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Nuclear Deterrence Summit
"The Reliability of the U.S. Nuclear Stockpile"
(Transcripts)
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General Chilton: Thank you, Ed. It's a pleasure to be here this morning. I appreciate the opportunity and invitation to join you all this morning. It's also a distinct pleasure to follow Chairman Tauscher. I think we are very blessed in this country to have her leadership of the committee that she leads at this particular time.

I'd also like to say a special hello to three gentlemen here that are great leaders and important parts of the infrastructure that I'm going to talk about today and that's Dr. Tom Hunter, Dr. George Miller, and Dr. Mike Anastasio, the leaders of our laboratories which are so critical to the capabilities that this country needs to provide a strategic nuclear deterrent. So welcome. It's always a pleasure to join you gentlemen at this conference.

I think Representative Tauscher is right on the money when she talks about a need for bipartisan leadership on this issue. So I'm very encouraged by her leadership. I'm encouraged by her call for a bipartisan committee to take a look at this problem earlier this past year with a goal of having that brought to the table early in the new administration. Because above all, what we need is some light shined on this debate and we need this debate to be brought to the forefront. It needs to be brought to the Floor of the House. It needs to be brought to the floor of the Senate, and we need to start taking a serious look at some of the issues. Representative Tauscher I think in her prescient decision to bring that bipartisan committee together last year has served us and our nation well by pushing for that.

We're here today to talk about nuclear deterrence. That's, of course, been your theme starting yesterday. When I think about our nuclear capabilities today I'm reminded of a story about the famous Sherlock Holmes and Dr. Watson. The story goes like this.

They were out taking a little break from their normal sleuthing duties and out in the countryside enjoying a camping trip. After a nice meal one summer evening in the English countryside they settled down to sleep for the night.

In the middle of the night Holmes awoke and nudged Watson. He says, "Watson, my friend. Look up at the sky and tell me what you see."

Watson rubbed the sleep from his eyes and said, "Holmes, I see millions of stars."

Holmes says, "What does that tell you? What do you deduce from this?"

Watson replied, "Well, it tells me that we are just a small part of a greater universe, the cosmos is nearly infinite, tremendous millions and millions of stars out there which makes me ponder the existence of humanity and our future. What does it make you think of, Holmes?"

Holmes says, "It's elementary, my dear Watson. Someone has stolen our tent." [Laughter].

It's healthy to think about the numbers of stars, and it's healthy to reexamine one's nuclear strategy, and the elements of that that underpin the need for and the size of our nuclear deterrent. But when storm clouds threaten, which they predictably will do at unpredictable times, it's just as important to pay attention to the status of your tent -- whether someone is stealing it or whether it is becoming threadbare, it is not a luxury. In fact it's essential that we do this.

Now as the Commander of the United States Strategic Command I have a lot of missions that we conduct in U.S. Strategic Command. Our three main lines of operation are in space, cyberspace and nuclear deterrence. Of course today I'm going to focus on nuclear deterrence. When I think about what we're asked to do I always ask myself, since I do not organize and train and equip the forces that I need to conduct my missions, I have to know what it is I demand from the services providers that provide me the tools that I need to do my mission. So I ask, what do I need to do the mission of nuclear deterrence?

Well, first I need reliable warning systems. I need to know when this country is under attack. More importantly, I need the adversary to know that I will know if and when this country were to come under attack. And I need to know that I'm going to know in a timely enough fashion that I'll be able to or the President will be able to, more precisely said, to respond to that threat. And the need to know that we'll be able to attribute the source of that threat.

I need reliable communication systems so that our adversary knows that should they attempt to threaten the United States of America there is no doubt in their mind that our warning systems for our people at STRATCOM will be able to communicate that threat to the President of the United States assuredly, and the

President, after making a decision will be able to promulgate orders to our forces in the field with one hundred percent assurance.

To do this mission I need reliable people. Those people are trained, ready, part of a program which assesses their reliability on a daily basis, and is ingrained in their very core.

I need reliable delivery platforms in our bombers, our submarines or our ICBMs. We need to know, if we're going to provide deterrence, that they will work.

Finally, and the one that we don't like to talk about but the one that we need to talk about is that I need reliable weapons. For the deterrent to be effective our adversary must know and understand clearly that we have reliable warning systems, communications, trained and ready people, reliable delivery platforms. But at the end of the day that is all for naught if they do not believe or we do not believe that the weapons that ride atop those missiles or in the bomb bays of our bombers are indeed reliable and capable to do their mission.

All are essential to provide a credible deterrent to the United States of America.

Today I'd like to talk mostly about the weapon element of the equation. I've talked at length on this subject over the last year at various forums, and I think a good bit of the choir is with us here this morning, so I hesitated as I prepared my remarks to go back through my normal talking points. If you'll bear with me, I'm going to adjust fire slightly and address maybe a few of the points that have come up as a result of talks that I have given or talks that I've heard, counterpoints that are oftentimes brought up, some of which, quite frankly, I think belong in the area of mythology. [Laughter]. I'd like to address some of those points today and perhaps use that to expand on the points that I've made in the past on the needs of our nuclear, not only of our nuclear weapons, but of our nuclear weapon infrastructure.

Myth number one kind of goes like this. If our nuclear capabilities are safe, secure and reliable today, they will be tomorrow too.

Every year as the Commander of U.S. Strategic Command I am required, in another hat I wear, to sign a letter to the President of the United States certifying that our nuclear weapons stockpile is safe, secure, reliable, and does not require testing in the coming year.

When I took command about a year ago this letter was placed in front of me for my signature as one of the first pieces of

paper I was to sign as the new commander. I said you can take that back and set it in the "To Do" file until I'm convinced that what the words on this paper say are indeed true. I'm from California, but I feel often like I'm from Missouri. You've got to show me first.

So I went off and spent quite a bit of time traveling around visiting our labs, visiting our nuclear infrastructure, talking with some of the experts that are here in the room today as well as those on my staff, members of the group that do our Stockpile Stewardship Program. Eventually I got comfortable with signing that letter.

I just recently signed it for this past year as well, the second time.

But as I've gone around and gotten comfortable with being able to put my signature on that letter, and I am absolutely comfortable with certifying the safety, security and reliability of our current stockpile today and the fact that we do not need to test today, I asked over and over again, what about tomorrow? And it is when I ask that question that the people who instruct me begin to fidget a little bit, and understandably so. It is in asking that question that I began to hear debates on the matter as to whether or not some day we may need to test if we continue on our current course, or some day we may need to test if we develop modern weapons. But I think in light of one of the presentations you got yesterday by John Foster, I think you would have to acknowledge that things are changing in the stockpile and this notion of not doing anything is not a correct notion.

The weapons themselves, I've described before in the past, are really like chemistry experiments in motion. They are changing every day as they sit on the shelf.

Now at NASA, I spent a few years there, we used to talk about space hardware, particularly our rocket ships that we would put human beings on, we talked about that hardware, we talked in terms of listening to the hardware. We would say sometimes the hardware is speaking to us. We need to pay attention to it. So if the boundaries and the limitations on a particular piece of equipment on the space shuttle had to operate above this lower level and below this upper level, even though it was operating in that band if we saw a change within that band, we said the hardware was talking to us. Pay attention to this.

It was our failure to pay attention to hardware that was speaking not in whispers but loud and clear back in the early 1980s that led to the Challenger accident, quite frankly. Hot gasses were not supposed to get to the first O-ring, but they did and we knew it. Hot gasses were not supposed to go past the first O-ring, but they did and we knew it. The hardware was

screaming at us and we were not paying attention. That led to the loss of the Space Shuttle Challenger and seven astronauts.

The hardware in our nuclear enterprise, in our weapons, as you saw from John yesterday, is speaking to us. We need to listen.

The bottom line is, I'm not comfortable that the future STRATCOM commanders will be as comfortable signing the letter that I have to sign every year as I am today. I think it would be irresponsible for me to not worry about that and try to peer into the future and ask the hard questions, what do we need to do today to make sure that subsequent STRATCOM commanders are able to sign that very same letter that I have to sign every year.

Just because our nuclear deterrent is safe, secure, and reliable to perform its mission today does not imply it will be forever.

A second myth goes something like this. We have plenty of time to address the nuclear infrastructure issues that this country faces today.

First of all, what I have learned, again another NASA phrase we used to use. We used to talk about lesser difficult problems by saying hey, this isn't rocket science. We know what rocket science is.

This is rocket science when we start talking about nuclear weapons. In fact it's more than rocket science. It's physics. It's chemistry. It is hard and difficult stuff, maintaining and developing and sustaining nuclear weapons capabilities. And if we're going to continue down a path of preserving that capability for the United States of America, then it makes sense that we take care of the infrastructure.

In 1961 when President Kennedy said we're going to put a man on the moon and return him safely to earth, we didn't start working the infrastructure problem in 1968. We started it right then. We started building the launch pads right then. We started building the rocket factory, right then. You can study rocket science all you want, but if you don't build the rocket factory you don't get to the moon.

The same is true in this particular endeavor. We need a production capability to preserve our nuclear deterrent. The numbers, the math, speaks loudly to me. If you look at it, the numbers we're heading down to in our deployed stockpile which is between 1700 and 2200 and I'll pick 2000 because I don't do math in public very well, the arithmetic is pretty common-sensical here. If we had a production capability of replacing 50 weapons a year, which we do not have today by the way, but even if we had

50 it would take us 40 years to replace all the deployed weapons in the current inventory.

Now mind you, these are weapons that were designed with 15 to 20 year design lives in their original specification, and not one of them is younger than 20 years old. So you're talking adding another 40 years onto that before you address the issues of aging and sustainment of those particular weapon systems. The math tells me we are overdue today in modernizing our production capability, and developing and reestablishing it. A production capability that we disassembled in the 1990s.

There's another important reason for this as well, and that is the human capital element. Without the production, without the appropriate infrastructure, you cannot attract the human element that we need to sustain this technology and this capability for the future. We can and have made dramatic investments in things like the myth in hydro-testing capabilities, in the science element, in modeling and simulation. But if all we did was study the modeling and simulation required for flight and stopped production at the Wright Brothers we wouldn't be flying airplanes today and we wouldn't be attracting new young engineers and scientists into the business. It's not exciting enough for them.

In addition to that, if you don't bring that new youth into the business you can guarantee you will not be able to sustain the knowledge base that you need for the future.

I'm told that the last person to actually design and help build a nuclear weapon in this country and participate in a test of that weapon will either be dead or retired in the next five years. That's an element of the infrastructure that we have to pay closer attention to. Time is not on our side.

The third myth is that the real goal of modernizing our nuclear weapons is to develop a new nuclear capability. I think Representative Tauscher hit on this very effectively in her remarks. I'll emphasize the fact that as the STRATCOM commander what I'm asked to do from a military perspective, provide nuclear deterrence for the United States of America, does not require me to have any new capabilities in our nuclear weapons. It does require me to have safe, secure and reliable weapons.

I'll use a slightly different analogy than Congresswoman Tauscher with regard to her vehicle, because I have a little different perspective. You see, I'm the father of two driving teenagers with one in the on-deck circle who's 14 and thinks she's ready to drive tomorrow. It's a nervous position to be in. Those of you who have been there know what I'm talking about. [Laughter].

Well, do I want my teenager out driving in a '57 Chevy? I'd love to own a '57 Chevy, but would I want her out driving in it without seatbelts, without airbags, without safety glass, without anti-lock brakes on it? Of course I wouldn't want that. And at night when she's coming out of the mall parking lot when it's dark, do I want her to have a little button that when she pushes it the lights come on on the car and another button on that key chain where if something's not right she pushes and the horn starts blaring and she attracts attention? You bet I want that on my daughter's cars. And if she's driving home from college and breaks down along the way in that automobile, do I want her to have to go on e-Bay to find the spare parts she needs to repair that car? Or would it be nice to have a vehicle that has parts on the shelf that are modern and can be easily attained and put in the vehicle to keep it moving and keep it functional?

We need safer weapons with the terrorist threat that faces us today and their avowed desire to get their hands on nuclear weapons. We need more secure weapons. And above all, we need reliable weapons with adequate margins.

Today's weapons were built and designed with the expectation that they could be tested. The designers, when they built these weapons they expected they would be able to test. They cannot today. They were also built with the knowledge that we had a robust production capacity at the time so if there was a problem in the design they could recover from it quickly. They could either fix it or they could replace that particular design. And our current inventory was built with the expectation that the weapons would be replaced on a 15 to 20 year cycle. None of these assumptions are valid today and that demands that we approach modernization of our inventory with new assumptions, new boundary conditions, which will lead to new and more stringent requirements for safety, security and reliability.

There is no need today for a new nuclear capability to accomplish the STRATCOM mission of providing an effective nuclear deterrent. There is, though, a need to modernize our weapons inventory.

A fourth myth, modernizing weapons to meet 21st Century requirements will increase nuclear proliferation around the world. Again, Congresswoman Tauscher touched on this as well.

Not modernizing over the last 15 or 20 years has not discouraged proliferation, in my view. In fact I would posit something slightly different than Representative Tauscher. I think the United States can take great pride in the reductions we have made in our nuclear inventories over the last 15 to 20 years. From over 10,000 deployed weapons heading toward 1,700 to 2,200 by the Moscow Treaty, and we're on a good glide slope to get there, we have made a dramatic reduction in the number of deployed nuclear weapons. And yet that has not discouraged North

Korea from developing and proliferating their own nuclear weapon; it has not discouraged Iran; it has not discouraged Pakistan; it has not discouraged India. Failing to modernize our weapons, I believe, will have just the opposite effect on proliferation. Modernization does not support proliferation. Modernization will inhibit proliferation, in my view.

A failure to modernize on our part would certainly lead to a decrease in confidence by our friends and allies who today enjoy the nuclear umbrella of the United States of America. I believe in this dangerous world that proliferation occurring among states like Iran and North Korea and the continued presence of nuclear weapons in other countries, I believe if that confidence were ever to be lost in our ability to protect them, that would lead to rampant proliferation around the world of other countries who would feel compelled to develop their own nuclear deterrent capability. So in my mind if we don't modernize, proliferation will increase.

The fifth myth and the last one I'll speak about is the notion that modernizing our weapons to make them safer, more secure and more reliable is in conflict with our goal to reduce our total inventory.

We will always need a hedge of some sort or another. There are different ways to provide that hedge. The reason we need a hedge, strategy, is because we are not so prescient in predicting the future as we think we might be. We never have been. There's always the risk of political uncertainty, strategic changes, and the international environment. We also need a hedge to protect for a failure in a family of our nuclear weapons.

In short, we'll always need this hedge. The question is, can we be smarter about it and can we reduce the total number of weapons that we maintain on the shelf to support the hedge.

Today, as Representative Tauscher commented on, we keep a large number of weapons on the shelf because we don't have a production capability, we don't have an ability to test. So we have to hedge with those six extra cars she talked about in the garage.

I think there's a way to reduce that total inventory of weapons. I think proceeding down a path of a modernized weapon and a modern production infrastructure will allow us to reduce the total number of warheads the United States needs to maintain for its nuclear deterrence. In any scenario.

So if in the future we are wrong and the world doesn't get more stable, and there comes a time when our leadership decides that for whatever reason we need to increase the size of our nuclear capability, then proceeding down a path of modernization

and weapons and infrastructure today is the right course of action, obviously.

On the other hand, if future STRATCOM commanders are directed to just maintain the size of our nuclear capability then a modern weapon and infrastructure also is the right course of action. And if it is our desire to safely and effectively reduce our total nuclear inventory, both deployed and on the shelf, then modernization of weapons and infrastructure again, in my view, is absolutely the right course of action.

I believe modernizing our weapons and infrastructure allows us to place greater confidence in a hedge strategy that doesn't rely on a large inventory of weapons. So contrary to the myth, I believe that modernizing our weapons and production capability is an essential element of reducing out stockpile inventories that we have today.

Let me recap the myths here.

Just because our nukes are safe and secure and reliable today doesn't mean that we can be assured that they will be tomorrow if we take no action.

Time is not on our side.

We do not need new capability, but we do need weapons designed with 21st Century requirements in mind and the realities of the 21st Century in mind.

A modern, reliable inventory of weapons supports non-proliferation goals. Failure to sustain confidence in that inventory will result in increased proliferation.

A modern weapon and production capacity will allow us to further reduce inventories, regardless of what that target inventory is.

I find it interesting that currently the United States is the only declared nuclear power that is neither modernizing its nuclear arsenal nor has the capability to produce nuclear warheads in a production type facility.

Notably, Russia is upgrading their delivery platforms and their weapons. China is upgrading their delivery platforms and their weapons. Additionally, our closest friends and allies, the United Kingdom and France, have come out publicly to validate the need of a viable nuclear deterrent in the 21st Century and have committed to not only modernizing their delivery platforms but their weapons as well, and sustaining their production capability.

If we continue on our path, which is a path of inaction at this point, I believe we are on a path to unilateral disarmament, and I don't believe that is a path that is in the best benefit of the United States of America.

The only wrong action regarding our nuclear infrastructure and our nuclear weapons, in my view, is to do nothing. We owe it to the American people to properly care for this unique capability that is essential to our national defense, and in my view the time to act on these issues is now.

Thank you very much. I look forward to your questions.

[Applause].

Question: Darryl Kimball. I'm the Executive Director of the Arms Control Association.

Thanks for your remarks. I wanted to just make a very brief comment and ask a question on the subject of deterrence.

I personally respect your experience, your views, and I think it's very useful to have back and forth about some of the debate that is going on about the future of the nuclear arsenal infrastructure. But I think that we're better served with a direct discussion. I don't agree with the way that you characterized these so-called myths. So I think there's some false arguments that you've presented from the other side. So that's an observation, and I would invite you to in the future try to engage with others who hold these views so that they can express them in their own way.

My question goes to the subject of the conference which is what is the future of deterrence? You've thought about this, you think about this every day. We're 20 years after the end of the Cold War. We're in a post-9/11 environment. How would you briefly describe the role of nuclear weapons in deterrence? We heard some very good questions from Congresswoman Tauscher about how we need to rethink this, but if you could just address that question. What is nuclear deterrence for in today's changing world?

General Chilton: There are a couple, and Congresswoman Tauscher mentioned one of them certainly, and that is as long as there is a nuclear risk to the United States of America it's important to maintain a nuclear deterrent.

I think there's a broader discussion that could be had on that as well, and a lot of folks have written on this subject matter looking back to the last really major war this world has experienced, World War II. When you look at even casualty rates in all the wars rolled up since then, minuscule compared to what happened in World War II. There are those who would posit, and I

don't think they're wrong, that the presence of nuclear weapons in the world as a deterrent has deterred not only nuclear war but conventional war on the scale that we saw in the first half of the 20th Century.

So I think there are multiple reasons to be looking at the need for a nuclear deterrent, not the least of which is today there still exist nations in the world who can destroy the United States of America with their nuclear capability.

The difference between today and the mid 1980s is purely intent, not capability. Intent can change overnight.

So we need to look at it both from a nuclear threat to United States capability, but also a deterrence factor with regard to conventional warfare. Then I would add the blackmail element as well that Representative Tauscher talked about. Obviously North Korea is not today likely to develop a capability akin to Russian capability which literally is an existential threat to the United States of America, but it could be a capability that could blackmail us. In that regard when we start thinking about deterrence it broadens the aperture beyond just our weapons, to include our defenses.

So it's an area ripe for discussion and one that I think we need to have and I think, again, Representative Tauscher is correct that the underpinnings and the bilateral discussions that need to take place here as we inform ourselves from the NPR [Nuclear Posture Review] will be essential to help us move forward.

Question: Greg Mellow, Director of the Los Alamos Study Group.

I'm not sure that in our discussions about nuclear testing and the future of nuclear testing that we're fully admitting to ourselves as a community what the real likelihood of the United States conducting a nuclear test under really any future scenario. Are we really talking in a balanced way about the security impact of the United States conducting nuclear tests, what it would cost the United States, what it would trigger in other countries?

Personally I think the prospects of the United States conducting a nuclear test under virtually any foreseeable circumstances are now zero. So when we talk about the possibility of resuming testing, I think we're talking about a fantasy. I think we're past that now. And I think that when I hear these discussions it feels like we're talking 15, 20 years ago.

Could you address this please?

General Chilton: You're probably asking the wrong person to make an assessment on whether or not we ever need to test or not because I ask that question all the time and I hear two sides of the argument.

But what I would say, I would be hesitant to say that the United States would never test. You can imagine scenarios where you would absolutely need to test. Now whether those are plausible scenarios or not is the debate, I think. But the United States should never put itself in a position to surrender its ability to defend itself because we said we're not going to test.

Now someone has asked me before, does that mean you're against CTBT[Comprehensive Test Ban Treaty]? Well, there are parts of CTBT that legally allows for withdrawal from the treaty. You would expect if we signed the CTBT that we would still respect that ability to do that should we ever get to a point where the defense of our country was at risk.

But as far as the technical side of that, you're asking the wrong guy. I think I could probably do a poll in the room and it might be split, certainly a split amongst the scientists who, when asked do you think we can proceed down a path of life extension programs and never modernize our capability and not ever have to test, or modernizing our capabilities with new designs, design adjustments, and never have to test, we'll get varying answers and opinions on that.

Question: Todd Jacobson with Nuclear Weapons and Materials Modern.

I was curious what your views are on presenting this argument to the new administration and what challenges you feel in making this a priority to that and what your thoughts are on that.

General Chilton: Actually I started thinking about that a year ago. The whole idea was, and the idea is, to again as I said earlier, to shine some light on this topic. It's been something that we don't want to talk about, or it hasn't been able to generate discussion outside of subcommittees. So I've been thinking about the next administration since last year and how we can stimulate debate and discussion in forums like this and articles in the newspaper and debate on the Floor of the Senate, debate on the Floor of the House of Representatives, and the appropriate studies and bipartisan approach to this which is why I've been talking about it for the last year. I'm very encouraged that we're on a path to have that discussion.

If we can't talk about this, if we can't agree to define the defense lines or the boundaries or limitations or define the problems that need to be solved, we'll never get there.

So I'm very [interested in it] and again, I compliment Chairman Tauscher for her leadership in this area.

Question: General Chilton, thank you for your presentation. Leah Montegura with the Center for Arms Control and Non-Proliferation.

My question goes to your assessment that modernization will actually help non-proliferation. You mentioned Iran, North Korea, Pakistan, and those developments certainly have been problematic. But we're talking about a handful of problematic states. We're not talking about 180 problematic states. And last year Malaysia, on behalf of the Non-Aligned Movement questioned the United States commitment to the Non-Proliferation Treaty citing specifically failure to ratify the CTBT and also pointing specifically to the development of the reliable replacement warhead.

My question is, how would you respond to the Non-Aligned Movement and to leading non-nuclear states that are questioning the United States' commitment specifically because it's headed to modernizing its arsenal. Thank you.

General Chilton: I would just repeat what I said earlier, we have not modernized. There's been no traction for RRW. We've taken apart our nuclear production capability, it's zero now. We can make a few in the laboratory. We've reduced our inventory. That has not slowed proliferation amongst countries like Korea and Iran. It has not slowed testing in Pakistan or India. Then I would reiterate the point that if there's a loss in the confidence in our ability to provide a nuclear umbrella I would anticipate that other allied or friendly nations of ours that enjoy that umbrella today would feel threatened enough, if not by the big nuclear powers, than by some of these more rogue elements who go off and develop their own capabilities. That is a proliferation that I think would be much bigger scale than what we've seen over the past 15 years. So I think it is our responsibility to modernize.

[Applause].

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