



INTELLIGENCE AND  
NATIONAL SECURITY  
ALLIANCE

## INSA LEADERSHIP DINNER

WITH

**GENERAL PAUL NAKASONE, USA**  
**Director, National Security Agency (NSA)**  
**Chief, Central Security Service (CSS)**  
**Commander, U.S. Cyber Command**

**August 9, 2018**

**Ritz-Carlton Tysons Corner, McLean, VA**

Chuck Alsup:	<a href="#">00:00:00</a>	Okay, I'm- I'm calling the meeting to order. Find a seat. And I'm, I am warning John and Paul right now that there's a sign on the microphone that says please don't move me, okay?
Chuck Alsup:	<a href="#">00:00:34</a>	Okay, good evening.
Audience:	<a href="#">00:00:34</a>	Good evening.
Chuck Alsup:	<a href="#">00:00:37</a>	Come on, come on. Good evening.
Audience:	<a href="#">00:00:38</a>	Good evening.
Chuck Alsup:	<a href="#">00:00:39</a>	Okay. Okay, I hope you enjoyed the reception. You have a salad in front of you that wants to be eaten, okay? But we're also gonna be talking a little bit here while you're eating your salad, but before you get your main course. So if you could keep the fork clinking to a minimum, I know our speakers would appreciate it. So, we are ... Okay, folks, let's calm down. Trying to get you to calm down here.
Chuck Alsup:	<a href="#">00:01:17</a>	Okay, we are please tonight to host US Army General Paul Nakasone, Commander of US Cyber Command, Director of the National Security Agency, and Chief of the Central Security Service, for his first leadership dinner with INSA, as- as- as INSA's honored guest. But Paul is not a stranger to INSA. He's been an attendee at some of these sorts of things before. He's been a consistent participant in our annual summit, over the years, and will be a participant again this year, so, check the website, and you'll see we're gonna have some really great folks at the summit in September. So, Paul, welcome back, and thanks for your support and friendship over the years.

Chuck Alsup: [00:02:14](#) Okay folks, we're gonna calm you down. No conversations at the tables right now, okay? Okay, also, thank you Paul for your leadership in the Intelligence Community, your leadership in our army, and your service to the nation as you dragged Susan, Sarah, Daniel, Joseph, and David, Team Nakasone, around the world, and often had to leave them while you deployed. Despite or maybe because of that, it would seem that Team Nakasone turned out pretty good (laughs). But thanks again for your willingness to speak to our members and guests tonight. So welcome, everybody. Please me in welcoming Paul.

Chuck Alsup: [00:03:21](#) I know this audience looks forward to hearing from you, and learning more about your vision for NSA and CYBERCOM. And let's not leave out the 25,000 strong at the Central Security Service, the uniformed service members at Fort Meade and around the world, who support NSA. Central Security Service always gets short-shrifted in these introductions, but we wanna give them some love tonight. So, let's hear it for the Central Security Service.

Chuck Alsup: [00:03:49](#) Okay, briefly I'd like to recognize the members who sup-, who make this sort of event possible, the dinner tonight – our sponsors. And hold your applause, I'm gonna read off a list here: AT&T, General Dynamics Information Technology, IntelliGenesis, Jacobs, KeyW, Leidos, ManTech, Northrop Grumman, Guidehouse, the name, new name for our longtime partners from PWC Public Sector, Oracle, Perspecta, Raytheon, and SAIC. Please join me in acknowledging our sponsors.

Chuck Alsup: [00:04:45](#) Our media partners tonight is Congressional Quarterly / Roll Call, a reminder to all, especially for our, our honored guest Paul Nakasone. Tonight's program is on the record. We welcome our friends from the Fourth Estate, who were, who are in attendance tonight, who were, who are in attendance tonight. So, welcome.

Chuck Alsup: [00:05:04](#) I'm sure the press will have some questions for Paul tonight, and you might as well. If you have questions, you may have noticed when you sat down there was an index card on your seat. The incredible INSA interns will be wandering around the dining room after dinner, picking up cards, and will share them with our moderator, former NSA Deputy Director, Rick Ledgett. And don't forget, these amazing interns that many of you may have met already, or hopefully you will before the night's over, are all looking for jobs, okay?

Audience: [00:05:42](#) (laughing).

Chuck Alsup: [00:05:43](#) In the business of intelligence and national security, you couldn't go wrong hiring one of these talented young folks, so talk to them, okay?

Chuck Alsup: [00:05:53](#) So, Rick, Rick Ledgett, welcome and thank you for participating in our program tonight. I'm sure you will keep Paul on his toes. We really look forward to your insightful discussion, so please join me in welcoming Rick Ledgett.

Chuck Alsup: [00:06:18](#) Okay, but now, we're going to hear from General Nakasone before we get to the main course, okay? To introduce General Nakasone, please join me in welcoming John DeSimone, Vice President of Cyber Security and Special Missions for Raytheon Intelligence Information and Services, to the podium. John, come on up.

John DeSimone: [00:06:53](#) Good evening. Thank you all for coming, and for your attention this evening. This year's speaker is a leader of an organization focused on the newest battlefield domain, one that is expanding and evolving at an alarming rate. The interconnected nature of our digital lives means that when everything is connected, everything is vulnerable. This modern threat demands a new strategy for protecting our critical systems, supporting our military missions, and ensuring our way of life.

John DeSimone: [00:07:20](#) This modern threat is a new s-, uh, excuse me. I have no doubt that all of you in this room are faced with a challenge every day, in our focus on how we can achieve superiority in cyberspace, and in all domains. As a proud sponsor of this important gathering, we have been the leading edge of the digital battle space evolution.

John DeSimone: [00:07:39](#) With digital threats evolving at the speed of software, it is critical for industry to remain agile, establish partnerships that will enhance the development of new tools. This is the cornerstone of our approach.

John DeSimone: [00:07:50](#) At Raytheon, our cyber innovation areas are designed to provide unprecedented cyber protection, advanced computer network operation, and world class training for the cyber admission forces. This new cyber force faces an unprecedented challenge to ensure our way of life in an environment of constant change.

John DeSimone: [00:08:09](#) General Paul Nakasone has assumed command of this elite force in May of 2018. He previously commanded US Army Cyber Command from 2016 to 2018, and has also commanded the

Cyber National Mission Force at US Cyber Command. His distinguished career has featured several command and staff position across all levels of the Army, as well as several joint assignments across the globe, including the Director of Intelligence of the International Security Forces in Kabul, Afghanistan. Please welcome, please join me in welcoming General Nakasone to the podium.

- Paul Nakasone: [00:08:55](#) Okay, so it's always good to see that Rick Ledgett can bring a house out tonight. Well done, Rick. So ladies and gentlemen, distinguished guests, thank you very much. It is truly an honor to come to have an opportunity to it, to talk to INSA tonight. You know, when I was confirmed as both Commander of US Cyber Command and Director of the National Security Agency, I would tell you that I knew that a speaking engagement, courtesy of Chuck Alsup was obviously in the, in the making.
- Paul Nakasone: [00:09:24](#) And so, very, very pleased to- to join you tonight. I know this evening's agenda has former director NSA Director Rick Ledgett, asking me the questions after dinner.
- Audience Member: [00:09:35](#) (laughs).
- Paul Nakasone: [00:09:36](#) Having known and worked with Rick for many years I can tell you that letting me ask the questions of Rick would be far more entertaining for all of you.
- Audience: [00:09:44](#) (laughing).
- Paul Nakasone: [00:09:47](#) But since you set the format, I will certainly abide by it. As we're about to eat let me just provide a- a few opening comments.
- Paul Nakasone: [00:09:56](#) You know, it's a sign of the times that last week that NSA published a message to its workforce, about pig-ins. Pig-ins! Yeah, pig-ins which are potluck social events held in the office. The message wasn't about food safety or nutrition though. It was about a national security risk. It was a reminder that many crock pots now contain wireless capable and network devices ...
- Audience: [00:10:23](#) (laughing).
- Paul Nakasone: [00:10:24](#) ... that pose a risk to our secure operating environment.
- Audience Member: [00:10:26](#) (laughs).
- Paul Nakasone: [00:10:29](#) Interesting times we live in. But the article reminded me that the employees, uh, that the Internet obviously does have its

own shortfalls and concerns that we address every day. Now it's tempting that we want to run and hide from that sort of challenge but that's not what we do in the Intelligence Community. We run towards the risk.

Paul Nakasone: [00:10:48](#) For me it's a perfect match, for what makes NSA unique as an agency. We've been preparing for this moment for six decades. Securing and operating in the information domain, with innovative and agile solutions. We applied that mastery of information to the Cold War, to gain deep access in denied areas, giving decision makers powerful insights and options. We applied it in the post-Vietnam era to ensure that we understood that nature of combat support, integrating national intelligence, on the battlefield in an actionable form, using resilient, secure lengths down to the last mile.

Paul Nakasone: [00:11:40](#) We applied it in exquisite partnerships with many of you in the room, post-9/11, to confront an asymmetric threat amidst staggering volumes of data in near real-time speeds.

Paul Nakasone: [00:11:54](#) Today NSA can use our mastery of information to navigate into places, and steal secrets that a not-too-distant past required people, on the ground, operating in harm's way, at extreme risk. In doing so, we allow our human colleagues to extend their highly specialized skills into more areas where they are uniquely capable.

Paul Nakasone: [00:12:20](#) Now, we're not gonna address the challenges of today relying only on the approaches that served us so well in the past. And we certainly can't control our way out of risk when the commercial marketplace is driving our operating environment. What we do have though are constants, that over the past 65 years have allowed NSA to help solve some of America's most difficult problems. Those same constants will help us to address the existential threat of cyber attack, and gain the operational and defensive advantage in a world massively infused with network sensors.

Paul Nakasone: [00:13:04](#) For me, those constants are highly effective partnerships, extraordinary talent, the application of technology and innovation, and an ability to select and prosecute the right targets to the greatest advantage. I believe that with a focus of these constants, NSA will continue to solve some of America's most difficult problems.

Paul Nakasone: [00:13:34](#) Now let me talk a little about those constants a little more, starting with the partnerships. This group knows better than any other how critical partnerships are to successful intelligence

outcomes. It's about our defense and intelligence partners. As well as our partnerships with industry, academia, research centers, although it makes some of our Intelligence Community colleagues a little nervous, well certainly our managed partners with foreign nationals. These partnerships are asymmetric in cyberspace today.

Paul Nakasone: [00:14:09](#) Now, as the leader of both NSA and Cyber Command, each with their separate and distinct missions, I consider those close partnerships and coordination between the two organizations as really the foundation to our success, the example upon which we want to set, being able to leverage the authorities, the capabilities, the expertise, has allowed us to rapidly address these threats.

Paul Nakasone: [00:14:36](#) Moving forward we need to increase our ability to transform insight and expertise, developed in the classified domain, for use by our sister agencies, and departments that are charged with defending the homeland, and securing critical infrastructure.

Paul Nakasone: [00:14:52](#) I think there's a lot of opportunity in this space, and that's certainly an opportunity that we at NSA and CYBERCOM intend to pursue, intend to pursue with vigor. We'll also continue to cultivate strong partnerships with industry and academia, as these partnerships bring new ideas and fresh insights into our work, and are critical to developing the talent and tools needed to solve tough national security issues.

Paul Nakasone: [00:15:17](#) Speaking of talent, which is my next constant, I'm continually amazed at the extraordinary people that we are able to attract at our agency. We draw in an average of more than 17,000 high caliber applicants every single month. We were just ranked in the top 20 of employers deemed most desirable for computer science graduates.

Paul Nakasone: [00:15:40](#) I'm proud to say that our applicant pool is an incredibly representative one, with 40% of the pipeline enriched by diverse candidates. We are constantly recognized of an employer of all abilities, not just in recruiting, but in creating an accessible workplace, with customized technology. Last year alone NSA received no fewer than five external honors for our efforts.

Paul Nakasone: [00:16:04](#) Further, more than 1/3 of our workforce has masters degrees, and a similar percentage works in the technical and stem fields. Even with the competition for this type of talent, our retention rates remain- remain high, well over 92%.

Paul Nakasone: [00:16:18](#) I'm encouraged by all of these data points, but I'm not complacent of where we are and know where we need to go. For example, we have a young workforce, a young workforce that continues to need training and experience. We have those that are new hires that bring a lot of expectations, experiences, and frames of reference that is new and invigorating. We have to align our workforce practices to those that features with hope to fully unlock their ability, certainly their imagination.

Paul Nakasone: [00:16:48](#) To succeed in solving our nation's most difficult problems, we must bring to bear every bit of our talent in our workplace, across all generations and all levels. This means continue to attract, advance, and retain a workforce with diverse perspectives. It also means cultivating an environment that seeks out these rich, diverse perspectives, at times protects them, vigorously debates with them, and ensures that we're setting them up for a rich pattern of success. It is this diversity of thought that fosters innovation, and allows us to develop and take advantage of cutting edge technology, my next constant.

Paul Nakasone: [00:17:31](#) So, technology and innovation, what you here know so well, has always been among the defining characteristics of or agency. And we remain focused on creating conditions favorable in innovation, both internally and externally. There are plenty of eh-, you know, certainly plenty of technology challenges and opportunities for us, which include finding new ways to sustain, nurture, and take advantage of those capabilities that now are dominant in the private sector and shift our focus, as we always have to, to bigger, harder, and yet unmet challenges linked to our mission.

Paul Nakasone: [00:18:09](#) For example, we will enhance information and data security in the age of internet of things, in a way that will add value and impact well beyond national security systems. We will develop ways to use artificial intelligence, and machine learning that allow us to discover certainly the unknown unknowns, with precision, and certainly speed. We will make advances in encryption and in quantum computing to secure what we choose, and to unlock what we need, and to maintain an operational advantage.

Paul Nakasone: [00:18:41](#) And NSA will master fifth generation technologies that will soon explode on our target space, as well as address all the ramifications that they'll have for our mission.

Paul Nakasone: [00:18:54](#) Our partnerships in the technology and innovation space are critical to success. As an example, let's take the success of the cyber resiliency against destructive malware team. Many of you

know about this cross-sector team, partnered among DHS, NIST, NSA and other federal agencies, together with technical experts from 14 different countries. And companies.

- Paul Nakasone: [00:19:19](#) These, this partnership advanced the state of the practice via new technical standards, published by NIST, brought new cyber resilient products to market in defense industrial based countries voluntarily implemented new resiliency guidance to counter ransomware. Some of you in this room may have participated in these very successful efforts.
- Paul Nakasone: [00:19:39](#) Looking ahead, we're excited about the ability to bring SWAG to the Department of Defense. Yes, SWAG.
- Audience: [00:19:45](#) (laughing).
- Paul Nakasone: [00:19:45](#) This Secure, Wearable, Authentication Gear, only a guy from NSA and CYBERCOM could offer that.
- Audience: [00:19:51](#) (laughing).
- Paul Nakasone: [00:19:52](#) It offers a frictionless wristband system to insure and confirm a user's identity. Think about that. This wearable technology we use cryptography to replace vulnerable passwords with a simple tap, and a proximity monitor will automatically lock the system when the user leaves the vicinity. Pretty powerful stuff in today's environment.
- Paul Nakasone: [00:20:15](#) So innovation is critical given the environment we work. It moves at warp speed, our advantages, and our adversaries don't forecast changes months of ahead time. They download them, new apps, and they constantly apply them. That's where we come in. They move fast, but we move faster. Which brings me to my final constant, targets.
- Paul Nakasone: [00:20:34](#) In 2017 the National Security Strategy and 2018 National Defense Strategy, both affirm that the central challenge to US prosperity and security in this emergence of long-term strategic competition with China and Russia.
- Paul Nakasone: [00:20:48](#) NSA and its partners have done incredible work over the past decade against terrorist organizations like Al Qaeda and ISIS. This was a tough, grueling experience that challenged every corner of every partnership, of every enterprise, and forced us to come up with very, very innovative solutions. It's not over. These foes can still attack our homeland and our troops,

diplomats and fellow citizens abroad. The terror target will not go away any time soon, even if the threat is diminished.

Paul Nakasone: [00:21:21](#) Today, however, we must ensure that our efforts are appropriately focused on our nation's major competitors. China and Russia are testing the international orders as never before. And the National Security rightly names and as major challenges to our nation's security, and our interests. Neither country wants war with the United States. Instead these competitors are playing out on many fronts, but particularly in cyberspace, where our adversaries leverage cyber means, engaging in continuous, provocative, and even dangerous activities, in a manner below the threshold level of armed conflict.

Paul Nakasone: [00:21:57](#) Their actions collectively work to weaken our institutions, erode our competitive advantage, and impair our national interests. What I'm, what am I talking about here? What I'm talking about here is that China has pillaged our intellectual property by cyber means. Russia has used cyber espionage in its aversion to undermine our democratic processes. Iran and North Korea have attacked US companies through cyberspace.

Paul Nakasone: [00:22:23](#) We must prevent our adversaries from freely moving, using cyberspace to challenge, distract, and destruct America, its allies, and its interests. We can and must take steps to block them from gaining strategic advantage, in, through, and from cyberspace, during competition, crisis, and even armed conflict. To address these adversary cyber campaigns, we with our partners must shape our opponents' expectations, and behavior through action.

Paul Nakasone: [00:22:52](#) At US Cyber Command our vision is implementing a strategy of persistent engagement, to build resilience at home, defend forward, and contest adversary campaigns and objectives through continuous cyberspace operations. Persistent engagement, however, depends on intelligence. In short, what we call persistent presence. And the close integration of all source, full-spectrum capabilities. That presence and access enable us to stay ahead of adversaries in both knowledge and certainly in action.

Paul Nakasone: [00:23:29](#) Maintaining this level of engagement and persistence requires persistent innovation, which brings me back to my point that we must be poised to understand, and rapidly adapt to technological changes. Artificial intelligence, machine learning, quantum computing, and other breakthrough technologies, to maintain the advance and our edge over our adversaries.

Paul Nakasone: [00:23:56](#) So, partnerships, talent, technology, innovation and targets. With a focus on these constants, and the execution of our NSA strategy that underpins them, were poised to continue to solve, again, some of America's most different challenges.

Paul Nakasone: [00:24:15](#) Defending the nation as we all know in cyberspace is a whole of nation, whole of society responsibility, not just government, academia, or private industry. No one has the monopoly. However, we're ready. We're highly trained. We're fully committed. Together with our partners, including organizations such as INSA, we can achieve the future we seek, and position ourselves for continued success in defending our nation and our lies. Now, thank you very much for your kind attention, and certainly your time. I wish you a, a good meal, and I look forward to talking with Rick in just a few moments. Thanks a lot.

Chuck Alsup: [00:25:03](#) Okay. Thanks, Paul, that was, that was great. I think that sets the tone. We're gonna look for some great discussion after dinner, uh, on some of those themes.

Chuck Alsup: [00:25:12](#) The, uh, several of you have asked me, uh, where's Tish, okay?

Audience Member: [00:25:19](#) (laughs).

Chuck Alsup: [00:25:21](#) (laughs). Yeah, I think you've gotten used to seeing, the Tish and Chuck tag team show up here. I also want you to know that, I hope you know that Tish does her work with INSA out of the goodness of her heart. She also has some other responsibilities that pay the bills, and one of those responsibilities called her away. She is on a plane to London as we speak for a meeting, tomorrow and Saturday in London, after which she has to go to Nice, France, and I think you're all saying, "Oh, poor Tish."

Audience: [00:26:02](#) (laughing).

Chuck Alsup: [00:26:02](#) But she's not even getting to stay overnight there, okay? And she's coming back, she'll be back Monday, but she extends her greetings to you. And she was very sorry she wouldn't, couldn't be here tonight. So with that, enjoy your dinner, and we'll have a great after-dinner discussion.

Chuck Alsup: [00:26:20](#) Okay! There we go. Okay, so I hope you enjoyed dinner. Hope it was good for you. Now we're gonna have some fun with a bit of a moderated conversation. I mentioned that Rick Ledgett was here with us. I'm not gonna do a long introduction of Rick. I think he's will be mercifully happy about that.

Audience: [00:26:45](#) (laughing).

Chuck Alsup: [00:26:45](#) But I think you all know he was deputy director at NSA for a good while. You know, he did some ODNI things before that. He ran the NTOC for a while. You know, he was the poor guy that had to deal with that Snowden things for a while, okay?

Audience: [00:27:01](#) Boo!

Chuck Alsup: [00:27:02](#) And, and maybe we'll hear a little bit about that, I don't know. But Rick's been retired for a while now. Rick and I are friends on Facebook.

Audience: [00:27:13](#) (laughing).

Chuck Alsup: [00:27:14](#) Okay? Yeah, no, the- the main question I've got for Rick is, how many different places have you played golf in the last year and a half?

Rick Ledgett: [00:27:25](#) Probably about 45 or 50.

Chuck Alsup: [00:27:27](#) Did you get that? 45 or 50, okay. He's been playing a lot of golf, okay? And deservedly so. Paul, are you on Facebook?

Paul Nakasone: [00:27:37](#) I'm not on Facebook.

Chuck Alsup: [00:27:38](#) Okay. (laughs).

Audience: [00:27:38](#) (laughing).

Chuck Alsup: [00:27:43](#) So, Rick has generously agreed to moderate what we hope will be a substantive and interesting conversation about NSA and CYBERCOM. And with that, Rick, over to you.

Rick Ledgett: [00:27:57](#) Thanks, Chuck, appreciate it. So thanks to INSA for the opportunity to do this. It's an honor and a privilege, and also the folks who sponsor these events. Thanks for making this possible, and especially thanks to Paul for agreeing to do this. It's... I've known Paul for about 15 years now. I met him when he was an O-5, and he was one of those guys, I was one of several people who said, "He's gonna be the director of NSA someday," and, and glad it proved out to be right, and glad the Army and the National Security community saw that was a good move.

Rick Ledgett: [00:28:28](#) We didn't know you were gonna be Commander of Cyber Command, mainly because it didn't exist at the time, so ...

Audience Member: [00:28:32](#) (laughs).

Paul Nakasone: [00:28:33](#) Well I will say that after my appearance in New York City it's really nice now to have to sit on a couch.

Rick Ledgett: [00:28:37](#) (laughs).

Audience: [00:28:37](#) (laughing).

Paul Nakasone: [00:28:38](#) Particularly as Rick asked those penetrating questions. So, thank you very much, Rick.

Rick Ledgett: [00:28:42](#) (laughs). Sure, thanks. So I'll start off with one that, I'm certain everyone here has thought of, and it's a little bit of the elephant in the room. But, you ... There's- there's been lots of talk, lots of rumors about splitting the dual half, the dual command relationship of one person is Commander of Cyber Command and Director of NSA. What do you, what do you see is the future of that relationship between those two organizations?

Paul Nakasone: [00:29:02](#) So as many of you know at my confirmation hearing I was asked the same question, and what I had responded was that after the, my first 90 days as Director of NSA Commander of US Cyber Command, if confirmed, I would give an assessment to the Secretary of Defense and Chairman of the Joint Chiefs on Section 1642 of the NDAA.

Paul Nakasone: [00:29:24](#) I've have done so and the Secretary now has it, and I will allow him to read it, and leave it at that. How's that, Rick?

Rick Ledgett: [00:29:31](#) That's great.

Audience: [00:29:31](#) (laughing).

Rick Ledgett: [00:29:34](#) (laughs). Good answer. (laughs).

Paul Nakasone: [00:29:35](#) But let me, but let me further elaborate in terms of, you know, whatever the decision is at the end of the day, there is a very special partnership between the National Security Agency and US Cyber Command. It is a partnership that our nation needs. And so, one of the things that I think we almost remember, at the end of the day it's really what's best for the nation, and I think we'll certainly move through that, and whatever decision's made, obviously, you, move with quickly to, to do that.

Rick Ledgett: [00:30:06](#) So, you talked in your, in your remarks earlier, Paul, about the importance of talent at NSA, and I completely agree. I think the,

the thing that makes the agency special is the, the brain power of the men and women who work there and their willingness to put that brain power in service in the nation.

- Rick Ledgett: [00:30:21](#) That kind of talent is in very high demand in the private sector, especially with the burgeoning cyber security business, the skill-that-
- Rick Ledgett: [00:30:30](#) ... that we need to succeed are also the skills that the private sector needs in order to do its job. How's NSA going to hire and retain that kind and the caliber of the people that you need, and specifically, how to do that in a way that reflects, that is representative of the American population?
- Paul Nakasone: [00:30:48](#) So, not only US Cyber Command and NSA, but, you know, we all are looking for talent. The way that we approach it at both the agency and the command is, we take a look at it at the perspective of, it's not just recruiting the talent-
- Paul Nakasone: [00:31:01](#) ... it's recruiting, it's retaining, and then it's obviously developing, and then the big piece is retaining. And you have to have the emphasis across all elements of that if you're gonna be successful.
- Paul Nakasone: [00:31:13](#) What have we learned from looking at NSA over the past several years is they also have a number of built-in advantages that I think we take advantage of, and that's first of all our great intern program.
- Paul Nakasone: [00:31:23](#) I met with the directors interns just recently. Nine thousand people apply for director's interns every single year. We consider about 1,000, and 280 or so come in. Of those 280 we hire 70% of them. These are the top mathematicians across a multitude of great colleges in our, in our country. And so that's an advantage that we certainly leverage.
- Paul Nakasone: [00:31:47](#) The other piece though is, you know, we also have an incredible mission. Whether or not at your US Cyber Command or NSA our mission sells itself. And one of the things that I had the opportunity to talk about today at our town hall, both at US Cyber Command and NSA, is what makes us special is our mission. And all of you know here in the Intelligence Community that, you know, it begins with that idea that we are defending our nation. And I think that that is, is special, so ...
- Rick Ledgett: [00:32:14](#) Yeah. Great. Last week you, Director Wray of the FBI, Secretary Nielsen from Homeland Security, and Director Coats spoke at

the White House about efforts to counter Russian manipulation of our elections. What should Americans take from that? Are we gonna be safe and secure in our elections this year and in 2020?

Paul Nakasone: [00:32:39](#) We are fully committed to ensuring that our elections in 2018 are not intruded with, are not interfered with. We are serious about this, and that's a message that hopefully was conveyed by all of us that appeared at the White House. We have worked very, very hard. Great guidance. We are pursuing this with a strong sense of purpose. Our adversaries should know that. Whether or not they're going to try to interfere, create maligned influence, of anything else our nation will not allow it.

Rick Ledgett: [00:33:16](#) I think that would be reassuring to people all across the country. You also talked in your, in your speech about partnerships, specifically with industry, and there are a lot of industry folks in the room here, and they're very interested in understanding how they can better partner with NSA, and- and two things in particular that I think are fun to mine for them. One is the acquisition process, and- and how to build agility into that. And the other one is the attrition of contracting officers, and how we're gonna address that. Because without contracting officers, you don't get contracts.

Paul Nakasone: [00:33:58](#) Let me start with the latter one first, Rick, 'cause I certainly know that you lived it as- as our Deputy Director. The contracting piece in making sure that we that we continue to have a- a stable body of growing number of contracting officers is critical for us. So, one of the things that we have done at the agency is looked at incentives in terms of pays that we can offer our young people and those that are working in the contracting force a part of their enumeration, so they have an opportunity to continue to grow, that they have an opportunity to continue to succeed in this field. Tough business. And that's something that we have to focus on.

Paul Nakasone: [00:34:35](#) That's something that ... I know Deputy Director George Barnes is here tonight, and Harry Coker, Executive Director, have focused on with me very, very hard. They are having some success there-

Rick Ledgett: [00:34:44](#) Mm-hmm (affirmative).

Paul Nakasone: [00:34:44](#) ... we're growing the population, but it's something we've gotta stay on top of. I- I don't see this as being just a small, you know, short period of time. This is something we'll continuously do at the agency. And to be very frank with you, at the command as well.

Rick Ledgett: [00:34:59](#) On the acquisition side can you talk about the agency's use of OTAs or other similar vehicles?

Paul Nakasone: [00:35:06](#) Certainly looking at OTAs very, very, very, very closely, particularly on the CYBERCOM side, I think many of you have also seen that we've also looked at different partnerships to bring in different talent and different requirements. When I was at Army Cyber, we had a very, very close partnership with Defense Digital Services to look at how we bring in that capability with that group of talent to assist us with some of our hard problems. We're doing the same thing at CYBERCOM today, at NSA, looking at the move to full-time equivalencies in terms of how we get after that, a- and certainly how we take a look at OTAs to, to get after some of our harder problems.

Rick Ledgett: [00:35:42](#) Great. Thanks. You also talked about persistent engagement, persistent presence, and persistent innovation. Can you expand on that a little bit and kind of describe how Cyber Command and NSA engage in that and what that, what that means?

Paul Nakasone: [00:36:00](#) It's interesting when we started to think about Cyber Command in 2009, and it actually stands up in 2010. What were we focused on? We were really kind of focused on our adversaries that were trying to get into our networks, to do what was mostly espionage, and to some degree, some exploitation. But by 2011, the world had changed, and I, and I would go back to April of 2011 when we took a look at Arab Spring.

Paul Nakasone: [00:36:29](#) You know, we looked at it as the ability for the internet, for social media to generate positive change in our world. I'd offer that our adversaries looked at it as an extent-, existential threat to their existence. And so everything from 2011 on, you'll see our adversaries starting to put controls on the internet, looking at how they can utilize cyberspace to their advantage, weaponizing information. That's the journey that we've been on for the past several years.

Paul Nakasone: [00:36:58](#) And so now as we approach it in 2018, what we're looking at is, how do we ensure that we as a nation can continue to stay involved of adversaries that are operating below the threshold level of conflict. And that idea is that we've gotta do two things. First of all, we have to act forward, outside of our boundaries. Something that we do very, very well at Cyber Command in terms of getting into our adversary's networks. But the other part is we have to enable our inter-agency partners that are doing the work back here for the defensive critical infrastructure, for the work that's securing our nation.

Paul Nakasone: [00:37:39](#) And so while we're in support of the Federal Bureau of Investigation or the Department of Homeland Security, that's this idea of persistent engagement, the idea that your adversary never rests, so why would you ever rest? It's not the large that eat the small in this environment. It's the fast that eat the slow.

Rick Ledgett: [00:37:56](#) Yup, yup. That's great. So this one, this one hits a little close to home for me, but NSA's faced some real challenges over the last few years, in terms of trusted insiders. Can you talk about what the agency's doing to ensure that America's secrets that NSA's entrusted to keep remain secret?

Paul Nakasone: [00:38:18](#) So for the past six or seven years, our agency has undertaken what we call Secure the Environment, Secure the Network, taking a look at some of our most significant vulnerabilities, ensuring that we've corrected them, ensuring that we put a focus on them, and putting resources, both people and money, to securing out data, to securing our networks.

Paul Nakasone: [00:38:42](#) This is a tremendous amount of work that we've done in our agency. And I know that recent press reports have said that there are vulnerabilities in, in our agency and our network, and we take that very seriously.

Paul Nakasone: [00:38:55](#) But all of you that have run a network understand that it's never a one-time thing. This is a continuous thing that you're trying to do to ensure the security of your network. We do the same thing at our agency, and at Cyber Command.

Paul Nakasone: [00:39:07](#) So I would offer that today we have a much more secure network, one that we are certainly working on every single day, one that we maintain vigilance on, but one that I would tell you that I would put up against any within our government or any within the private sector today.

Rick Ledgett: [00:39:23](#) Good. Since, since this isn't your first time at NSA, you've been here before a couple of different times, what's changed since you were here last? What's really noticeable that stood out for you in terms of -

Paul Nakasone: [00:39:35](#) Well there's certainly a new director.

Rick Ledgett: [00:39:38](#) (laughs).

Audience: [00:39:38](#) (laughing).

Paul Nakasone: [00:39:39](#) So, coming back to NSA in May of 2018, several things that really impressed upon me. The first thing is-

Paul Nakasone: [00:39:51](#) ... at several of our town halls that I've conducted, I'll ask a simple question. Please raise your hand if you started employment at our agency after 9/11. I would say 70, 80 to 90% of the hands go up.

Audience: [00:40:07](#) (laughing).

Paul Nakasone: [00:40:08](#) Now for all of us in this room that remember 9/11 like it was yesterday, that's, that's pretty shocking to see how many people have joined in the past 17 years. But then you think that's a whole generation of work that has gone on. So I would say the first thing is just the- the rapid amount of change that- that has, that has undergone.

Paul Nakasone: [00:40:28](#) The second thing is, I would say that has surprised me is, uh, really how constant it is at NSA today in terms of the focus on the mission.

Rick Ledgett: [00:40:38](#) Mm-hmm (affirmative).

Paul Nakasone: [00:40:38](#) And that is just a reassuring feel that when you come in every single day, it's about defend the nation, and secure our future. And whether or not you're young or old, or, you know, a new employer or a, a mature employee, that's what you're seeing, and I think that was a reassuring piece to me.

Paul Nakasone: [00:40:54](#) The final thing that I would offer is that what is interesting and what is, I would say for my experience has been kind of telltale is, it's interesting to see how fast the domain is changing. We're almost onto 5G.

Rick Ledgett: [00:41:09](#) Mm-hmm (affirmative).

Paul Nakasone: [00:41:10](#) Fifth generation, for a person that remembers 1G, analog-

Rick Ledgett: [00:41:13](#) (laughs).

Audience: [00:41:13](#) (laughing).

Paul Nakasone: [00:41:14](#) ... okay, don't give all of yourself too much credit out there. You remember 1G as well.

Rick Ledgett: [00:41:18](#) (laughs).

Audience: [00:41:18](#) (laughing).

Paul Nakasone: [00:41:20](#) We're almost onto 5G. Think about the power that's gonna be at, the endpoint, at the user.

Rick Ledgett: [00:41:26](#) Mm-hmm (affirmative).

Paul Nakasone: [00:41:28](#) Tremendous opportunities.

Rick Ledgett: [00:41:29](#) Yeah. So, speaking of 5G, what do you think are the major risks to 5G implementation in the country? I mean, specifically things having to do with, with foreign efforts to get into the supply chain for 5G.

Paul Nakasone: [00:41:45](#) Many of us certainly understand that, as we take a look at fifth generation of wireless, you know, there are only a certain amount of providers now in the, in the world that are doing that. I think the question that we're gonna have to ask ourselves as a nation, are those providers the providers that we want to provide the infrastructure for our nation, a place where we store out wealth and treasure on the internet? That's obviously a policy question that'll be worked by others besides me.

Rick Ledgett: [00:42:15](#) Mm-hmm (affirmative), yup.

Paul Nakasone: [00:42:15](#) But I would tell you that I think this is one of those fundamental times where we say, you know, how do we, how do we look at this as a key critical resource for our nation? Because 5G is gonna transform our economy, our military, our social media.

Rick Ledgett: [00:42:31](#) Okay. So, do you see opportunity to apply NSA's awareness of, of threats to help the general private sector be better protected? And- and if so how does that work?

Paul Nakasone: [00:42:44](#) I was wondering if perhaps the private sector might be able to provide NSA that same perspective.

Rick Ledgett: [00:42:49](#) (laughs). Well, actually, I think a two-way, a two-way channel is a good thing.

Paul Nakasone: [00:42:53](#) I- I think that's an important piece as we talk about it.

Rick Ledgett: [00:42:55](#) Yeah.

Paul Nakasone: [00:42:55](#) I, I had mentioned to Rick on Monday, I was in London visiting our, our close partners. And one of the places that I stopped was the National Cyber Security Center. And it's interesting to

see the progress that has been made by the UK at looking at the, you know, how do you defend the nation in cyberspace in total.

Paul Nakasone: [00:43:15](#) But one of the things that I found most retracted was this idea of the, the top 100. The top 100 firms that are partnering, close partnership with the government in terms of providing them information, providing them talent, providing them insights. As we all know, as we all know, 90% of our critical infrastructure is in the private sector.

Paul Nakasone: [00:43:35](#) And so, as, as Rick mentions, you know, what NSA can do for the private sector, you know, I think the other piece is, what's the private sector in, in NSA, and- and DHS and FBI gonna do in total as a, you know, as a whole force here, because I- I think this is, as we think about defending our nation, is really kind of the whole of society piece that, that we have to talk about.

Rick Ledgett: [00:43:56](#) Mm-hmm (affirmative). Yeah. That makes sense. So, a couple questions about Cyber Command. One is, can you sort of describe how it would work if, if a foreign nation stayed launched a significant attack against critical infrastructure in the United States? How would CYBERCOM engage in that?

Paul Nakasone: [00:44:13](#) So certainly, in terms of our role with critical infrastructure right now, we are in support of Department of Homeland Security. And if Department of Homeland Security requested support from the Department of Defense, we would, we would provide that immediately. This is something that we're working in close partnership with DHS today in how we look at the critical infrastructure, our 17 different sectors, and provide whether or not it's from the CYBERCOM side or the NSA side. So what are the things we need to talk about today? What are the things that we should be working with? What are the things we should be exercising before a bad day? Before a really bad day?

Paul Nakasone: [00:44:50](#) I think that's a- a very positive sign. I- I, I'm very, very pleased at the partnership that has gone on between DOD and DHS, and- and FBI, particularly over the past six to seven months as we've worked through some of these areas, and I think there's a lot of progress being made. We still have a lot of work to do, but that's an area that I think, as we look back, that's, it's been a very, very good year for that, that partnership.

Rick Ledgett: [00:45:15](#) Yeah, I think you raise a very good point there too. It's, if- if- if the department, specifically Cyber Command, is called on to defend those networks, you can't be walking into the networks as an, as an unknown entity, either them to you or you to them.

You have to understand the terrain, the network terrain, and you have to understand how to inter-operate there, so, so I think that, that sort of partnership is, and peacetime is really important.

- Paul Nakasone: [00:45:35](#) Yeah. And I think the other piece that- that's important is the commitment of, of the leaders within the departments and the agencies to come together to have these discussions.
- Rick Ledgett: [00:45:43](#) Mm-hmm (affirmative).
- Paul Nakasone: [00:45:44](#) I have had great discussions with Secretary Nielsen, with Director Wray, Deputy Director Bowdich, I mean, we have, we have worked a lot of issues at our level that I think makes some of those areas go away in terms of the friction and the bureaucracy that sometimes prevent us from getting things done. And that I'm very heartened about.
- Rick Ledgett: [00:46:01](#) That's good. Have you thought about ... Is there a need for a separate cyber uniformed service? Or does the, the model of each of the services contributing work for you?
- Paul Nakasone: [00:46:13](#) A fascinating question on the day that we have a Space Force, Rick.
- Rick Ledgett: [00:46:15](#) (laughs).
- Audience: [00:46:15](#) (laughing).
- Paul Nakasone: [00:46:19](#) So, I- I'm not, I'm not there yet in terms of a separate service, just as a personal opinion of someone that's worked it over the past several years. I think there's unique, uniqueness of what our services have to have. We're focusing on building readiness within our cyber forces today, and I think that that's, that's appropriate focus for us.
- Rick Ledgett: [00:46:39](#) Mm-hmm (affirmative). Okay. On the, staying on the cyber theme, what about cyber deterrence? How does the, how does the US build an effective cyber deterrence policy?
- Paul Nakasone: [00:46:50](#) So I think it begins with persistent engagement, that our adversaries know that every single day, we're gonna operate in cyberspace, that we are going to act, and we're gonna enable. It's different in my mind than the deterrence that many of us grew up in the Cold War where, you know, it was this idea of, you know, we're gonna hold a target at risk. But here's what I

would also say is that the power of deterrence is the power not necessarily of cyber against cyber.

Rick Ledgett: [00:47:19](#)

Mm-hmm (affirmative).

Paul Nakasone: [00:47:20](#)

It's what our nation brings against an adversary. You know, what are the diplomatic pieces? What are the informational pieces? The military pieces? But a lot of times what are the economic pieces that we get after an adversary that are so effective?

Paul Nakasone: [00:47:33](#)

We as a nation bring that. That's a very, very powerful punch, much more so than a single cyber action.

Rick Ledgett: [00:47:39](#)

Mm-hmm (affirmative), okay. Having a clear workforce is, is important to include the contractor workforce. And I know there are efforts underway now to look at clearance reform. What is NSA doing in that, in that regard, and how important is that to you?

Paul Nakasone: [00:47:55](#)

So, certainly it's very, very important to us in terms of a, a cleared workforce. One of the advantages we have at NSA is the fact that we, we do our own clearances. And so that has been very effective to, to really shrink the, the days of, of clearance backlogs. I think the challenge that we always have at the agency is the fact that we hear about, you know, the one person that has been out for two years.

Rick Ledgett: [00:48:18](#)

Mm-hmm (affirmative).

Paul Nakasone: [00:48:18](#)

Yet, when we really kind of dig into it that's the anomaly. You know, what really is for us is, been down to, you know, less than 50 days in terms of clearing people is very, very important. We've gotta work that same process upon working with our industry partners. And I know that INSA's been doing some work on that. I applaud it, just because of the cost for all of us is, is tremendously high, both on the, the private side, but certainly on the government side as well.

Rick Ledgett: [00:48:44](#)

Mm-hmm (affirmative). And it also affects that ability to do persistent innovation that you were talking about earlier.

Paul Nakasone: [00:48:47](#)

That is correct.

Rick Ledgett: [00:48:48](#)

Yup. When you talked about technology, you talked about fifth generation wireless, you talked about artificial intelligence, machine language, a little bit about, or machine learning,

rather, a little bit about quantum. What about blockchain? How is blockchain relevant to NSA, both on the information assurance side ... Let's just stick with the information assurance side.

- Paul Nakasone: [00:49:06](#) Yeah, so, certainly we're working that pretty hard. I- I think that many of you are very aware that we are working much of that within our research department today, and- and trying to bring that together in terms of our cyber security elements into the future.
- Paul Nakasone: [00:49:18](#) Coming back to the o-, the other ones, I would say that, you know, it's interesting that much of what we saw in our work as a combat support agency, particularly in places like Iraq and Afghanistan, fed a lot of our learning in terms of artificial intergen-, artificial intelligence and machine learning. The things that we were doing with call detail records, the things that we were doing in places like Iraq and Afghanistan again to support a technology that was, what we wanted to chase was kind of foundational to, you know, what we all grew up and started to learn and said, "Hey, that's Cloud," or, "Hey, we call that A.I."
- Paul Nakasone: [00:49:50](#) Well we've been doing that for a little bit o-, a little bit of time here, so, we're gonna continue to focus on all of those and certainly blockchain is among those that we're gonna work hard on.
- Rick Ledgett: [00:49:57](#) So that's what we would refer to as RTRG, the- you were describing-
- Paul Nakasone: [00:50:01](#) It's just the real-time regional gateway-
- Rick Ledgett: [00:50:02](#) Yup, yup.
- Paul Nakasone: [00:50:02](#) ... that, uh, that you've talked about publicly, and we appreciate that.
- Rick Ledgett: [00:50:05](#) Ah. (laughs).
- Audience: [00:50:05](#) (laughing).
- Paul Nakasone: [00:50:09](#) That's serious.
- Rick Ledgett: [00:50:09](#) Thanks. Thanks. Yeah.
- Audience: [00:50:10](#) (laughing).

Rick Ledgett: [00:50:11](#) What haven't we asked you that you wanna talk about? What would you like to dive into? In more detail.

Paul Nakasone: [00:50:18](#) Let's talk about the workforce of the future. I had an opportunity to talk to both the National Security Agency and US Cyber Command. One of the messages that I wanted to convey is that, as we recruit our force for the future, that force has to be reflected of the nation in which we live. We're proud of that at NSA and Cyber Command in terms of what we've been able to do but it's not there where we need it to be yet. So one of the things is we talk about the future, the idea of, you know, why do you sponsor organizations like Cybergen, or why do you look at Cyber Patriot, or, or why do you look at Girls That Code as being one of those things that you invest in?

Paul Nakasone: [00:50:54](#) Because that's the future workforce that we all, whether or not you're at the agency, you're in government, or you're in the private sector, we've gotta be able to develop and we've gotta be able to recruit, and we've gotta be able to hire. That's really important for us. And so when we talk about that, one of the things that I was, I emphasized in the workforce today is, how do we ensure that we develop that workforce, because that's what we need as a nation, that's what we need as an agency.

Rick Ledgett: [00:51:18](#) Okay. Thanks. On the topic of A.I., I- I- I'm gonna believe this, whoever wrote this, I don't ... I've not heard this but I'm gonna trust that it's correct. If Vladimir Putin said, "Whoever masters A.I. will control the world." Do you, do you agree with that, and who do you think is, is ahead in that race?

Paul Nakasone: [00:51:39](#) So, in the words of General Powell, you know, you get to ask the questions, I guess I get to answer them, right?

Rick Ledgett: [00:51:45](#) (laughs). You can ask questions.

Paul Nakasone: [00:51:46](#) (laughs). So, I would offer that, whether or not you're looking at artificial intelligence or quantum or you're looking at machine learning, I mean, these are all critical capabilities that we as a nation need to be able to be in the forefront of. I don't think there's any one that necessarily means that you're gonna win the game, but certainly, those collectively, those are what our nation needs to focus on in terms of our might as a nation in the future.

Rick Ledgett: [00:52:09](#) Mm-hmm (affirmative). Okay. The release of information in recent years about NSA surveillance capabilities has, for large segments of the, or for some segments of the US population,

caused people to mistrust the government. How, what can NSA do, and what can the IC do to help regain that trust?

- Paul Nakasone: [00:52:31](#) It's interesting, one of the things that I had an opportunity to do before I was confirmed is I went to try to meet with almost all the former directors of NSA and the former commanders of US Cyber Command. The latter is much easier 'cause there are only two of those guys, and I work for both of them.
- Audience: [00:52:44](#) (laughing).
- Rick Ledgett: [00:52:44](#) (laughs).
- Paul Nakasone: [00:52:45](#) The former I had some very, very interesting conversations in terms of, you know, what's it like, uh, as the DIRNSA, and what should, what should you expect? One of the things that I think was most telling is the comment that was made to me is, "In the world in which you live today, never is the idea of 'No Such Agency' or your ability not to talk publicly gonna be allowed or accepted by the American public."
- Paul Nakasone: [00:53:07](#) And I think that's the world in which we live, and so, one of the things that is certainly charged to me is to, to be that person that talks about our agency, that talks about, hey, there is a Vulnerabilities Equity Process that our nation goes through to look at vulnerabilities. It's conducted by the White House. It's looked at very, very carefully. And as you well know, well over 95% of the vulnerabilities that are there are released back to private industry.
- Rick Ledgett: [00:53:34](#) Mm-hmm (affirmative).
- Paul Nakasone: [00:53:35](#) It's, it's done in the inter-agency manner. It's something that we should also look at as being kind of a template upon which we move forward. So, these are areas that I think that, you know, we'll continue to talk about, I'll certainly continue to talk about. But it's one of those things that, we're in a different world today, and I think that that's ... We just have to realize that.
- Rick Ledgett: [00:53:53](#) I would also add in regards to that Vulnerabilities Equities Process you describe, we're the only nation in the world I'm aware of that does that, so ... so, on the signals intelligence side, many, in fact most of our targets are- are really inconsiderate and refuse to speak in English.
- Paul Nakasone: [00:54:10](#) (laughs).

Audience: [00:54:10](#) (laughing).

Rick Ledgett: [00:54:10](#) And, so, we've had this long standing need for people who are fluent in a lot of foreign languages including some very low-density foreign languages. And NSA has a long history of- of sponsoring foreign language training in schools, and things like that, but what's the agency doing now when, when you have the, uh, the possibility for little pop-up things, and having to go from zero to 60 in some language that not very, very many people in the world speak?

Paul Nakasone: [00:54:37](#) So I think this is one of those areas coming back to the question on Putin is, is there a role for artificial intelligence and machine learning in human language translation? I think there is. In fact I think it's gonna be pretty impressive when someone gets that to the next level.

Rick Ledgett: [00:54:54](#) Mm-hmm (affirmative).

Paul Nakasone: [00:54:55](#) And so we as an agency, you know, certainly look at that very, very carefully. We're not gonna ever be able to, I would imagine, train enough Mandarin Chinese linguists, or Russian linguists, or anything that are gonna meet our need as an Intelligence Community as a whole. We do have a competitive advantage though, in A.I. and machine learning.

Paul Nakasone: [00:55:15](#) And so as we start taking a look at that, I think that's an area that we're gonna look at very, very carefully, in terms of capability and capacity for what we're gonna need to have in the future.

Rick Ledgett: [00:55:23](#) Right. And last question for you, you mentioned earlier, you made an allusion to the internet of things, and, and-

Paul Nakasone: [00:55:29](#) (laughs).

Rick Ledgett: [00:55:30](#) ... things that NSA is, is doing in that space. Can you elaborate on that a little bit? I wanna make sure that my, my toaster doesn't report back to the Russians or the Chinese on-

Audience: [00:55:37](#) (laughing).

Rick Ledgett: [00:55:37](#) .... on what I'm having for breakfast.

Audience: [00:55:39](#) (laughing).

Paul Nakasone: [00:55:40](#) So again, I think that as we live in this brave new world, think about how much of our house is connected to the internet. Go home tonight and take a look at what you have connected in your house to the internet. Alexa. Your Fitbit. Your phone. Your thermometers. And so, as we start looking in the next 18 months and we think about what fifth generation is going to do, what does that mean to all of us?

Rick Ledgett: [00:56:10](#) Mm-hmm (affirmative).

Paul Nakasone: [00:56:11](#) That means that there's incredible vulnerabilities, incredible challenges, incredible, well, opportunities for an agency like NSA, out there, in foreign space.

Rick Ledgett: [00:56:20](#) (laughs).

Audience: [00:56:21](#) (laughing).

Rick Ledgett: [00:56:25](#) And to help establish standards for securing the -

Paul Nakasone: [00:56:27](#) And establish standard for security in the United States-

Rick Ledgett: [00:56:30](#) Right.

Paul Nakasone: [00:56:30](#) ... and with our allies. But, but I offer that just as a thought, because I- I think that as we think about where we're at today, as we start thinking about the impact that the internet of things is going to have in terms of our own lives, this is something that we as a nation really need to think about very, very hard. Because standards, requirements, security, these are things that we still have to, I think, move forward on.

Rick Ledgett: [00:56:54](#) Yeah. Great. Well, Paul, you've been very generous with your time, and generous in answering the questions and I know everybody here appreciates it. Before we close, is there anything you'd like to say in closing?

Paul Nakasone: [00:57:04](#) So, three things I shared with our workforces today, and both US Cyber Command and NSA Town Halls, and I thought I'd share with them tonight. The first thing I said is, you know, it's interesting, what makes us different? You know, we do an incredible mission. We have the opportunity to work with incredible people.

Paul Nakasone: [00:57:21](#) But the thing that came back to me as I was thinking about it, and, and all of us here in the Intelligence Community certainly understand this idea that, whether or not you're military or

civilian, one of the things you do is you swear an oath to the Constitution. Wow! And that's an interesting concept when you think about it as a young 18 year old that's coming into our agency or the command.

Paul Nakasone: [00:57:43](#) And so I don't think we really appreciate until you get to a person of my advanced age, and say hey, it's, you know ... Well, I've been thinking about this for a long time, and how important that is. And one of the things that I tried to leave with the workforce today is, you know, swearing an oath to that Constitution is swearing an oath to an idea, and that's really important to us.

Paul Nakasone: [00:58:03](#) The second thing that I offered is, again, this idea of, as we take a look at our workforce of the future, our workforce of the future needs to be a workforce that is representative of our nation. And being able to hire, and being able to train, and being able to retain that workforce is incumbent upon all of us.

Paul Nakasone: [00:58:19](#) And the last thing I just shared with them is, hey, at the end of the day whether you're at US Cyber Command or NSA, make a difference. Make a difference every single day in what you're gonna do, defend our nation and secure our future. So, on behalf of Rick, I know that we were really pleased to have spent some time with all of you tonight, to our sponsors and certainly to INSA, thanks so much for, for this evening. Thanks.

Chuck Alsup: [00:58:39](#) So ... Am I on? Can I go on? Okay, thanks. So, sorry, we had a little bit of a sound problem earlier and we were having a little bit of difficulty hearing, but I think we got the gist of everything. I think we can all rest assured that the things we need to be doing to protect our nation, that are associated with the cyber business, and the SIGINT business, are in good hands. So, I think, again, let's all join in thanking Paul for assuring us about that.

Chuck Alsup: [00:59:48](#) So I'm gonna, I'm gonna, one, first give Rick a INSA coin, okay? So, Rick, thank you. And again, thanks to Rick for a, for a great job. The second thing is, you know, I'm ... This is the INSA coin, and on the backside it's got the INSA Foundation logo on it. But it pales in comparison to the lovely coin that Paul's got in his pocket-

Audience: [01:00:15](#) (laughing).

Chuck Alsup: [01:00:15](#) ... that, that he's been giving to several of our INSA interns and some other young folks around tonight. So thank you for doing

that for some young folks here, but I hope this coin finds a prominent place-

Paul Nakasone: [01:00:30](#) Thanks, Chuck.

Chuck Alsup: [01:00:31](#) ... in your office-

Paul Nakasone: [01:00:31](#) Really appreciate it.

Chuck Alsup: [01:00:32](#) ... at, at NSA. So thank you. Thanks. So, Rick, come over here. So, thank you all again for being here with us tonight. Thank you for your support of INSA. Thank you for your support of our National Security leaders. And we look forward to seeing you in the future. But please be safe as you go home tonight.

Paul Nakasone: [01:00:57](#) Great.

Chuck Alsup: [01:00:58](#) So thank you.

Rick Ledgett: [01:00:58](#) Thanks.

**- END -**