber.

General Nakasone: Right.

Senator King: It can be other elements of national power.

Thank you very much, General.

Thank you, Mr. Chairman.

Senator Inhofe: Senator Hawley.

Senator Hawley: Thank you, Mr. Chairman.

Assistant Secretary West, many of us on the committee are working through the President's decision to withdraw forces from Syria. It appears there's a fair amount of work to be done there. I'd just like to know, from your perspective and from an SOF perspective, how would you characterize victory in Syria, winning in Syria? What does that look like, and what do you need to get there?

Mr. West: Sir, I'd be cautious to use the word "victory," but I think it's very important not to diminish
what has happened there. As General Thomas said, the physical caliphate did, at one time, attract over 40,000 foreign fighters into that territory, from 100 different countries. They can no longer do that. But, this will be a very long war. ISIS is quite expansive, in terms of its global territory, but it now becomes an insurgency.

Senator Hawley: General Thomas, let me just ask you the same question. What do you -- what does winning look like in Syria? And what -- are we -- have we won? I mean, are we satisfied with where we are, in terms of SOF's mission there and what you've -- what you feel that you've been tasked to accomplish?

General Thomas: Senator, I'd -- again, I'd be hesitant to use the term "winning," as opposed to the objective. I think our reasonable objective is to reduce the threat in that area, and to be able to maintain persistent capability so that an external threat cannot emanate from that area in the future.

Having said that, Syria is perhaps the most complex battlespace that I've experienced in 40 years. My recent trip out there had our forces operating in and around Syrian regime forces, Russian forces, Turks and their surrogates, Iranian Revolutionary Guard forces, Lebanese Hezbollah, and ISIS. Again, an incredibly complex environment that I think, again, the objective is to reduce the threat and be
able to maintain some sort of sustainable security there.

Senator Hawley: And just on that point about reaching
a point where the external threat can't emanate from that
region, are you satisfied, General, that we're at that
point, where an external threat from VEOs cannot emanate
from Syria? I mean, do you think we've accomplished that
objective?

General Thomas: I do not think we're there yet. We're
on the verge of diminishing the threat, and then in the --
in a -- in the process of determining what the residual
capability needs to remain in place in the region to ensure
that we're securing that -- you know, securing that
objective.

Senator Hawley: Let me ask you, General, about
recruiting and retention. You talk about this in your
prepared testimony. You talk a lot about the significant
strain on SOF over the doubling of the size of the force and
the significant deployment demands. Tell me about where you
think we are, in terms of recruitment, retention, what
additional tools or help that you need to make sure that
your force is ready, is rested, is healthy, and is getting
everything they need to be able to do the very significant
and demanding and dangerous work we ask them to do.

General Thomas: Senator, over the years, we have
aspired to grow the Special Operations Force that the Nation
needs, but have not dropped standards at all, so the -- it's a little bit of a Catch 22 here. You know, part of our mantra is, you can't create this in a hurry, and people are our most important asset. We have had challenges, of late. And I attribute it to a number of causes, as much the downsizing of the Army, specifically, for recruiting Special Forces, but there are some very good initiatives in place to rectify that and to try and address our recruiting shortcoming. So, I'm think -- I think we're trending in the right direction, but it has been challenging over the last year to 2 years, in terms of getting the numbers in that we would like to have, but cognizant of the fact we're not going to drop standards.

Senator Hawley: Is your -- is it your sense, General -- and then I'll put the same question to you, Secretary West -- but, starting with you, General, is it your sense that, under the NDS and the new prioritization -- reprioritization of great-power conflict, that demands on SOF will maintain -- will be the same, will increase? I mean, what's your sense of it as you think about the -- your posturing and your needs under the NDS? What do you see about the demands for the forces that you command?

General Thomas: I think, departmentwide, we all can take away that the NDS highlights there's not going to be a respite, in terms of national security challenges. You
know, we've had an 18-year ongoing struggle, the longest struggle in the history of the United States. That has not come to a conclusion yet. And so, we have some work left to do there. We've had the reemergence of peer competitors as a priority, an existential threat and clearly the focus for the Department. So, we share that across the Department. I get pretty good guidance from the Department, in terms of where they want me, in terms of priorities and effects as a part of the Joint Force, and we manage that. Paul and I share the same -- as a global combatant command that provides forces to the six geographic combatant commands, this is our daily challenge, but it's one we embrace.

Senator Hawley: Very good.

Thank you, Mr. Chairman.

Senator Inhofe: Thank you, Senator Hawley.

Senator Duckworth.

Senator Duckworth: Thank you, Mr. Chairman.

Gentlemen, thank you so much for being here today.

You oversee a directorate and combatant commands that operate not in just one geographic area of responsibility, but also in the most austere environments around the world. The men and women you lead are often the first in battle, and the heroism and dedication is not fully understood by elected leaders and the American public. So, I'm very appreciative of the opportunity to hear from each of you.
about the state of your Commands and the challenges and
opportunities you face.

So, I'd like to take this opportunity to thank General
Thomas for his 38 years of service as you come to the end of
your time in uniform. I really wish you the best of luck on
your next phase of your career.

Since the committee began hearing testimony from
military leadership this year, much of the conversation has
been about ensuring that our forces are lethal and agile so
that they provide a credible deterrent, reducing the
probability of armed conflict with our peer adversaries.
Yet, Special Operations and Cyber Forces are uniquely
tailored and trained to achieve effects against our
adversaries in a variety of situations that are just short
of war, itself. Could each of you briefly discuss,
conceptually, how Special Operations and Cyber Forces can
exact a toll for malign activities, short of supporting
armed conflict? And, in your opinion, what kind of
restructuring with the Special Operations and cyber
communities will they need to do in order to dominate these
gray-space conflicts?

Mr. West: Thank you, Senator. Certainly, you're
correct, in that the nature of war doesn't change, but its
character has changed radically in the last 15 years. I'll
let General Nakasone take on the cyber portion.
In terms of the Special Operations tactics, where SOF traditionally thrives, we're also seeing the enemy employ these. So, in my judgment -- and I'll let General Thomas talk specifics on operations. But, when we talk about competition short of armed conflict, dealing with partner nations, problems that need to be quickly solved and the -- and agilely solved in a cheap manner, you're really talking about SOF. So, there's a real role for that, that General Thomas will be able to describe.

General Thomas: Thanks, Senator. And thanks for your service, as well.

Senator, we're actually very excited about the opportunity that the NDS and the specific subject of competition short of conflict offers for us and in conjunction with Paul and others, in terms of winning that critical phase. And winning, in that case, is not a -- we don't think it's a defeat moniker that applies. It's to disrupt, deny, and really, you know, ensure that our United States policies and objectives are pursued and successful. We think it's a combination of information operations, influence operations, partner capacity, cyber operations, in conjunction with Paul, the whole array of, you know, some -- sometimes described nonkinetic activities that are really an art form that we're excited employing in the future. And we think we will -- we hope to play a substantial role there.
Senator Duckworth: Thank you.

General Nakasone, on Tuesday, Admiral Davidson highlighted to this committee the need to enhance the cyber defenses of our logistical networks, which touched the commercial industry that we help contract for support, both in the U.S. and overseas. Can you provide examples of what might be affected and how we might be able to harden the network when it comes to organizations such as TRANSCOM? You know, we have this long logistical tail that must support our forces, no matter where they're operate, and I feel like they are sometimes the most vulnerable, and we overlook that -- those organizations. And how does TRANSCOM fit into your priority for cybersecurity?

General Nakasone: Senator, General Lyons and I have not only had discussions about this at Transportation Command, but I've also been out to visit him. We see the ability for us to project our strategic elements in the world as being something that's uniquely suited for our Nation and a tremendous capacity. What we are doing at U.S. Cyber Command is ensuring that we understand the networks that he has to operate on, the platforms that he is utilizing, and, most importantly, the data, because it's that data that we want to make sure that we can secure. The challenges you point out is making sure that we have enabled our partners. And these partners are
oftentimes private-sector partners that we work with, the Department of Homeland Security, and other sectors, to ensure that they have the information upon which they understand the threats to them and they can build more resilient networks and protect their own data.

Senator Duckworth: Thank you, General.

I yield back, Mr. Chairman.

Senator Inhofe: Thank you, Senator Duckworth.

Senator Cotton.

Senator Cotton: Thank you, gentlemen, for your appearance here today.

General Thomas, let's start with Syria. We've talked a little bit about the state of the fight there and the great advances our troops have made, a little bit about what will happen when our troops depart Syria. One thing that's been on my mind is all the bad guys that are currently being detained in Syria. Some of your colleagues have testified before the committee that that number would go into the hundreds. We don't have to be anything -- any more specific here in that setting. They've also testified that, while some of those detainees are front-line, untrained cannon fodder, some of them are also external operation plotters and master bombmakers and other really bad guys. Is that your understanding, as well?

General Thomas: Senator, without getting into the
specifics on the numbers, it's actually closer to a thousand than it is hundreds already in detention, with more to, potentially, come. A huge area of concern for us, especially because they're being maintained by the non-nation-state that's otherwise known as the Syrian Democratic Forces. So, how we resolve this foreign-fighter -- mostly foreign-fighter detentions from, I think -- I lost count, but it's in the dozens of countries that have contributed to it -- but, how we reduce this, that threat, and have those people properly detained and handled over time is of paramount importance right now for the problem.

Senator Cotton: Yeah, how are we going to do that?

General Thomas: A pretty aggressive action right now, Senator, ongoing with State Department and with other partner nations to specifically reduce that threat. I'll give kudos to some of the countries, a surprising number of countries who have recently stepped up, some of the smaller countries that had capacity challenges, but that have, nonetheless, you know, assumed the burden -- or started to assume the burden. And we, with State Department, primarily, are trying to assist them in reducing this problem.

Senator Cotton: I know it's not in your area of operations, but we have empty beds at Guantanamo Bay, don't we?
General Thomas: Yes, Senator, we still do.

Senator Cotton: Maybe we should consider that for some of those really bad guys in Syria.

While we're talking about Syria, let's contrast Syria and Afghanistan, or specifically Afghanistan against some of the other places where we have a serious terrorism threat.

The President said, a couple of weeks ago, that we're going to have troops in Iraq for a while, in part because we need to watch the counterterrorism threat there, watch the threat of Iran. That's right next to Syria, in places like Yemen and Somalia. We obviously have freedom of action on the seas for a lot of your troopers. Contrast the CT mission that we have in Afghanistan, which is -- I think, is 800 or 900 miles from the nearest sea, and the challenge that we would face there if we significantly drew down our troop presence in the conventional forces, for your forces and Special Operations.

General Thomas: Thanks, Senator. I'd -- truthfully, we look at it in a global context. So, in Afghanistan, and, as Senator King pursued earlier, the external threat adversaries have been greatly diminished, and we're focused on them specifically. There's a larger counterinsurgency effort that you know is, you know, into its 18th year, but with a specific focus to support Ambassador Khalilzad's efforts to drive the -- you know, drive that into
reconciliation. So, you know, a distinctly different, as
you mentioned, problem, but correlated, in terms of the
global threat and their connectivity.

Senator Cotton: It would be hard to get after those
terrorist organizations, though, in Afghanistan, for your
troops, if we didn't have some kind of physical presence in
Afghanistan, isn't that right?

General Thomas: Senator, access and placement are key,
and, again, something you can't establish in a hurry,
necessarily, if you leave it. I probably failed to answer
Senator King's question earlier. The way we look at the
current context is very similar to 2011. So, the recent
annual assessment we did reflects on 2011, when al-Qaeda in
Iraq was badly down, but not out, and we pulled out of Iraq
at that point. And we know that, in less than 2-years'
time, they were ISIS, running the deck through Nineveh,
running the deck through Anbar. So, how we finish that
threat, and -- or at least contain it, going forward, is a
critical concern. But --

Senator Cotton: And what's true of our troops is true
of enemy forces, as well, right? It helps them to have a
safe, secure physical base from which they can carefully
plot attacks outside of that base?

General Thomas: Yes, Senator, they thrive on
sanctuary, and they're actively seeking sanctuary right now
if they lose their toehold in Syria and other places.

Senator Cotton: Thank you, General Thomas.

General Nakasone, a quick question about the 5G network. We've discussed this many times before. What is the status of your conversations with counterparts around the world to the threat that Chinese companies, like Huawei and ZTE, pose to our telecommunications networks?

General Nakasone: Senator, for fifth-generation wireless, on U.S. Cyber Command, we have certainly talked with our partners and our allies with that. In terms of the Director of National Security Agency, of which I am, we have also worked that to the Department of State as they've made engagements with our allies throughout the world.

Senator Cotton: Thank you.

My time is expired.

General Thomas, I don't think you'll be appearing here before us again. You are smiling at that, I can tell. I want to thank you and thank your wife, Barbara, for many years of carrying the rucksack of responsibility for our Nation. You have more than earned the opportunity and the privilege to pass it on to the next man.

Senator Inhofe: Thank you, Senator Cotton.

Senator Kaine.

Senator Kaine: Thank you, Mr. Chair.

And thanks, to all of you.
General Thomas, I offer my congratulations, as well.

I want to ask you a question -- and the others may want to chime in, too -- about an important aspect of our military operations, which is building partner capacity. As I've traveled in Armed Service CODELs, I've often been struck very positively by the response of our allies to the partner capacity we work -- work we do with them all over the globe. There was a CRS study -- Congressional Research Service study -- in 2016 that kind of analyzed about 20 instances of building partner capacity. And their conclusion was that the results are sort of mixed, in terms of effect. I've always viewed the partner-capacity issues, whether we're doing work in the field in other nations, or whether bringing foreign military leaders here to go to the Army War College, or other -- you know, or other institutions, as it's great to build strong relationships; you know, you build them with young officers, and later they might be a Minister of Defense or even a, you know, Prime Minister or President. But, as you are finishing your time, your lengthy career, what are the sort of metrics we should be looking at in the build-partner-capacity investments we make through DOD to see whether they're successful or not?

Just share, kind of, lessons learned on that, please.

General Thomas: Thanks, Senator. Great question.

I guess my first point of reflection is how drastically
different the approach to partner capacity and, really, partners is from when I first started. It had very little to any contact points. Established relationships were checkered. Often, when -- you know, when countries were deemed to have behaved badly, the first point of separation was to separate IMET schooling --

Senator Kaine: Yeah.

General Thomas: -- and things like that. So, great difficulty to -- you know, to keep them close and to work their capacity if you don't have the point of contact.

Over the years, the establishment and the expansion of our contacts and true partners has been extraordinary. And I tell our younger officers, "You're in a period of time of international relations and partners that I didn't grow up in. Please don't -- you know, don't lose sight of the potential."

To your point on success, though, it is -- you know, we should assess, constantly, how -- you know, how worthwhile -- what's the return on investment for these, you know, various efforts. Again, I think the report card's better than, probably, the American public knows, and it's both with established nations -- you know, and the Russia threat's a good case in point. We've had persistent presence in countries -- every country in the European landmass with Russia for the last 5 to 6 years, and are
thriving there. But, even with untraditional partners -- I reflect back on the Syrian Defense, you know, Democratic Forces, which started as, you know, seed corn of a couple hundred people is now 60,000 strong, has done most of the fighting and dying in Syria in support of that effort, have lost thousands of people, but just an extraordinary force that was cobbled together over time, you know, through a partnering effort. So, I am more inclined to see the potency and the results than some of the shortcomings on it.

Senator Kaine: Secretary West.

Mr. West: Senator, the National Defense Strategy requires us to answer this question.

Senator Kaine: Yeah.

Mr. West: And an assessment --

Senator Kaine: Secretary Mattis always says, "by, with, and through" -- anytime he was with us, "by, with, and through other nations." I heard him say that many times, and I know that's an important part of the Strategy.

Mr. West: Since there must be a resource allocation, we must begin to look at, number one, the nature of the threat. Local forces who do not demonstrate intent or capability do not deserve the same resource allocation as do those enemies with the capability and the public declaration they'll strike us. Number two, what are -- as General Thomas said, What are the odds of success of training this
force? How long will it take? And how well connected are
they to the people and to the government?

Senator Kaine: General Nakasone, how about in the
cyber realm? Talk a little bit about the partner-capacity
issue and activities that we're engaged in with them.

General Nakasone: So, I would add to the -- the
importance of building these partners, as our National
Defense Strategy has indicated. My perspective, in terms of
what I've seen within the cyberspace domain, is, it provides
us three critical elements. First of all, intelligence that
we may or may not have by ourselves. Secondly, capabilities
that our Nation may or may not have. And, third thing,
unique placement, placement around the world that is really
critical for us, that gives us greater reach as a Nation.

Senator Kaine: I will follow up with this in other
hearings, as well, because I think it's really important.
It is a significant investment. It's a part of the DOD
budget. It's not massive, but I think it has a massive
upside if we it right. And we just want to make sure we're
analyzing the metrics correctly.

I'm going to ask a question, just for the record,
General Nakasone, for you, but let me just preface it. I'm
on the Health, Education, Labor, Pension Committee. We are
reauthorizing the Higher Education Act this year. Part of
that is analyzing workforce and skills gaps and doing things
like public-service loan forgiveness and other programs to fill gaps. And one of the areas that we're looking at significantly is cyber professionals, whether it's in the DOD side of the house, the DHS side of the house, or in the private sector. So, the question I will ask is if you would have any suggestions for us, as we work on Higher Ed reauthorization, programs that you think are successful to enable us to train and recruit and retain the cyber professionals that we need. And I'll ask that question for the record.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]
General Nakasone: Thank you, Senator.

Senator Kaine: Thanks, Mr. Chair.

Senator Inhofe: Thank you.

Senator Rounds.

Senator Rounds: Thank you, Mr. Chairman.

Gentlemen, first of all, thank you for your service.

General Thomas, we most certainly appreciate all of the hard work that you've put in, and your service to our country.

I'm curious, with regard to the -- within the Middle East. We've talked a lot about Syria and the challenges that we have there. What about with regard to Iraq at this point? And I know that we've talked about the fact that we're going to have forces remaining in Iraq in the near future. The President has indicated that there's the capability to be able to move back into the Syrian areas. But, within Iraq itself, what is the current state of play with regard to ISIS, specifically within northern Iraq?

General Thomas: Senator, I would offer that we -- with our Iraqi partners -- and they -- you know, we -- they have embraced their sovereign responsibility, in terms of defending their terrain. We're maintaining, you know, persistent pressure on ISIS, both where they were and where they are intending to try and have any sort of resurgence.

So, I -- it is -- it's -- it continues to be a work in
progress, but it's a -- you know, borne primarily through
the Iraqi forces, who we have, you know, rekindled our
relationship with.

Senator Rounds: Do you see evidence of their activity
in northern Iraq with regard to any incidences that they
appear to be responsible for?

General Thomas: In terms of the Iraqi forces, sir?

Senator Rounds: In terms of ISIS impacts within
northern Iraq. Are you seeing evidences of where they're
trying to impact local communities and so forth?

General Thomas: They are attempting to make a
resurgence in various locations. But, again, I'd -- I
believe our forces, with the Iraqis, are very aware of where
they are, and they're addressing them accordingly.

Senator Rounds: Thank you. Thank you.

General Nakasone, I appreciate the way in which you
laid out, today, a little bit about the activity that the
men and women of CYBERCOM, along with their associated
forces within the NSA and so forth, worked very hard. And I
-- with regard to previous election, the 2018 election.
Would it be fair to say that it is not a coincidence that
this election went off without a hitch, and the fact that
you were actively involved in the protection of the -- of
this very important infrastructure that we value?

General Nakasone: Senator, the security of the midterm
election was the number-one priority at U.S. Cyber Command and the National Security Agency.

Senator Rounds: Would it be fair to suggest that one of the bigger challenges you have in being able to share the story of just exactly what occurs is the fact that, in the future, there are -- every time -- can you share a little bit about what the tools are, and the need to protect the tools and the systems and the process that are used in order to protect an election, as an example, and the different types of threats that you see and that have to defend against? Could you share a little bit about that?

General Nakasone: Senator, as part of a whole-of-government effort, we were looking at three different areas. We were looking to ensure that we prevented interference in the election. Secondly was to disrupt any attempts by adversaries to influence that election. And thirdly, to impose cost on any adversary that decided that they would attempt to interfere with our democratic processes.

Senator Rounds: Would it be fair to say that there's been clear evidence in the past -- we've seen -- with regard to Russia, in the past, they've done propaganda, they've attempted to manipulate the American public, they've tried to pit one side against the other, and so forth. In this particular case, would it be fair to say that Russia has, in the past, demonstrated a compatibility in the cyber realm to
use Internet activity, social media, and so forth, as a way to do exactly the same thing with more sophistication than perhaps in the past?

General Nakasone: Senator, the Russians are a very sophisticated adversary in using influence operations that you described.

Senator Rounds: Would it be fair also to say that there have been concerns in the past and that the CYBERCOM has worked very hard to make sure that the elections that have been held in the United States have not been impact directly, in terms of vote counts or anything like that?

General Nakasone: Certainly, Senator. Again, working as part of a broad government team, that was our focus. And I give great credit to Department of Homeland Security, the Federal Bureau of Investigation, and other elements of our government to work towards this. This was a team effort.

Senator Rounds: Very good. Thank you.

Sometimes when we talk about these items, we talk about -- in terms of being able to impact social media, to be able to impact and to make sure that folks outside of the United States coming in are not able to influence public opinion by providing misinformation. But, there's another piece of this, as well, and that's to actually be able to defend and protect the infrastructure, the physical infrastructure within the United States. While I'm on a town -- would you
just simply explain to the public that there is more to it than just simply stopping bad tweets from going out? It is a matter of actually protecting critical infrastructure that has a real impact on day-to-day lives of American citizens.

General Nakasone: Senator, one of the things that is within our mission is certainly to protect that critical infrastructure in the defense of the United States. You accurately portray, obviously, both the opportunity and the challenge that we have at our Command in doing that. I would also offer that one of the things that is so important here are the partnerships that you've formed. And if there's anything that I've learned over the past several months, these partnerships give us real strength in being able to do that.

Senator Rounds: Thank you.

Thank you, Mr. Chairman.

Senator Inhofe: Thank you, Senator Rounds.

Senator Blumenthal.

Senator Blumenthal: Thank you, Mr. Chairman.

And thank you all for being here today, and for your service to our Nation.

General Nakasone, I was grateful to have the briefing that we did -- classified briefing, very recently, which I think was very illuminating as to the continued threats to our Nation as a result of cyber, particularly meddling and
interference with our elections. The threat from Russia continues unabated. Can you say that in public here today?

General Nakasone: Senator, Russia certainly provides a very sophisticated threat to our Nation, and one that they have done over several years.

Senator Blumenthal: And that threat ought to continue to concern the American people, shouldn't it?

General Nakasone: Yes, Senator, it should.

Senator Blumenthal: And I said in that briefing, and I've said it in numerous such classified briefings, that, really, I wished that the American people could have heard more of what you told us. In a sense, the enemies know what they're doing; we know what they're doing, to some extent; they know we know what they're doing; the only ones who are in the dark, really, are the American people. And as we enter this next election cycle, would you agree that we ought to do everything we can to make the American people aware of that threat?

General Nakasone: Senator, we will, at Cyber Command, commit to working that. I think your point is a very important one. Being able to educate the public is critical for us. The success that we had in 2018, more of our Nation should know about.

Senator Blumenthal: And it was success. I think very few of the American public know about the successes. They
assume that the meddling and interference in our election system, when it occurs, simply is undeterred or unstopped. And I think -- again, without going into any of the details, there are some successes that the American people should know happen, but, at the same time, should know that the threats do continue, not only from the Russians, but -- let me ask you whether you've seen any indication that China has sought to conduct activities similar to what we have seen from Russia in 2016, 2018?

General Nakasone: Senator, given the forum that we're in today, I would offer to broadly state -- what we're seeing is that our adversaries understand how to operate, again, below this level of armed conflict, and are taking broad lessons learned, upon which they will attempt to impact our Nation.

Senator Blumenthal: And would you agree that the American people should know about the threats from, not only Russia, but other countries, as well, because the tools and means and techniques are highly asymmetric? That is, they don't need to invest tens of billions of dollars to disrupt our election system. Some of it is available with very little such investment.

General Nakasone: I agree, Senator.

Senator Blumenthal: General Thomas and Mr. Secretary, I know we have been over this issue, to some extent, but I
just want to be clear. From your standpoint, moving Special
Operators from Syria to Iraq -- in other words, withdrawing
from Syria and moving those forces to Iraq -- could you say,
again, what the impact is on our operational capability?

General Thomas: Senator, obviously, it's easier to do
our job with access and placement and proximity. And we've
thrived on that, being with the Syrian Democratic Forces and
enabling them to do the heavy lifting that I described
earlier. It'll certainly be harder to not have that
proximity, make it more challenging. But, we're working
alternate solutions to -- you know, to maintain some contact
and some level of support for them.

Senator Blumenthal: Would you agree, Mr. Secretary,
that it will make it harder, but you're trying to overcome
those challenges?

Mr. West: Militarily, it is more difficult, sir, but
we can remotely assist and advise. And, if Special
Operations does anything, this agile force has already
adapted.

Senator Blumenthal: Thank you, Mr. Chairman.

General Thomas: Senator, I probably would point out,
too, that's how we started the first of it. We were not in
Syria for the first year. I was in the command that was
responsible for that, and we did everything from externally
to establish that force and provide --
Senator Blumenthal: But, there was a reason why you went into Syria, which is that it enhanced your operational capability, correct?

General Thomas: And it got us the return on investment. I mean, they maneuvered and destroyed the caliphate, or are on the verge of destroying the caliphate, so that was -- you know, that subsequent phase to play.

Senator Blumenthal: thank you.

Senator Inhofe: Thank you, Senator Blumenthal.

Senator Perdue:

Senator Perdue: Thank you, Mr. Chairman.

Thank you, gentlemen, for appearing today.

China is -- it's public information that they're trying to build a navy of about 425 ships, you know, within the next decade or so. And they're accelerating that. It's been reported, in just December, that Chinese hackers have been breaching Navy contractors to steal pretty much everything from maintenance data to missile plans. A particularly egregious report came out later that one breach was about a supersonic antiship missile that we were building for our nuclear submarine force. If they're successful, they'll -- by 2030, they'll have a navy that's about 100 ships bigger than our Navy has today. And the problem is, right now, that they're accelerating that development through hacking, not the Navy network of
information, but our contractor network of information.

So, General Nakasone, how do you operate with our contractors? Should this data be kept on DOD networks? How do you interface with the FBI, when we get into these commercial entities out there that seem to be less protected than our military networks?

General Nakasone: Senator, the example that you cited there is one that has driven the Department, and we're certainly working with that Department as one of the lead agents to ensure that contracts are written right, that -- ensure that our cleared defense contractors understand the standards that have to be met, that we test those standards, working with the services, ensuring that there are proper safeguards in place that will guarantee that the information that they have that's critical for our Nation is safeguarded better.

Senator Perdue: Are you optimistic you have everything you need, from an organization standpoint of funding and so forth, to help accomplish that?

General Nakasone: Senator, I'm optimistic that if I don't have what I need, I'm going to come back rapidly to ask for it.

Senator Perdue: Yes, sir. You've done a good job of that.

Let me move on to the organization. Right now -- in
August of 2017, it was announced that the Cyber Command would be elevated to a unified command, if I'm correct. Today, we're still operating in a dual-hat structure. And it's been reported that one of the reasons we still have a dual-hat responsibility is that there is a concern about the lack of intelligence in a separate unified command, versus NSA, that you're still getting a lot of your intelligence through the NSA. How do you equate this, relative to the long-term plan of having a unified command? Does that mean we'll have a duplicate capability, in terms of intelligence, both in the Cyber Command and also in NSA, or will there always be a close relationship between the two?

General Nakasone: Senator, the decision on the dual hat remains with the Secretary. I've commented I need it. During my first 90 days, I provided my thoughts on it. Whatever the ultimate decision is, there will always be a very, very close partnership between NSA and Cyber Command. And so, that's where I see it right now, Senator.

Senator Perdue: Thank you.

General Thomas, first of all, thank you for the leadership, the -- you're at the tip of the spear. When we have continuing resolutions, how does it affect your operation in the field? I mean, you -- you've been at war for 17 years, your troops. And I've been around some of your troops around the world, and I would have to say, the
best and the very best of what we have in America is in your
uniform. But, when we do a continuing resolution here in
Congress, I get the feeling that it really impacts you guys
pretty directly. Is that true?

General Thomas: Senator, that's an accurate statement.
It's disruptive, in terms of programming and just normal
operations.

Senator Perdue: Can you just describe just a couple of
anecdotal examples of how that really impacts training,
refitting, rotations, all of the above?

General Thomas: Yes, sir. I'd be inclined, because
it's usually played to me, the biggest impact is in the
prescription for new starts. So, in a -- inside a fiscal
year, a -- the aspect of a continuing resolution inhibits
our agility to actually adjust to the problems. You know,
it's a fluid, you know, and dynamic environment that we live
in. So, it -- more broadly, it's the aspect that we're
stuck in a preceding paradigm and not able to move on to the
newer, better ways of solving problems.

Senator Perdue: Thank you, sir.

Mr. Chairman, I'll yield my time.

But, General Thomas, I do want to echo my colleagues'
comments about your storied career, but particularly your
time in the 75th Ranger Regiment in Georgia. God bless you.

Senator Inhofe: Thank you, Senator Perdue.
Senator Shaheen.

Senator Shaheen: Thank you, Mr. Chairman.
And thank you, gentlemen, all of you, for your service.
And, General Thomas, we wish you well in whatever you do next.

I want to pick up on Senator Perdue's questions about how vulnerable we are to third-party products and software. And so, I think this is for you, General Nakasone. In 2018, the NDAA included a provision that would prohibit the use of products and services developed or provided by Kaspersky Lab in third-party products. And it required a report on DOD's capacity to spot and address risks. So, can you tell me what the status is of banning all of those Kaspersky products from third-party contracts, and also what's the status of the report on what risks might still be there?

General Nakasone: Senator, I know that we have conducted the ban, but let me take that for the record to make sure I have an accurate response to both parts of that question.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]
Senator Shaheen: Okay. Thank you very much.

General Thomas, I want to pick up on the questions about Syria, and particularly on the detainees. As you are probably aware, two of those detainees are suspected in the murders of four Americans: James Foley, Steven Sotloff, Peter Kassig, and Kayla Mueller. And I don't know if you have anything that you can tell us today about what their status is and what the potential is to make sure that they can be brought back to the United States to be tried for their crimes, but certainly that's what the families of those murdered Americans would like to see happen.

General Thomas: Senator, I don't have an update on the status, but I would express my appreciation for your personal interest on the matter. Your visit out there, and your very public commentary after that, actually helped focus the world on the problem, and then specifically on the U.S. problem. I -- but, I don't know the current status. I just know it's in -- you know, in the legal wrangling of considering how we handle the special cases like that.

Senator Shaheen: Well, thank you. I hope you and Secretary West will both take back the interest that the families have in making sure that they see justice in the United States.

But, General Thomas, I also want to go back to the question about, How confident are you that, given the
estimates on the number of ISIS fighters who have gone underground, who may be operating out of Iraq or other places in the Middle East, that we will be able to contain that threat if we no longer have operations in Syria, given the complexity there?

General Thomas: Senator, as I mentioned, this has been one of the most complex challenges that our force has dealt with in quite a while. I am concerned that we are not overly restricted in the end state, and I don't honestly know what that is. There are several planning efforts ongoing, with a focus to maintaining what we've gained so far, to focus to ensure that there is no external attack capability coming from a morass of bad actors -- admittedly bad actors, many of whom are just regional, local types. So, we're in the throes of trying to do the right planning and preparation to provide the Nation options to make sure that that's not a shortcoming and we have a revisit to the 2011, you know, recurrence.

Senator Shaheen: And how much of a threat continues from Turkey to the Syrian Democratic Forces and their continued work on the ground?

General Thomas: Senator, there has been -- friction is an understatement, right from the very beginning, in terms of our choice of a partner force. It -- truthfully, it was a necessary choice. It was the only force really available.
And their relationship with the Turkish government -- again, I would, you know, commend both General Scaparotti, General Votel, the senior leaders, who have been trying to work through that friction and stay focused on the counter-ISIS effort, which is why we're out there. But, it has been a challenge, but the -- but, I think we are certainly addressing Turkish sovereign interests and concerns as we stay focused on ISIS.

Senator Shaheen: Well, I appreciate that. I hope we're also continuing to support SDF, who have been such good partners with us in the arena.

Secretary West, I understand that you're the point person at DOD for implementing the Women, Peace, and Security Act. Is that correct?

Mr. West: I'm certainly on point, Senator.

Senator Shaheen: Okay, good. I wonder if you could give us an update. I understand that we are expecting the plan, that it's going through final approvals. Can you tell me when we might see the final plan for how that's going to get implemented, and any thoughts you have about the effectiveness of being able to implement that as we're looking at all of our operations around the world?

Mr. West: Senator, we're certainly supporting the interagency plan. As they say in the Green Berets, we're trying to lead from the back of the front. But, this does
establish the United States as the world leader in ensuring that women are part of the conflict resolution and prevention process. And I want to thank you personally for the appropriation we have this year, because the gender advisors, which were already installed in some COCOMs, now will be permanent.

Senator Shaheen: Well, thank you. I hope, as we're looking at continued negotiations in Afghanistan, that we will certainly make sure that women are at the table in any negotiations.

Thank you, Mr. Chairman.

Senator Inhofe: Thank you, Senator Shaheen.

Senator Ernst.

Senator Ernst: Thank you, Mr. Chair.

Thank you, gentlemen, for being here today. And, on behalf of the American public, I would like to say thank you, because much of the work that is done within your commands, the American public will never know about, nor will they be able to appreciate. So, thank you very much for that.

General Thomas, I'd like to start with you. And what I would like to do is, basically, give you an open floor or a moment to reflect upon your time in command. There have been many innovations during your time in command that you have brought forward for Special Operations Command, and I'd
like to give you the opportunity to talk about some of those innovations, why they have been so important to our Special Operators, and if there's anything that is not yet finished, what you would like to see continue on in your absence.

Sir, please.

General Thomas: Thanks, Senator. Dangerous to give me an open mic, here.

[Laughter.]

General Thomas: I'll try and stay focused.

I humorously -- I joke with contemporaries, whether it's in the Armed Forces or in the private sector, that the one problem we do not have in Special Operations Command is to spur innovation. It's almost runaway innovation and problem-solving every day. As you know, it's bottom-up-driven. And so, the challenge for us, as a higher headquarters, is to assess and bundle the -- you know, the great ideas and the solutions that are being forwarded, and put them into programs of record that drive budget considerations and things like. Nice problem to have, I would offer. All -- I can't recount, you know, the extraordinary number of, you know, initiatives and solutions that the forces provided over the last couple of years, and I'm incredibly proud of it.

I'm more excited about where it's going in the future. The Command is truly poised to be even more relevant, you
know, for the Department of Defense and for the Nation, in terms of securing this country, and borne on the back of just the best talent that the country has to offer, but with the resourcing that you all provide and the ability to do creative solutions.

The one area that you and I have discussed time and again, that was probably the best innovation, that I would ascribe to my predecessors, and addresses directly how we sustain this force, despite -- you know, despite the pace and -- the relentless pace of things, and that's the initiative awkwardly named Preservation of the Force and Family --

Senator Ernst: POTFF.

General Thomas: -- POTFF, but juxtaposed to our ability to care for our people with the Care Coalition. Right now, we have, I think, 15,000 wounded, ill, and injured SOF members, both prior -- currently serving and prior, that are part of our core -- you know, our core focus, you know, to take care of the Command. But, the POTFF effort has been just remarkable, in terms of building in resilience to the Command. And again, I give all the credit to my predecessors, who saw that as a needed requirement, and this body, for giving us the resources to get after it.

Senator Ernst: Well, General Thomas, I thank you so
much for your emphasis on POTFF. I've had the great opportunity to travel and visit with a number of your operators at Fort Bragg and Fort Benning, Hunter Army Airfield, Coronado. We've covered the bases there, and not only in supporting the operators, but their families, as well, because they truly are such an important part of the equation on why you are so successful. So, thank you for addressing that.

We do have a closed hearing this afternoon, so I will save some of my questions for that time period, but I do want to take this opportunity to thank both of you, both Generals. Thank you very much for the command structure that you have provided, the leadership and guidance.

Secretary West, thanks for taking on this very challenging position out there with DOD. We know that it's a -- an ever-growing and -influencing part of the DOD. So, thank you very much for that.

And, just in the very short time that I have remaining, General Thomas, I want to thank you for your time and service. To you and Barbara, my best wishes as you move on to retirement. It is well earned and well deserved. You will be missed. You will truly be missed. But, thank you for your leadership.

Thank you very much. I'll yield back.

Senator Inhofe: Thank you, Senator Ernst. And we all
agree with her comments.

Senator Warren.

Senator Warren: Thank you, Mr. Chairman.

And also, I want to add my thank you, General Thomas, for all of your work and for your leadership.

Last year's NDAA required the Secretary of Defense to review whether members of the Armed Forces or coalition partners of the U.S. abused or witnessed abuse of detainees during operations in Yemen. And the unclassified summary of DOD's report to Congress concluded, quote, "DOD has determined that DOD personnel have neither observed nor been complicit in any cruel, inhuman, or degrading treatment of detainees in Yemen," end quote. So, when I asked General Votel about this last week, he said DOD's conclusion was based on the discussions and reports from the people that they have on the ground. General Thomas, is that your understanding, as well?

General Thomas: Senator, I monitored your conversation with General Votel, and that -- I am in agreement with that assessment.

Senator Warren: Okay. So, the Associated Press, Human Rights Watch, Amnesty International, and the United Nations, all four, have all conducted their own investigations and come to a very different conclusion. They determined that our Emirati partners oversaw a network of detention centers
that regularly engaged in torture and abuse. General Thomas, do you find these independent investigations credible?

General Thomas: Again, Senator, I monitored General Votel's answer to the same question, and you'll probably hear some consistency. Every one of those allegations is taken with the utmost, you know, interest, in terms of poring into them and determining if they're factual. And we have. And, in fact, I'm not aware of any outliers. But, if we observe violations of the Law of Armed Conflict, it is a break-contact standard along our force, to address it specifically and/or to break contact with those partner forces. So, again, I would reinforce how General Votel answered it. It's a high standard.

Senator Warren: So, I appreciate that, and General Votel said that -- exactly that there -- he was very careful about what he said. He said he -- I asked him if he'd reached any conclusions about whether or not our Emirati partners are engaging in detainee abuse when DOD personnel are not present, and he said he was not aware of that. The question I was asking, though, General Thomas, Do you find these independent investigations -- those four investigations, do you find them credible?

General Thomas: Senator, I find them of sufficient interest that it's actually been our -- a topic of
discussion back with our Emirati partners. So, the hard part is -- hard for us to confirm or deny if it happened, but not something we just take as something I can't -- I approve or disprove. It's the subject of our discussion with the Emiratis that, if we can prove this, or if there is evidence, this could be a deal-breaker.

Senator Warren: Okay.

General Thomas: So, I -- again, we take it very seriously.

Senator Warren: Good. I appreciate that, General Thomas. I know you work hard to encourage our partner forces to obey the Laws of Armed Conflict. But, when it comes to whether or not our partner forces have engaged in abuse of detainees, there seems to be a really serious disconnect between what DOD understands to be true and credible independent reports from journalists and human rights organizations. So, I remain deeply concerned about whether our partners in Yemen are treating detainees in ways that are consistent with the Law of Armed Conflict. As you know, turning a blind eye is not acceptable. So, I'm going to keep asking questions about this. I appreciate your answer on this.

If I can just ask one other area quickly in the time left to me, General Thomas, I'm concerned about the militarization of our foreign policy. And nowhere is that
more evident than in the use or overuse of our Special
Operations Forces. I think Senator Reed alluded to this
earlier. In 2017, Special Operations Command deployed
forces to 149 countries under your Command, and they launch
airstrikes, carry out raids, train foreign militaries, all
in the hope of removing terrorists from the battlefield.
Many of these countries have governance challenges that
allow violent extremist groups to grow. Instead of treating
the causes of violent extremism, we're treating the symptom.

So, let me just ask. General Thomas, do you think that
we can kill or capture our way out of this problem?

General Thomas: No, Senator, I definitely do not think
that's the solution to most of these problems.

Senator Warren: You know, I -- do you think that the
current pace of operations for your Command is sustainable?

General Thomas: I do, Senator. We had challenges on
specific parts of our formation and to specifically get to
the Department-directed standard of one-to-two dwell rate,
so for one -- a cycle of deployment downrange, two, you
know, parallel cycles back home -- but, we have gotten that
back into a new -- very healthy shape, with a few outliers,
and we're intent on getting them, you know, healthy, as
well, here.

Senator Warren: I appreciate it. Thank you, General
Thomas. I just want to say, we need to be thinking harder
about using our nonmilitary tools, here, as well. Thank
you.

Senator Inhofe: Thank you --

Senator Warren: Thank you, Mr. Chairman.


Senator Blackburn.

Senator Blackburn: Thank you, Mr. Chairman.

And, to each of you, thank you for your service to our
country. We appreciate it.

General Thomas, we do wish you well. And we wish your
family well. And thank you for the service.

I will say, Senator Ernst mentioned some of the posts
she's visited. She also has visited Fort Campbell, and they
were, and still are, a big part of our Tennessee community.
And I represented that post during my time in the House, and
have enjoyed working with those military families and
looking at the challenges that are going to be necessary for
21st-century warfare.

And, General Nakasone, you know, cyber is a -- an
enormous part of that. And I think it's been really curious
to me this week, as we have looked at the different
geographic combatant commanders and those AORs, maybe a
hesitancy to engage in the discussion of how our adversaries
are using the cyber area to their advantage; namely China,
of course. And we've talked some about the great
So, my question to you, General Nakasone, would be, Do you feel like that your Command, Cyber Command, is being properly integrated into all of the other commands in those missions?

General Nakasone: Senator, I do feel that Cyber Command is being integrated properly into the other combatant commands. We have undertaken a very aggressive approach to engage with the combatant commands. General Thomas and I have had a long association, and one of the things that I think that we've been able to leverage is the close partnership of ensuring that what we do in cyberspace is supporting his end states and what he was trying to do, whether in previous commands or at U.S. Special Operations Commands. We are very, very appreciate of the work that has been done and approved by this committee to build cyberspace operational integrated planning elements at each of our combatant commands. This will allow us to develop the talent and the planning expertise to ensure that we get to outcomes.

Senator Blackburn: Okay.

Let me -- let's talk about artificial intelligence for just a moment, because I -- I think that that strategy -- and, of course, it's been released -- and the strategy highlights a reality that we've known for some time. And I
want to quote from that, and then have you respond. And I'm quoting, "Other nations, particularly China and Russia, are making significant investments in AI for military purposes, including applications that raise questions regarding international norms and human rights. Failure to adopt AI will result in legacy systems irrelevant to the defense of our people eroding cohesion among allies and partners, reduced access to markets that will contribute to a decline in our prosperity and standard of living, and growing challenges to societies that have been built upon individual freedom." Now, that, in my opinion, is a pretty sobering assessment. So, do each of you agree with that strategy's assessment? And exactly how do you see the AI strategy informing your Command as we move forward?

General Nakasone: I agree with the statement that you read, Senator. I do see artificial intelligence, deep learning, machine learning, as something that's a critical enabler of what we're going to need to do at U.S. Cyber Command. We have already seen the power, at the National Security Agency, of what artificial intelligence can do for our foreign intelligence mission, our cybersecurity missions. This is where the world is headed, in terms of innovation and capability. We, as the military fighting force, have to ensure that we have that enabler. One of the things that I do take great credit in is -- and pride in --
is that U.S. Special Operations Command really has led a lot of the work in artificial intelligence, in integrating some of the early thinking into how they become a more powerful force.

Senator Blackburn: General Thomas?

General Thomas: Senator, great question. And we could spend several hours talking about it. Unfortunately, we don't have that kind of time. But, agree with the assessment, in terms of threat. More importantly, am incredibly enthusiastic about the opportunity.

Anecdotally, 3 years ago, Eric Schmidt visited our Command as part of the Defense Innovation Group. Quick assessment that he felt compelled to give me, he said, "You've got tremendous people, you prototype pretty effectively, and you're absolutely terrible" -- he had some more colorful words than that -- "for machine learning, applied artificial intelligence." Truthfully, it gave me a spark 3 years ago, and turned me into a zealot on the subject. But, more importantly, it has really kind of reoriented our Command to embrace this phenomenon and apply it. It -- relevance to everything we do, until it's proven otherwise. And so, we're taking, you know, not-so-small bites, but some pretty substantial bites into embracing artificial -- applied artificial intelligence, and I'm excited about where we're going in the future.
Senator Blackburn: Thank you for that. Thank you for your service.

I yield back.

Senator Inhofe: Thank you, Senator Blackburn.

Senator Tillis.

Senator Tillis: Thank you, Mr. Chair.

Gentlemen, I apologize for not being here for a lot of the hearing. We have three committee hearings going on simultaneously.

General Thomas, I want to thank you for your service and the -- all the quality time you've spent in North Carolina. I hope, in retirement, you continue to spend a lot of quality time there.

I'm going to take, probably, the questions a different direction in my capacity as Personnel Subcommittee chair, because I know a lot of the other members have covered the landscape on the extraordinary work you're doing. And I thank -- General, thank you for the briefing earlier this week. There are some real -- I got a real sense of progress being made. And I think some of that stems from some of the authorities that you've been granted. And you're doing great work there, so thank you for your leadership.

But, I want to talk more about the personnel aspects. Number one, when you look at, General Thomas, the very challenging job of an operator -- and I -- a disturbing
percentage that are going to get injured in one way or another -- what more do I need to be thinking about, in terms of family support, for the members, and actually even in dealing with the wounds of war -- what more should we be looking at, as a function of the Personnel Subcommittee, to send the very clear signal we understand the dangerous job and the impact it's having on family?

General Thomas: Senator, thanks for that question, and thanks for the concern expressed.

I would actually challenge the term "operator," because that -- therein lies the -- you know, I think, the opportunity for us to do better by our people in the future. While you highlighted a -- particular career fields that are inherently dangerous, in terms of jumping and fast-roping, and things like that, we're as good as our weakest link. We're as good as our support personnel. The enabler -- we call -- you know, the term we use, "enablers," which is broadbased, but it's the entire fabric of the force, and, arguably, we didn't focus sufficiently on the entirety of the force early on, when we talked about POTFF and how we sustain it. We're -- I think we're much more focused on that, and we have come to you to ask for additional resources so that we can more thorough in the application there. But, again, thanks for the support we've had so far. Truthfully, the best comment we can get on it is, the sister
services are emulating what you've allowed us to do as the way they could/should take care of their people, as well.

Senator Tillis: Thank you.

Something else that we'll be talking about -- I was just briefly speaking with Senator King about progress that we can make on procurement. We've taken some steps, in recent NDAs, for acquisition reform, procurement. And I think we can still take a few pages from you-all's book, in terms of rapid prototyping and deployment. So, look forward to that in subsequent hearings. Mr. Chair, hopefully we can have that as a subject, some point in this Congress.

General Nakasone, you've got a challenge -- you mentioned, in your opening statements -- I was here -- you know, you're trying to find the resources. You're competing with the private sector. Again, in the last NDA, we made some progress, in terms of being able to get resources from the private sector into positions. But, what more do we need to do? I've got to believe you just don't have enough of what you need, in terms of expertise. What more would you suggest that we look at, as a matter of policies, going into this NDA cycle?

General Nakasone: Senator, I think that we have to come back to the committee and identify those critical subsets. There are people within our force right now that I call "10-or-20X" type of people. That means they're 10 or
20 times better than the people that they work with, better
coders, better malware analysts, better developers. And so,
how do we ensure that we keep those within our force? The
services do a wonderful job in recruiting. We get great
recruits. We do a very, very good job in training them.
Our challenge will be in retaining the very best -- not
everyone, but the very best. And this is where I think
identifying those categories, coming back to you to make
sure that we have the proper career paths and the proper
enumeration will be very helpful.

Senator Tillis: Well, Senator Rounds and I have talked
a lot about it in his capacity on Cyber, and we need that
information sooner. In the private sector, I led a practice
that had ethical testing in cybersecurity resources. And
they were very -- they were even scarce in the environment
where you could pretty much pay whatever the market rate is,
so I can't imagine what you're going to go through for
retention. We just need to think creatively and recognize
that these are hot skills. And you've got to have the SOF
equivalent of cyberwarriors out there. And we need to do
everything we can to provide you the authority to do that.
And -- but, you also have to differentiate -- as you just
said, you've got to differentiate between that person who
has a 20-time multiple on skills, and just say, "We're going
to treat you all fairly. We're not going to treat you
equally," because you've got to have those extraordinary
warriors in this domain.

I'm going to follow up with a couple of questions for
the record, but they happen to do with plumbing in business
matters, so I'm going to yield back my remaining 10 seconds.

Thank you all for being here.

Senator Inhofe: Thank you, Senator Tillis.

Senator Sullivan.

Senator Sullivan: Thank you, Mr. Chairman.

And, gentlemen, thank you for your service.

General Thomas, I really wanted to thank you for all
you've done for our Nation. And I think I've had a bit of a
unique opportunity to not only get to know you from this
position, but also when I put my Reserve uniform on. As my
commander, he's, like, 17 levels above where I am in the org
chart. So, it's -- you've done a great job, and really
appreciate it.

Secretary West, appreciate the job you're doing. You
know, unfortunately, there's a very small number of Harvard
marines, and you're making us proud. Very few.

And, General Nakasone, I want to ask you, on this issue
of offensive operations -- I know you probably can't talk
too much, but you might recall a hearing we had in this
committee a couple of years ago, where Director Clapper and
some other leaders on the cyber and intelligence front
openly admitted that, after the Chinese hacked the OPM and stole over 20 million SF-86 forms for all our top-secret operators, including members of this committee, that he openly admitted we didn't retaliate against them, which I thought was kind of a stunning admission. And, to me, it was part of the problem. Whether it was North Korea or Iran -- I think, a couple of years ago, China, certainly Russia, we were viewed as kind of the world's cyber punching bag. Any of these countries could come and do what they wanted, and we did not retaliate.

Can you tell me, without getting -- revealing anything classified, do you feel you have the authorities to hit back, or maybe even hit back harder, to make the costs of those kind of operations against our country, against our democracy, much more prohibitive? Particularly for a country like North Korea, where I'm assuming we could just drop their entire electrical grid and Internet system overnight if we wanted to.

General Nakasone: Senator, if I might, 1 year ago I appeared before the committee for my confirmation, and you asked a similar question of me. And I think it's important that we look at what's happened within this past year: a National Cyber Strategy, signed; a DOD Cyber Strategy, signed; the FY19 National Defense Authorization Act that provided us greater capabilities and greater authorities
within the law was signed; a new presidential policy that came out on offensive cyber; and finally, our ability to have a new construct upon which we operate, which is persistent presence. All of those provides a much different environment for our adversaries today than it did 1 year ago.

Senator Sullivan: So, can you publicly state, in this hearing -- again, without getting in classified information -- that you have -- do you have the authorities and you are not unwilling to undertake offensive operations that can help deter, whether it's Chinese stealing 20 million SF-86 forms or the North Koreans hacking our companies?

General Nakasone: Senator, I have the authorities to accomplish my mission.

Senator Sullivan: Or the Russians attacking our electrical -- or our election systems.

General Nakasone: I have the authorities that I need to accomplish my mission, Senator.

Senator Sullivan: Good.

I want to ask Secretary West and General Thomas -- you have taken the lead over the last 2 years on the counter-WMD mission. SOCOM has that lead. And to me, there's probably no more important mission for the survival of the entire Nation, the entire republic. We might have, you know, threats that, you know, rise -- ISIS or al-Qaeda, they might
rise and fall, but, as long as we have a republic to defend, the counter-WMD mission is going to be, in my view, the most important mission. How is that going? Do you need more resources on that? And are there any things that we can do to help you with the authorities, whether it's working with allies, whether it's more resources to undertake that mission, in terms of the leadership that you're -- that you now have with regard to that mission?

General Thomas: Senator, one, we appreciated the opportunity to perform this mission. It is a -- it's a daunting, critically important mission, as you mentioned. We actually had John Hyten, from STRATCOM, visiting, as well as Paul Nakasone, this past week. And I would offer, his mission is probably the -- you know, the true, primary mission, and this one's connected just -- you know, just underneath.

The level of cooperation and collaboration that we enjoy with the community of action is extraordinary. We just hosted our annual seminar, 2 weeks ago. We're about to produce our Annual Assessment to the Secretary of Defense. This mission set and space continues to move in the right direction. I don't know on resources yet. I daresay we will probably uncover some --

Senator Sullivan: Yeah.

General Thomas: -- gaps, in terms of collection
capabilities that we, the Nation, need, going forward, whether it's Department of Defense or other entities. But, the mission is going very well for us, and I'm appreciative of some of the expertise that has been brought to bear on it.

Senator Sullivan: Mr. Chairman, if I may, just one final quick question.

The great -- the return of great-power competition is spelled out in the NDS, the National Defense Strategy. How are -- how is SOCOM aligning with regard to that mission? And have we overutilized the SOF community on low-intensity threats? And are we focused on the new NDS mission, on the SOF side?

Mr. West: Senator, quickly, from my perspective, SOF is perfectly well suited to take on this challenge, because it's cheap, it provides the Nation real leverage. But, the basic task is resource allocation. As you indicated, we are at capacity, and demand signal is not shrinking. So, then this, in turn, requires a new assessment of the threat in counter-terror to repurpose forces.

Senator Sullivan: Thank you.

Thank you, Mr. Chairman.

Senator Inhofe: Thank you, Senator Sullivan.

Senator Wicker.

Senator Wicker: Thank you very much, Mr. Chairman.
General Nakasone, in February, the Department of Justice and the Department of Homeland Security sent a joint report to Congress on 2018 election interference. You testified before a classified session of this committee yesterday. But, the public-specific conclusions of the report of these two departments was as follows, quote, "There is no evidence to date that any identified activities of a foreign government or foreign agent had any material impact on the integrity or security of election infrastructure or political campaign infrastructure used in the 2018 midterm elections." I appreciate your testimony yesterday, and I realize they're not -- there are things that you cannot get into today. But, what can you tell us, in this public setting, this committee and the public, about the -- whether or not, based on what you know, the Department of Justice and the Department of Homeland Security were correct in saying there was no such interference?

General Nakasone: Senator, I agree with what you had read with regards to that report. What I can say, in terms of our role with that, was, within U.S. Cyber Command, and specifically the National Security Agency, we took a look at all the intelligence information we had on our adversaries. We declassified as much of that information as we could. We shared that with the Department of Homeland Security, who,
in turn, shared that with the State and local levels so that
they had a very, very good picture of what we knew about
adversaries that might be trying to interfere with our
elections.

Senator Wicker: So, to the extent that there were
corns that a foreign government or agent had an impact on
the election, you concur with the public conclusion of the
Department of Homeland Security and the Department of
Justice that there was not such interference.

General Nakasone: I concur, Senator.

Senator Wicker: Thank you very much.

I appreciate it, Mr. Chairman.

Senator Inhofe: Thank you, Senator Wicker and all the
other Senators, and certainly for the three witnesses. That
was a very eye-opening and a great presentation. Appreciate
your patience and your thoroughness. Thank you so much.

We're adjourned.

[Whereupon, at 11:27 a.m., the hearing was adjourned.]