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THE FUTURE OF U.S. EXTENDED DETERRENCE

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P R O C E E D I N G S

MR. ROSE: Good morning and welcome to the Brookings Institution. My name is Frank Rose and I'm a senior fellow here at Brookings. Thanks for joining us for this morning's program on the future of U.S. extended deterrence. We have a great program this morning to explore a very important, but extremely complicated National Security issue.

Our program this morning will consist of two parts. First, we'll kick-off the event with a keynote address by David Trachtenberg, the deputy undersecretary of defense for policy, who will outline the Trump administration's approach to extended deterrence. Secretary Trachtenberg's address will be followed by a panel discussion with three distinguished experts in the field to explore the issues in greater detail.

On that note, it is my distinct honor and pleasure to welcome Mr. David Trachtenberg, the deputy undersecretary of defense for policy back to Brookings. Secretary Trachtenberg has over 35 years of experience working in the private sector, the executive branch, and the legislative branches of government. Immediately prior to assuming his current position in October 2017, Secretary Trachtenberg served as president and chief executive officer of Shortwaver Consulting, LLC., a national security consultancy.

But this is not the first time he has served at the Pentagon. From 2001 to 2003 Secretary Trachtenberg was the principal assistant secretary of defense for international security policy, where he was my boss. In addition to his work at the Department of Defense, and the private sector, he's also served on the House Armed Services Committee, as a professional staff member.

Secretary Trachtenberg will provide about 20 to 25 minutes of opening remarks. Following that, he's kindly agreed to take some questions from the audience. So, therefore, without further ado, please join me in welcoming the deputy undersecretary of defense, David Trachtenberg (applause).

MR. TRACHTENBERG: Good morning everyone, good morning everyone (laughter). And thank you, Frank, very much for the kind introduction. I appreciated the

invitation to be here, Frank. I appreciate the invitation to come back to Brookings and speak with you today on a topic that is very important to discuss. Although, this is a fine spring day, and I'm sure we'd all rather be talking about other things than nuclear weapons issues, on a nice spring day like today.

But nevertheless, I am pleased to be here and I certainly appreciate the opportunity exchange used on this important subject. I had a professor at Georgetown once who talked about these particular issues, and his one regret was that he didn't teach a course in art history because he thought art history was a lot more uplifting than this subject matter (laughter); which I fully understand.

But notwithstanding that, I've been asked to discuss the future of extended deterrence and, put simply, because it is a complex issue, when we talk about extended deterrence we are talking about the ability to prevent adversary aggression against our friends and allies by extending our protection to them. And this includes the protection offered by our nuclear forces, which is why extended deterrence is often, sort of, colloquially referred to as U.S. nuclear umbrella. It's a way of assuring allies that the United States has their back, and is committed to their security. So, what I'd like to do is put this long going and long-standing U.S. commitment in context.

First, I would like to give a brief overview of the security environment as described in the National Defense Strategy and the Nuclear Posture Review. Then I'd like to spend a few minutes talking a bit about central deterrence; in particular, the relevance and importance of our nuclear modernization program as the foundation upon which we build our extended deterrence commitment to allies. Then I'll give some thoughts on the allied perspective, and then sort of sum up by addressing the continued importance of our constructive ambiguity doctrine and why a no first use policy, with respect to nuclear weapons, really is not called for in today's environment.

So as far as the border contact goes, the 2018 National Defense Strategy rightly describes today's security environment as more complex, volatile, and dangerous

than any in recent memory. Today the principal issue facing the department is the eroding U.S. military advantage vis-à-vis China and Russia.

For years our competitors have developed military concepts and capabilities intended to make it more difficult and costly for the U.S. to intervene in the defense of our allies, partners, and interests. The conventional force dominance that we have enjoyed for decades has created an incentive for our competitors not only to upgrade their own conventional military forces, but to rely more heavily on nuclear weapons in their strategies as a way of asymmetrically offsetting our conventional force advantages.

Russia and China have both strengthened, and North Korea has developed the ability to threaten or use nuclear weapons as a means of challenging the West and overturning the established international order that the U.S. helped create after World War II. Disturbingly, this includes an apparent increased willingness by Russia to contemplate the limited use of nuclear weapons, as evidenced by Russian leadership statements, military exercises, and nuclear force investments.

These investments include the modernization of Russia's large number of non-strategic, or so-called tactical nuclear weapons, and the deployment of ground-launch cruise missile in clear violation of the Intermediate Range Nuclear Forces, or INF Treaty.

Thus, maintaining the efficacy of nuclear deterrence is as important today as it has ever been; while the re-emergence of great power competition makes extended deterrence more critical, and arguably more challenging, than ever before.

Now, in committing to defend NATO members in Europe and our allies in Asia, the U.S. helps deter would be aggressors from attempting to leverage their expanded and modernized nuclear capabilities to alter the existing political, territorial, and security arrangements, we understand that the security environment has changed and that nuclear threats are more prevalent for our allies today than they have been in years, and that as a result, allies feel new anxieties.

To this end, the 2018 Nuclear Posture Review not only emphasized the

important of extended deterrence to achieving U.S. objectives, but went further to clarify that the assurance of allies and partners is one of the four explicit roles for U.S. nuclear weapons. This assurance role, in combination with the role of deterring both nuclear and non-nuclear attack against the United States, its allies, and partners, reflects an ongoing U.S. policy commitment to the continued importance of extended nuclear deterrence in our strategy.

Now, at this point I think it's important to note that the United States cannot credibly extend nuclear deterrence unless it can ensure its own security with some degree of confidence. Thus, I would agree extended deterrence does not exist in a vacuum. Rather the credibility of extended deterrence hinges on the robustness and reliability of central deterrence, that is, namely, the continued effectiveness of our strategic nuclear forces. So there is a clear linkage between our central strategic forces, and the credibility and reliability of our nuclear umbrella.

As a recent article co-authored by a Brookings senior fellow named Frank Rose recently stated, "America's nuclear capabilities underpin its key alliances and are a crucial bulwark against growing Russian and Chinese regional aggression.

Now, to this end the NPR's tailored deterrence strategy underpinned by flexible nuclear capabilities is intended to ensure that potential adversaries do not miscalculate regarding the consequences of their nuclear threats or actual nuclear use.

The 2018 NPR, consistent with the findings of all previous Nuclear Posture Reviews, produced by both republican and democratic administrations, endorsed the nuclear triad as the most cost-effective and strategically sound structure for ensuring effective deterrence. The triad, of course, is a combination of land-based intercontinental ballistic missiles, sea-based, or sea-launched ballistic missiles and strategic bombers on which our ultimate deterrence rests.

The triad's synergies and complimentary attributes, for example, the reliability and dispersion of our land-based missile force, the survivability of our sea-based

platforms, and the flexibility of our bombers, has served us well for decades, and provide the mix and range of capabilities needed to continue effective deterrence in today's dynamic security environment.

Given the breadth of the roles of nuclear weapons identified in the Nuclear Posture Review, and the diverse and dynamic threats the United States faces in the 21st century, it's imperative that the United States possess a diverse range and mix of nuclear forces to enable us to tailor deterrence to unique adversary characteristics and objectives.

But the triad we have today is now operating far beyond its originally planned service life. In fact, over the past 25 years the United States has made only modest, relatively modest investments in basic nuclear sustainment, life extension, and operations.

Most of the Nation's nuclear delivery systems, on which we rely for deterrence, were built in the 1980s or even earlier; and despite multiple efforts to keep them functional long beyond their intended, originally intended life span, we cannot keep them operational and reliable in perpetuity. So if not recapitalized, modernized, upgraded, these forces will simply age into obsolescence. That is not an acceptable outcome.

Therefore, consistent with the approach taken by the prior administration, the fiscal year 2020 budget request funds all critical Department of Defense modernization requirements, helping to ensure that modern replacements will be available before the nation's legacy system reach the end of their extended service lives. Our DOD Budget, the request for nuclear forces is about 25 billion dollars, which sounds like an awful lot of money, and of course, it is. But it is only roughly 3.5% of the overall Department of Defense budget, a relatively small fraction.

And this includes about 8 billion dollars for recapitalization programs. Recapitalization programs include the B21 Bomber, the ground based strategic deterrent, the intercontinental ballistic missile, the long-range stand-off cruise missile, as well as the Columbia class nuclear ballistic missile submarine. Also includes slightly more than 16

billion dollars to sustain and operate our nuclear forces.

This expenditure is both necessary and affordable. As a relative share of the DOD budget, our plans spending of nuclear modernization at the height of the modernization program will not exceed 7%. This is still less in percentage terms than the major modernization efforts that took place in the 1960s and in the 1980s.

But more importantly, because our nuclear forces are the ultimate guarantor of our security, it's dangerous to assume we can guarantee deterrents on the cheap. Although maintaining the efficacy of our nuclear triad requires a significant and a sustained level of investment, I would argue the cost of sustaining an effective nuclear deterrent are far less than the cost of failing to do so.

As the bipartisan National Defense Strategy Commission stated in its recent review, we believe that the 2018 NPR offers an appropriate option for meeting U.S. nuclear deterrents and assurance requirements in this era of major power rivalry and we urge DOD to proceed along the path the NPR lays out. Our extended deterrence posture depends on the credibility on central deterrence and this, in turn, depends on the successful completion of our modernization program.

Now, extended deterrence poses a more complex set of challenges for the United States than central deterrence for several reasons. For example, the United States must possess deterrence capabilities that are credible from the adversary's perspective, with credibility being a function of both U.S. capability and the will to exercise that capability; in essence, the will to go to war, possibly nuclear war in the defense of others.

In addition, the U.S. commitment must be viewed as credible by our allies, who we are seeking to defend, and their views regarding the credibility of our security guarantees to them may differ. For example, our Asian allies may have a different view of what it takes to assure them of our security commitment than our European allies. And even our European allies may hold different views among themselves.

Finally, of course, in the unlikely event that deterrence fails, the hopefully

unlikely event, obtaining and maintain domestic support to actually employ nuclear weapons on behalf of an ally may be particularly challenging, especially if doing so exposes the U.S. homeland to a devastating counter-strike. Therefore, missile defenses also have an important role to play in bolstering the credibility of our extended deterrent.

So, what are we doing from an extended deterrence perspective to credibly assure our allies? Well, first, the National Security Strategy provides a clear commitment to allies, noting in part, that together with them we can successfully deter and, if necessary, defeat aggression against U.S. interests, and increase the likelihood of managing competitions without violent conflict.

Follow-on guidance reflected in the National Defense Strategy directs both that we take steps to build a more lethal force and strengthen our allies and partners by expanding regional consultative mechanisms and collaborative planning in order to create an extended network capable of deterring or decisively acting to meet the shared challenges of our time.

In addition, both the Nuclear Posture Review and the Missile Defense Review describe the importance of allies and partners to U.S. National Security, and the central role played by both nuclear and missile defense capabilities in extended deterrence. Now, while my remarks are focused on nuclear extended deterrence, it's important to reiterate that missile defense does contribute to deterrence, deterring both threats to the homeland and to our regional allies and partners by undermining a potential adversary's confidence in his ability to achieve his desired political or military objectives.

The uncertainty this creates about the success of an adversary's actions, coupled with the knowledge that the U.S. has the ability to respond with a counter-attack of its own, should make an adversary think twice about launching missiles against the U.S., or our allies or partners. As such, missile defense directly supports U.S. extended deterrence guarantees.

With regard to Europe the U.S. commitment to NATO is unwavering. A

strong, cohesive nuclear alliance is the most effective means of deterring aggression and promoting peace and stability in the Euro-Atlantic region. And our extended deterrent is a demonstration of our commitment to maintaining the security of the alliance.

Importantly, NATO is addressing the change security environment to make clear that any employment of nuclear weapons against NATO, however limited, would not only fundamentally alter the nature of a conflict, but would result in unacceptable cost to an adversary that would far outweigh the benefits it could hope to achieve.

Since the 2014 Wales Summit, NATO has initiated measures to ensure that its overall deterrence and defense posture, including its nuclear forces, remains capable of addressing any potential adversaries, doctrine and capabilities. This draws on NATO's longstanding commitment to adapt its posture to changes in the security environment. While many of NATO's specific nuclear adaptation efforts remain classified, the U.S. has publicly demonstrated its commitment to the alliance by extending the life of the B61 gravity bomb, a stance that was reaffirmed in the 2018 NPR; the B61-12 gravity bomb will replace earlier versions of the B61, will have a lower yield, and better accuracy than earlier variance.

The United States is also incorporating nuclear capability onto the F35-A aircraft to be used by the United States and several NATO allies as a replacement for the current aging dual capable aircraft. Current U.S. dual capable aircraft able to deliver that weapon included the F15-E. Several NATO allies also provide aircraft capable of delivering U.S. nuclear weapons forward deployed to Europe. So improved aircraft readiness and the arrival of the fifth general F35 in conjunction with the B61 gravity bomb, will preserve NATO's ability to contribute to regional deterrence and assurance.

While the forgoing efforts are focused on NATO, the 2018 Nuclear Posture Review also announced two supplemental U.S. nuclear capabilities intended to deny regional adversaries the mistaken confidence that any limited nuclear employment can provide a useful advantage over the United States and its allies and partners. This initiative was largely based on Moscow's perception that its greater number and variety of non-

strategic nuclear systems may provide it with a coercive advantage in crises and in lower levels of conflict.

Thus the NPR concluded that the United States must adapt its existing forces with two modest supplemental capabilities to ensure that Russia, China, and others do not perceive an exploitable gap in our regional deterrence posture. The goal of these supplements is to discourage adversaries from even contemplating limited nuclear attacks thereby strengthening deterrence and helping to prevent conflict in the first place.

By modifying a small number of existing sea-launch ballistic missile warheads to provide a low-yield option, and by restoring a modern nuclear sea-launch cruise missile to the force, the U.S. will have credible response options to nuclear attacks of any magnitude. The low-yield, sea-launched ballistic missile and nuclear armed sea-launch cruise missiles are measured responses to close troubling gaps in regional deterrence that have emerged in recent years.

In addition, redeploying a sea-launch cruise missile addresses enormous disparity in non-strategic nuclear forces without attempting to match Russia system for system. That is not our goal and we are not attempting to match Russia system for system.

As General Scaparrotti said in testimony before the Senate Arms Services Committee in March, and I'll quote him, "Russia's non-strategic nuclear weapons stockpile is of concern because it facilitates Moscow's mistaken belief that limited nuclear first-use, potentially including low-yield weapons, can provide Russia a coercive advantage in crises and at lower levels of conflict".

The 2018 Nuclear Posture Review calls for adjustments to U.S. nuclear forces to close this perceived gap on the escalation ladder and reinforce deterrents against low-yield nuclear use.

Both of these supplemental capabilities will complement our existing capabilities by providing assured, tailored options in the face of increasingly advanced air and missile defenses. In addition, the unique attributes of a nuclear sea-launch cruise

missile may incentivize Russia to accept constraints on its non-strategic nuclear capabilities.

These two supplements do not require nuclear testing, do not violate any arms control treaties or other international obligations, and they do not lower the threshold for nuclear use. Rather, they are intended to raise Russia's threshold for employing nuclear weapons by convincing Russia that it would gain no advantage by using low-yield nuclear weapons or engaging in limited nuclear strikes.

In over the last 10 years, allies in Europe and Asia have become much more engaged in discussions with us on extended deterrence issues. We have dedicated and regularly occurring dialogues with these allies, which is useful for emphasizing the continued importance of U.S. extended deterrence commitments.

Despite all the challenges that go with maintaining effective and credible nuclear deterrence, the alliance still values the U.S. extended deterrence commitment. As NATO Secretary General Stoltenberg said at the Munich Security Conference last year, a world where Russia, China, and North Korea have nuclear weapons, but NATO does not, is not a safer world.

That is why the ultimate guarantee of NATO security is the strategic nuclear forces of allies, particularly those of the United States. And both the 2016 and 2018 NATO Summit declarations reaffirmed the importance of U.S. nuclear weapons and dual capable aircraft contributions to NATO. Last year the Brussels Summit declaration explicitly stated, "NATO's deterrence posture relies on United States nuclear weapons forward deployed in Europe and the capabilities and infrastructure provided by allies concerned.

Russia's increasingly aggressive posture in recent years has not gone unnoticed by our European allies, highlighting the continued need for credible U.S. extended deterrence. And in Asia, China's efforts to expand its influence, enhance its military reach, and develop its regional nuclear capabilities, is a cause of concern for our partners in the Indo-Pacific region.

In Japan, strong public antipathy to nuclear weapons remains a challenge for

U.S. extended deterrence. However, the United States and Japan have for years engaged in a regular extended deterrence dialogue that has informed and elevated each nation's understanding and insights as to the U.S. commitment.

In South Korea uncertainty surrounding progress on denuclearization may foster concerns over the implications of the U.S. - North Korea dialogue for extended deterrence. However, during the 50th U.S. Republic of Korea security consultative meeting, then-Secretary of Defense Mattis and Minister of National Defense Young, noted that U.S. forces in South Korea played a critical role in maintaining peace and security on the Korean peninsula over the past 65 years, and reiterated the U.S. commitment to maintain the force levels necessary to defend South Korea.

In these ways, the transatlantic and transpacific alliances face quite similar challenges posed by major power neighbors who have prepared to achieve something of a *fait accompli* at the conventional level of war, and to expand the scope, scale, and intensity of conflict if the U.S. and its allies attempt to reverse that *fait accompli*.

Another issue that has implications for the continued viability of our extended deterrence is the issue of no first use, no first use of nuclear weapons. Let me state at the outset here that U.S. declaratory policy on this issue increases the credibility of our commitment that we are prepared to employ nuclear weapons if necessary on behalf of allies and partners.

The United States has a well-established policy of calculated ambiguity regarding U.S. nuclear employment that has long deterred potential adversaries from nuclear coercion or aggression. It's a bipartisan policy reiterated in some form or fashion by every presidential administration since the early days of the nuclear era.

Notably, in 2009, the bipartisan Congressional Strategic Posture Commission, led by former Secretaries of Defense William Perry and James Schlesinger, considered whether the united states should adopt a policy of No First Use of nuclear weapons, and concluded that the United States, "should not abandon calculated ambiguity

by adopting a policy of no first use".

This policy pronouncement was right then and it continues to be right today. A policy of no first use would damage the health of our alliances because it could call into question the assurance in the eyes of our allies and partners that the United States would come to their defense in extreme circumstances.

For NATO, neither the United Kingdom nor France have the full range of capabilities and associated options that the United States possesses. They cannot replace U.S. guarantees.

Our Asian allies rely substantially on U.S. nuclear forces for their deterrence needs and the adoption by the U.S. of a no first use policy could incentivize others to develop their own nuclear weapons, which would seriously undermine our nonproliferation policy. In fact, I would argue that our current policy is one of the greatest disincentives to nuclear proliferation today.

Conventional forces are also unlikely to provide the same deterrent effect as nuclear weapons, as they may not be able to hold at risk those assets that an adversary values most, or they may not be positioned to respond in a timely enough manner to deter aggression in vital regions. Moreover, allies might feel the need to recalibrate how accommodating they might have to become to protect their interests in the face of nuclear armed adversaries.

Adoption of a no first use policy would also cause U.S. declaratory policy to diverge from our UK and French counterparts; a significant fissure within the NATO alliance that potential adversaries could seek to exploit. Such a policy could embolden adversaries to test what they might perceive as a weakened U.S. resolve to defend our allies and interests with every means at our disposal. This could simplify the decision calculus of potential adversaries and actually undermine the deterrent effect of our nuclear forces.

Despite the apparent attractiveness to some of a no first use policy, no presidential administration has seen it necessary or wise to abandon the tradition of

calculated ambiguity that has served us well for decades. Given the security environment we currently face, as articulated in the National Defense Strategy, the NPR, and the Missile Defense Review, this is simply not the time to consider such a significant break from long-standing bipartisan precedent.

In summary, let me say both the National Security Strategy and the National Defense Strategy released by this administration have emphasized the continuing importance of our allies and our alliances to the security of the United States. In turn, both the Nuclear Posture Review and the Missile Defense Review reinforce the importance of extending deterrence to our allies and partners.

The bottom line is that extended deterrence reinforces the security relationships we have with allies. It sends a strong message of unity to potential adversaries and it contributes to our nonproliferation goals and objectives. We are, therefore, committed to insuring the continued viability of extended deterrence by continuing the nuclear modernization programs begun under the previous administration, by continuing and expanding on the extended deterrence dialogues that we currently conduct with our treaty allies, by refining and clarifying U.S. declaratory policy as described in the Nuclear Posture Review, and by pursuing critical, though modest, supplements to our existing triad of nuclear forces; the low-yield submarine launch ballistic missile and the sea-launch cruise missile.

These efforts underscore that nuclear deterrence remains the bedrock of U.S. national security. The U.S. nuclear deterrent must dissuade any adversary from mistakenly believing it can benefit from any use of nuclear weapons, even in a limited way against the U.S. or its allies and partners.

Our nuclear deterrent underwrites all U.S. military operations and diplomacy around the globe. It is the backstop and foundations of our national defense. So in an era of renewed great power competition, allies and partners should take comfort in knowing that the United States has the will and the flexible resilient nuclear capabilities needed to deter nuclear attack and coercion against us, as well as against them.

Let me conclude just by thanking Brookings for the opportunity to come here today, present the department's views, and discuss these issues that are critically important to our national security, and with that I'll be happy to take questions. So thank you all very much (applause).

SPEAKER: Hello Secretary Trachtenberg, thank you for taking the questions. My name is Dan Leone, I'm a reporter with Defense Daily. I have a question actually about the Department of Energy which is building a couple of facilities to make the triggers for the future DBSD warheads. Both the Armed Services committees have paled a little bit about the cost of doing two facilities and said, why not do one; so I wondered whether the DOE had given you any assurance that they can meet the timetable for the GBSD role out if Congress limits them to one facility for these plutonium triggers?

MR. TRACHTENBERG: That's a great question for my colleagues at the Department of Energy (laughter), who I wish were here and would be better able to address that. I'm aware of the issue, but I wouldn't want to, sort of, step on my colleagues' toes by addressing the details of that. So I'll defer on that one for the time being, at least.

SPEAKER: Thank you secretary, Ang Jungcha with the Voice of America, if you could comment on the North Korean threat. North Korea tested technical weapons last week and are there any signs that North Korea is advancing its military capabilities, and how is DOD currently preparing for a possible provocation by North Korea at a time when diplomacy is at a standstill? Thank you.

MR. TRACHTENBERG: Sure, good question. We hope there will not be a provocation that the North Koreans will engage in. We are, of course, on the one hand cautiously hopeful that the dialogue that we have engaged in with North Korea, that President Trump has engaged in with Kim Jong-Un, will lead to very positive development, ultimately in the full, complete denuclearization of North Korea.

At the same time, we are certainly mindful. We are approaching these discussions -- **have** been approaching these discussions with our eyes wide open. We are

certainly mindful of the capabilities that North Korea has produced. We're mindful of the threat that North Korea poses, not only directly to the United States, but to our regional friends and allies as well.

So we are hoping for the best. We are certainly not there yet, but we also understand that while North Korea has refrained from nuclear tests and ballistic missile tests for quite some time, we certainly understand that the capabilities that North Korea possesses still exist and still pose threats that we need to deal with. That was certainly one of the reasons why in our Missile Defense Review we placed some significant emphasis on missile defense capabilities; not just to defend the homeland, but regional defense capabilities as well.

So we can be hopeful, but at the same time we are and need to continue to look at the ongoing situation with our eyes wide open fully recognizing that there is a history there as well that we need to keep in mind.

SPEAKER: Hello Secretary Trachtenberg, Mark Buckman from the National War College. Thank you for your comments today and for taking questions. My question has to do with progress on the low-yield W76 warhead, can you tell us anything about what the United States has done so far, or is in the process of doing, and does the Administration feel that it needs Congress' permission to go forward with that?

MR. TRACHTENBERG: We certainly made clear what we intend to do to the Congress. Congress is aware of our plans on both the supplemental capabilities that I mentioned with respect to the low-yield ballistic missile warhead, we are moving forward to do that, and again, I would reemphasize that that is not -- that what we are doing is not developing a new nuclear weapon. What we are basically doing is we are taking an existing nuclear weapon and we are modifying it in a way such that the yield of that weapon is reduced.

I found it a little bit interesting because many, certainly some of the critics of what we are doing have been arguing against a low-yield ballistic missile option on the

grounds that it may make nuclear weapons more usable. That is certainly not our intent, and I would argue it has just the opposite effect. It makes nuclear weapons less usable from the standpoint of an adversary perspective.

But I would also argue that I think some of the critics of our plan to lower the yield of those ballistic missile warheads, have also been critical of what they have seen as the high-yields and the high explosive power and destructiveness of the current nuclear arsenal. So, on the one hand there are critics who argue we have too much destructive power in our nuclear arsenal, but on the other hand, our efforts to sort of lower the destructive potential of our weapons are also being criticized as making nuclear weapons more usable.

I think those positions are internally inconsistent. And in fact, I see what we are doing with respect to the low-yield ballistic missile as a means, as I said, of hopefully removing any misperceptions that an adversary might have that they have some kind of exploitable advantage that allows them to take more risks, engage in nuclear coercion, or actually to engage in aggression, even conventional aggression, because they feel they have a capability on the nuclear side that the United States doesn't have, or that the United States would be forced to take an action that could immediately escalate a conflict to a level that we certainly don't want to go down.

SPEAKER: I my name is Sy Min, I'm a reporter from the Radio Free Asia. I have one more question about North Korea. You mentioned that U.S. maintain formal extended turnstile along with (inaudible) Korea, so I want to know what kind of that this (inaudible) has been made during the style of (inaudible) Korea, and then what is the U.S. specific extended policy talk with North Korea?

MR. TRACHTENBERG: I'm sorry I didn't catch the first part of that question?

SPEAKER: Okay, so you have been maintaining the (inaudible) about extended policy against North Korea, so can you tell me specifically what have you been

discussing about that, so what is the U.S. extended policy against North Korea direct?

MR. TRACHTENBERG: Well we have been maintaining a dialogue with the Republic of Korea. That dialogue is ongoing. We talked to the Republic of Korea when we developed the Nuclear Posture Review. We made sure that we were aligned and that the Republic of Korea, as well as our other allies, of course, regionally, were aware of where we were going, what we were recommending, and why we were proposing to do that. I think it's been a robust dialogue all along. I think it's been a productive dialogue all along.

We are, of course, aware of concerns with respect to North Korea and their programs, and the threat North Korea's capabilities pose. But I think overall, I have to say the dialogue, the consultations, and the relationship that we had with our allies on these particular issues that we are talking about here has not only been very robust, I think it's been very well received by our allies and partners. And this is not sort of a one and done opportunity here.

We continue to engage in a variety of forums on this and other issues with our Republic of Korea allies, our Japanese allies, and other friends and partners in the regions. So overall, I think it's been very well received and leading to a very positive outcome.

There were no surprises when we released the Nuclear Posture Review in terms of our allies' perceptions. They understand our rationale, they understand why we are going forward with the supplemental capabilities that we proposed, they understand our commitment to extended deterrence and to making sure that the relationships and the security guarantees that we provide to our regional allies and partners are strong and remain strong. And this Administration is committed to maintaining the strength of those security guarantees. (Long pause) Frank you want to pick it?

MR. ROSE: Just one more, of course.

MR. TRACHTENBERG: Okay, yes Sir?

SPEAKER: Hi I'm Hank Gafney. I spent 13 years on NATO nuclear

weapons and another 13 years of dialogues with the Russians --

MR. TRACHTENBERG: Well, I'll let you answer the DOE question
(laughter).

SPEAKER: But what's the prospect of real dialogues with the Russians? I keep hearing rumors that the administration is not going to renew New START, is that true? And what are the prospects for actual dialogues with the Russians?

MR. TRACHTENBERG: Well, look, that is an excellent question. The prospect for dialogue with the Russians -- we are certainly open to dialogue with the Russians. Whether New START is renewed or not renewed is an issue that has not been decided within the administration. It's one of any number of issues that we are looking at in the broader context of, where are we going with the arms control dialogue with Russia.

Russia, as you know, and as I alluded to in my remarks, has for years been in violation of the INF Treaty. That says something about Russian behavior. Russia has also been in violation of some other treaty commitments. What does that mean? Do the Russians get to sort of pick and choose which treaties and which obligations they wish to comply with and which they don't? This is all part-and-parcel of a broader dialogue that we're having and a broader examination within the administration as to, where do we go, what is the future of arms control look like, and more broadly, what is the future of our relationship with Russia?

We would like, of course, for the future of that relationship to be put on a more positive trajectory. It is not been on a positive trajectory primarily because of the actions that the Russians have taken and the behavior that we've witnessed in other areas; whether it's with respect to Crimea, Ukraine; whether with respect to Syria; whether with respect to other type and behavior and activities the Russians are engaged in.

The Russians are engaged in a major military modernization program completely re-scoping and replacing a lot of their nuclear systems, both at the strategic level and the non-strategic level. What does that mean in terms of ability to engage in dialogue

with the Russians going forward? What does it mean for arms control?

It's an excellent question. I would say we are certainly not opposed to talking to the Russians about where we go in the future. Unfortunately, Russia's behavior doesn't give a real cause for optimism in my view that we'll be able to get where we'd like to get with Russia down the road in connection with future arms control agreements.

That doesn't mean we won't consider trying, it just means we are in a situation today based on Russian behavior where I think it has become increasingly difficult to move the needle in a positive direction on that dialogue. Hopefully that will change, we haven't given up.

SPEAKER: So it sounds like a big new arms race.

MR. TRACHTENBERG: Oh no, not at all. It takes two to race. As I said previously, we're not interested in matching the Russians system for system. The Russians have been developing an incredible amount of new nuclear weapons systems, including the novel, nuclear systems that President Putin unveiled to great fanfare a number of months ago.

The Russians are doing a number of things; we are simply not doing. What we are trying to do is we are trying to take some modest steps in order to lower Russia's sense of confidence that what they are doing gives them some kind of exploitable advantage that could lead to a miscalculation on their part that we absolutely don't want to see.

MR. ROSE: Secretary Trachtenberg, thank you so much for coming today. I think you did a wonderful job providing us an overview of the Trump administration's extended deterrence policy. You've given us a lot to chew on for the panel, so thanks again for coming to Brookings.

MR. TRACHTENBERG: My pleasure.

MR. ROSE: Please join me in thanking Secretary Trachtenberg (applause).

MR. TRACHTENBERG: Thank you.

MR. ROSE: Thank you very much. Can I ask the panelists now to take

their seats and we'll start the panel discussion. (Long pause) Great.

Great! Well colleagues, we have an excellent panel of experts to further explore some of the issues that Secretary Trachtenberg raised in his keynote address. I call them the extended deterrence dream team (laughter).

First, we have Elaine Bunn who served as deputy assistant secretary of defense for nuclear and missile defense policy during the Obama administration. In addition to her time as deputy assistant secretary of defense, she has over 30 years of experience working extended deterrence issues, both in the Office in the Secretary of Defense, but also at National Defense University.

Next we have Kathleen Hicks who currently serves as senior vice president, Henry A. Kissinger chair, and director of the International Security Program at the Center for Strategic and International Studies in Washington. Prior to joining CSIS in 2014, she had a long career at the Department of Defense including service as both principal deputy undersecretary of defense for policy and deputy undersecretary for strategy, plans, and forces.

And last but certainly not least we have John Wolfsthal who currently directs the Nuclear Crisis Group, an independent project of Global Zero. John has had a long career working arms control and nonproliferation issues, including service as senior director for arms control and nonproliferation at the National Security Council, a senior advisor to Vice President Biden, and in various positions at the U.S. Department of Energy.

So here's how we are going to proceed: I'm going to ask the panel three or four questions and then we will turn it over to you for questions that you may have. And why don't we start the questioning with Elaine.

Elaine, you have worked extended deterrence issues for Democrat and Republican administrations.

MS. BUNN: Mm hmm.

MR. ROSE: So you have a pretty good feel on kind of where we are, where

the allies are? So at the 20 thousand foot level, how has the Trump administration doing on extended deterrence? Are the allies more assured, less assured, or are we about the same as always?

MS. BUNN: I would say that this administration's overall policy on extended deterrence is a bit confused and unclear, confusing and unclear. And I say that because I very much appreciate what David Trachtenberg had to say and especially being very supportive of our alliances.

I think among other things though, what his remarks brings out, what they highlight, is that chasm between what international security experts and specialists who are appointees in the administration say, and what comes out of the president's mouth.

So all the official documents that they have cited, the National Security Strategy, the National Defense Strategy, the Nuclear Posture Review, the Missile Defense Review, they all say how it's, I call it, the right things; the traditional things about alliances. They really do capture our intent to assure allies that we will have common approaches to common challenges, as much as that can be possible in democracies, we'll have common approaches. They really could have been -- those documents could have been written by any administration in the last 70 years. But those very carefully nuanced documents don't seem to reflect the, I'll call it disdain, that comes out of the president about allies and alliances.

In fact, earlier in this administration I debated with myself, I asked myself, do Trump tweets count as U.S. declaratory policy? And I wanted to think no, they don't, that's just kind of off the cuff, from the gut; but the more I think about it in the way it's perceived by allies, just as surely as Lincoln at Gettysburg or FDR making fireside chats on the radio are U.S. declaratory policy, so are the president's tweets.

And so I think the litany of issues that have come out of those has caused uncertainty --

MR. ROSE: Mm hmm.

MS. BUNN: -- with allies. And besides that, those much unexpected, sometimes, tweets or statements at rallies are more media-worthy, they get a lot more press than the one time, very careful, very nuanced—read dull and boring—documents that come out of every administration. So they reverberate around the world a lot more.

MR. ROSE: Great. Kath, John, would you like to add on this?

MS. HICKS: I think that was beautifully stated. And so I just always marvel at how politely our -- (laughter) -- so politely stated.

I would just add, to further Elaine's points that she has already made, we have a tendency, particularly in Washington, to think capital to capital, that we can reassure leader to leader, secretary to cabinet secretary, working level to working level. And that surely goes on for all the reasons that Elaine has said, because there are documents that officials in the administration can point to, there are good relationships that people have, long-standing or new, there are eager allies who want to hear these reassuring messages and translate them up. But we and our allies live in democracies with their open societies, messages carry, and the messages of a president carry to domestic audiences here and abroad, and that reverberates. That has a whole other set of reverberations that we're not capturing well when we try to talk about these official documents or the hard work that's going on behind the scenes. And I think that's really starting to wash over and take over the way in which alliance relationships, to include with regard to extended deterrence, are actually evolving.

MR. ROSE: John?

MR. WOLFSTHAL: Just a brief point. I agree with everything that's been said, but I don't think our problem with extended deterrence is just about the president's tweets. You don't start trade wars with your allies, you don't pull out of agreements that have been carefully negotiated with your allies and leave them in the lurch. So it's not just a question of declaratory policy and intent, extended reassurance and ally management, but a broad suite of economic, political, personal, cultural relationships, all of which are being

diminished and undermined by the president, but the administration's policies. No doubt, and I agree, that the documents repeat words that we believe and that the deep state, for lack of a better word, is trying to hold onto, but it's not just the person at the top. We do have a broad set of policies put in place by this administration that undermine American credibility, and that affects our ability to reassure and deter.

MR. ROSE: Great. Thanks for that.

Kath, let's go next to you. You recently served as a commissioner on the National Defense Strategy Commission. And that group raised some serious concerns that the U.S. was losing its conventional military advantage, especially with regards to Russia and China.

That said, my question to you is as follows, do you believe that the United States is indeed losing its conventional military edge against Russia and China? And if so, how do we reassure our allies that we will meet our extended deterrence commitments in a security environment where the United States no longer has overwhelming conventional superiority like we had in the 1990s and 2000s?

MS. HICKS: Sure. I think the simplest way I can frame this issue is when people talk about defense in the United States, we tend to talk about more or less, more money, less money, bigger force, lesser force size. The reality of the situation today is much less about that than about how we are spending and how we are modernizing. And here you intersect the issue of how the Chinese and Russians are themselves adapting to the world as it is. And they are starting to pace in many significant areas. So you can think about things that will feel very familiar, like cyber space, where I think most people recognize the Russians and Chinese are advancing pretty significantly, space, very concerning. We of course know -- and Dave Tractenberg did a nice job of highlighting what they're doing in the nuclear space, particularly Russia.

But what we're starting to see is that they are gaining capability -- sort of, if you will -- niche or specific capability advantages that make it very difficult for the United

States, increasingly difficult for the United States to deter and assure effectively in these forward regions where our allies and where the extended deterrence question comes into play.

So the United States is really challenged to adapt itself, alter itself in terms of how it operates in the future, rather than just focus on recapitalizing, if you will, overstating the case a bit, the 20th century U.S. military that we've all become used to and love. And so that really is a challenge, not just to the defense department, but to the industrial base, to congress, and to the White House, to really think about how we innovate in this next century when so much of the challenge set is about how we strengthen ourselves in the commercial sector, how we ensure we have, for example, cyber defense through critical infrastructure, whether it's our election systems, our defense industrial base, our energy sector, et cetera, and we get a population that's educated, diversified demographically to be as innovative in the future as it is today, while we know the Chinese and others are investing in things like AI, et cetera.

So that's a very broad-brush way of saying that we have these regional challenges playing out in both the Russia case and the China case. They are a bit different, but they have some common characteristics centered around missile capabilities, jamming capabilities, and the ability or the seeking of keeping the United States from being able to get into a region, take down air defense, which is our traditional mode, and have superiority of the air, land, and sea.

MR. ROSE: John, Elaine, anything you'd like to add?

MS. BUNN: I think that's exactly right because, I mean we talk about extended deterrence, people think it means extended nuclear deterrence. I agree with both of you, extended deterrence is much more than that. And, besides, I mean there's what we do for allies and then there's what they do, and then what we do together. And so all of it matters, all of it matters for these alliance relationships.

MR. ROSE: Great. John, let's go to you next. John, you've been a strong

advocate of the United States adopting a no first use of nuclear weapons declaratory policy. From your perspective, one, why do you believe the United States should do this, two, why is now the right time, and three, how do you bring the allies on board? You and I have both worked this issue with the allies and you know that the allies have been very, very reluctant to have the United States adopt such a policy.

So can you kind of provide us a little insight?

MR. WOLFSTHAL: Sure, happy to, Frank. And thanks for having me and putting me on the dream team. I'm the bench player here.

So I think no first use has to be in the mix as part of the discussion. Obviously you have to weigh the costs of adopting that policy, and there are costs, and the benefits that you gain. In my mind, I look at the number one threat facing the United States and our allies is the potential use of nuclear weapons, not just deliberate, but also accidental. And I think we tend to discount the inherent systemic risks of maintaining our forward deployed and our first use nuclear policy, we sort of bake it into the system. But there are real risks there. I mean we have forward deployed weapons, those are security challenges, there's a crisis instability challenge that we add to. Yes, Russia has a role to play in that, but it takes two to dance. And they look at us and are worried about what we might do first. And so I worry about maintaining very quick use, hair trigger postures where the Russians -- and we both have to worry about nuclear preemption. That shortens the decision timeline, and especially if we're going into a post INF world. I worry about that.

So anything I can find that will help raise the nuclear threshold, reduce the risk of nuclear weapons, to me should be on the table.

It's also not clear to me, given the work -- and we all have experience here -- we tend to say oh, well, our threatening first use really deters the Russians and Chinese from doing that. I think we need to unpack that very carefully. We believe it to be true because we believe it to be true. But there isn't a lot of evidence that actually says the Russians are ready to attack us, but it's only because we threatened the first use of nuclear

weapons that they don't. It's because of our conventional advantages. It's exactly what David Trachtenberg said, the Russians know they can't match us conventionally, which is why they have to threaten first use. Why then do we have to threaten first use? That doesn't make sense to me. We are trying -- in fact we make it easier for the Russians to threaten first use by doing something we ourselves don't need to do.

I think the essential question you asked here is how do you get the allies on board, can you get the allies on board, because we all agree extended deterrence and reassurance is a critical part of alliance management. I think it depends on who you are talking in the alliance system. If Kath or Elaine or you go and talk to the defense ministry in Germany, in Japan, in France, they'll say of course you have to maintain your current nuclear posture. Politically it would be a nightmare if you changed it and, you know, we want to keep the Russians guessing. You talk to the foreign ministry, you talk to the people that focus on arms control, the NATO relationship more broadly, the political actors, they're more open to that. And I think part of the challenge here is I talk to my community, you talk to your community. We need to actually force these communities to interact with each other because you can't have a sustainable alliance policy if the public in these countries oppose U.S. nuclear policy, oppose forward deployment of nuclear weapons, and we say we don't care what you think, we're going to keep doing this anyway. We have to constantly reexamine, is there a benefit there. And if they outweigh the costs, then we should maintain it. But in my estimate, the costs far outweigh the benefits that we get by threatening first use.

MR. ROSE: Elaine, Kath?

MS. BUNN: I totally agree that it depends on who you talk with in allied countries. And when I hear somebody say well this country thinks or our allies think, I go, uh-huh, uh-huh, no. Tell me who, tell me exactly. But having been involved in dialogues, extended deterrence dialogues with allies, NATO, yes, but all Japan, South Korea, extended deterrence dialogues that are co-chaired by the foreign ministry and the defense ministry, for

instance. I think it's too simple to say it's defense versus foreign ministry. I don't think that's right. I think it's the deeper one gets into these really hard issues the grayer it is.

And so I mean I agree with you that there's no data, there's no proof that not having enough first use policy is good for deterrence. There's no proof that having one is good for reducing accidents or miscalculations either. So I mean it is -- having looked and re-looked at this -- oh, let's see, Clinton Administration, George W. Bush Administration, Obama Administration -- it is, after looking at it very carefully and talking with a range of people in allied countries, it has come out so far that not a good idea for now. So I guess I don't say never. I would be a little more comfortable if you would say, what about enough first use of any kind of nuclear, chemical, bio. There are threats that we sort of -- we don't have biological weapons. So how do you deter really bad things from happening to our allies -- not just to us, but to our allies without that possibility, ambiguity? I'm not there yet, John.

MR. ROSE: Kath?

MS. HICKS: Yeah, I'm closer to Elaine. I'm not there yet. I think it's a possibility. On the agenda for nonproliferation, I'd put it lower down in my priorities than things like, you know, adding on the tactical or nonstrategic nuclear weapons for the United States. There are other things I would go at first, certainly making sure we can get a new start. There are a lot of areas I would go too first before I would think that it's appropriate to really get back to this issue of whether our calculated ambiguity pledge or approach is wrong.

I agree very much with Elaine that a lot of the rationale in the defense world has been around chem, bio in particular, and bio being the more -- even more threatening of the two where the U.S. of course as a nonpro priority stays out of those types of weapons and thus we have nuclear as the sort of fall back. There is some, you know, debated evidence that in the case of Iraq that there was a view that Saddam Hussein was deterred in the '90-91 period by the fear that the United States might bring nuclear weapons to bear

under the first Bush Administration. That's really the only case we have with some evidence that the fact that the U.S. had this calculated ambiguity policy created pause of action in an adversary. That's not Russia and China. I do think you have to tailor. But it's more than nothing.

MR. ROSE: Great. Well, let me pose one final question to the panel, and it's a two part question.

First, what steps do you believe the United States need to take, both political and military, to enhance extended deterrence going forward?

And here's the \$10,000 question, what are the potential consequences if allies begin to lose face in U.S. extended deterrence?

So who would like to start? John?

MR. WOLFSTHAL: Sure. I think the number one fundamental thing we need to do is have conventional military forces that are credible and capable of deterring attack and defeating an adversary. That prevents wars. We should have weapons that are credibly usable, that don't bring in these questions about whether or not we would or wouldn't, and we need to make that clear. That requires investments, and quite frankly those are investments that are tradeoffs between the nuclear and the conventional world.

I think the second thing is we need a political leadership, including a president, who speak unwaveringly about our unwavering commitments. I have questioned -- you know, in my mind I have wondered whether Under Secretary Trachtenberg knows the meaning of the word unwavering, because we have sent mixed messages, both by the President and in other actions. And so I think that has to change.

And I think we have to get back to a place where we're talking about the broader connections between the United States and our allies, not just on the military front, but military is clearly a key part of that, but on the economic, on the political, on the cultural, on the trade, on the immigration. All of those are parts of that construct.

MR. ROSE: Great. Kath?

MS. HICKS: Yeah, I mean if you think about the strategic challenge the United States faces today, and it's different than it has faced in the past, it will continue to evolve, but there is a constancy to the fact that one of the largest asymmetric advantages we have is our alliance network. It's a force multiplier, literally. It's an economic multiplier, literally. It creates the ability to generate pressure. Whether you agree, for instance, with the JCPOA or not, you can look at how the United States was able to bring China and Russia even to the table alongside allies and partners to create international action. You can take that model and apply it to something you prefer if you don't like that particular use, but the reality is we have successfully used it in North Korea sanctions, and you can think of other things.

That is a huge advantage to throw away, and to throw it away over loose language, more tactical challenges, which are real, from burden sharing to trade concerns, they are real concerns, but they need to be nested in a larger strategic vision. And if, in fact, the National Security Strategy and National Defense Strategy of the United States are going to frame themselves around these major competitions of the future, that is the best card we have to play, other than our own domestic solvency, which that I hope very much we find. And so that's my underlying view.

In terms of the list of horrors that could happen you asked about, I worry for a living, so could have many. I'll try to limit myself here. Obviously there is the concern about proliferation of nuclear weapons to these states. You can take from -- further proliferation probably most notably in the Middle East as an area, but you can think of Asia, you can think of Europe, probably to a somewhat lesser extent. That's a real concern because it's fewer -- you know, there are -- more and more countries with fewer controls, creates a lot of concern about use.

you could also think about sort of classic balancing bandwagoning issues, where if the United States is not a reliable partner, is not perceived to be a reliable partner, people look for other partners. This goes back to my first point. So you could see

realignments in regions where the U.S. loses ground because other partners or new partnerships develop that weren't there before.

And I'll pause there.

MR. ROSE: Okay. Elaine?

MS. BUNN: I just want to put something Kath said, which is that we don't have alliances out of the goodness of our hearts, we have them because they're in U.S. interest to have them.

Going forward, I agree -- goodness, I agree with John, I agree with Kathy, what else is there to say. I do think that continuing -- I mean there is no such thing as too much dialogue and consultation with your allies. There's no such thing. The kind of extended deterrence dialogues that did not exist in Asia, in Northeast Asia before 2010, those need to be continued and deepened and strengthened. We need to constantly be working as allies, whether it's in Europe or Asia, to look at -- I mean the basics is who are worried about, what are we worried about them doing, and together how do we deal with it. And some of that is things an ally will do, some of that are things we hope they will rely on us to do, the nuclear end of things, and then all the things in the middle that we do together.

MR. ROSE: Great. Well, thanks so much.

We're going to turn it over to the audience for questions. I have only two requests. One, that you identify yourself and your affiliation, and two, you ask a question.

We have microphones coming around. Why don't we start right here? And we'll take three questions and then come back to the panel.

MR. COUNTRYMAN: Tom Countryman, Arms Control Association.

I should have asked this to the Under Secretary, but it's a sincere question, not a rhetorical one. He pointed out that strategic ambiguity means that we won't say what we'll do, but we may use nuclear weapons in the event of extreme circumstances of an attack upon an ally. The Russians say they will not use nuclear weapons first, except in the extreme circumstance that their national existence is threatened.

How should I, whether I'm in this Administration or a different one, or just talking to people who are not Russians or Americans, explain that U.S. ambiguity is beneficial and Russian ambiguity is evil?

MR. ROSE: We'll go right there.

SPEAKER: My name is Derek Boyd. The Under Secretary emphasized that missile defense was going to be an important part of extended deterrence. And I was wondering how you envisage this working? I mean is the missile defense to defend the United States so that it feels secure in protecting the allies, or is it missile defense which is going to protect the allies themselves locally?

MR. ROSE: Great. And one last one right there.

MR. ROZMAN: Jeremiah Rozman with the Association of the U.S. Army. I wanted to ask a question about extended deterrence against below threshold of conflict or gray zone attacks against allies.

MR. ROSE: Who would like to start?

MS. HICKS: I can start, as long as I can turn to Elaine on the missile defense question. (Laughter)

MR. ROSE: If only we had people here who knew about missile defense.

MS. HICKS: As the former DAS for Missile Defense and many other things. So on strategic ambiguity I don't think -- I guess, Tom, I'm not sure I'm with you on the premise of the question. I don't exist in a world in which I see one as inherently good and one as inherently bad. I think they are of course interactive. And so I think that kind of helps you explain why we are where we are, which is this is part of why you need continuing dialogue and progress with the Russians in order to get to a point of trust where we feel like we're at a place where both sides can start to talk differently about this approach, if you're going to move forward on shifts in U.S. no first use policy.

I do want to say, because it did not come up, but your question hints at it, the nuclear posture review of this Administration took pains to add language that is

thoroughly confusing, in my opinion, on calculated ambiguity. So that is to say Dave Trachtenberg's point about the consistency of no first use as a U.S. policy, absolutely true. But the NPR in this Administration added language which causes one to wonder why -- were they trying to point to extended circumstances in which nuclear weapons can be used? They say no when asked that, but it worries me that they did that, because it is a shift in position, again, if you're trying to read the -- you know, (inaudible) understandings of the United States.

Gray zone -- I'm very glad you asked about that. I meant to mention it. I do a lot of work on gray zone issues and I think the United States is deeply challenged, both at home, but certainly in terms of how it's thinking through and resourcing to integrated tool kits that go at the types of threats that, for instance, the Russians and the Chinese and the Iranians can put forward. So that means things like energy coercion in the case of Russia, it means political and economic coercion in the case of, in particular, Russia and China. And that requires you to have capable integrated national security policy. A problem right now, but also a continuing problem in the United States. The same basic challenges that have been put forward from the 9-11 Commission, the Beyond Goldwater-Nichols that we undertook at CSIS in the late 2000s, and you can think of the project on national security reform. We've had many, many, many outside studies that have made it clear that the U.S. government does not integrate its tool kit well, does not leverage on military tools well, and much of the response on gray zone challenges is beyond the defense department and the military, and we are rhetorically in the right place. The NSS and NDS say their right things, very little action happening there. A lot of things to be concerned about.

MR. ROSE: Elaine?

MS. BUNN: Missile defense and importance of it for extended deterrence and do we mean defense of the U.S. or defense of the allies? Both. And this is not yes, Dave Trachtenberg said it, but I think this -- I could have said this in the Obama Administration, that -- so let me give you a for instance. South Korea worried that if North

Korea had an ICBM capability that could reach the U.S. that then the U.S. would not come to South Korea's defense. And so there are several things that we did to try to say, no, no, no, no, not true. First, you know, we went and took them to a site, a site of our missile defense and said, okay, this is -- yes, it protects the U.S., but we're trying to make sure, one, that North Korea -- not Russia or China -- but North Korea can't hold the U.S. at risk, and that's why this missile defense, but also remember that the U.S. has been at risk from far more ballistic missiles in its history with allies than we ever will be with North Korea, and still we extended deterrence to allies. I mean think about Russia, think about -- goodness, the Soviet Union had many more and we still were extending deterrence to our NATO allies.

The part about regional missile defense though for allies and for U.S. in regions has to do with well, one, allies not feeling -- especially allies who are reluctant to have their own even conventional strike capabilities, like Japan. It allows them to do (inaudible). They aren't just sitting ducks for the cheap shots. I think it's reassuring to their publics that there is something that can be done, and the U.S. can come to their defense.

And part of the regional missile defense is also that we can take forces that may be someplace else if there's a problem in a certain region and flow them to that region to help defend our ally in the face of adversaries who have ballistic missiles to try to keep us out. And so it is both the defense of the homeland and the missile defense for the regions that can play a part in extended deterrence.

MR. ROSE: John?

MR. WOLFSTHAL: Yeah, I'll take a bit of two questions. The first, Tom's on ambiguity.

I mean essentially what U.S. policy is saying is we can control escalation, we can go up the ladder, and you can't, that we believe we can dominate that escalation and control it, and that the Russians won't be able to do that. And the Russians believe the exact opposite, that they can control escalation and that we can't. And the reality is that neither of us can have any confidence that we can control escalation, which is why you end

up in the 1950s and '60s with 35,000 nuclear weapons each in every conceivable form, including land mines and underwater mines with frogmen. A nuclear war cannot be won and should never be fought. That's the basis for stability and security.

So I think in fact our policy, the Russian policy, they're both illogical. I understand why we have them, I understand the desire that is embodied in them, but I don't think they make sense, and in a conflict I think they're not additive to our security.

On the missile defense side, Elaine, you're right in terms of what I think David meant to say about regional and you can do things. But inherent in his argument -- it really did worry me because he's basically saying don't worry, we'll protect ourselves, a country can't use nuclear weapons against us, and that will improve our freedom of action. But what the Russians hear is wow, you're no longer into mutual vulnerability, which they worried about a lot when we pulled out of the ABM Treaty and as we're expanding missile defenses and as we're gearing missile defense more towards Russia, that has an impact on how they respond. The net assessment on that in my view is not very positive. And our allies eventually will hear, oh, I mean I understand the desire to say, look, don't worry, we're protected, we'll get you --

MS. BUNN: Against North Korea.

MR. WOLFSTHAL: Well, no, but that's not -- in your case you're talking about North Korea, he was talking about Russia and China. I mean I think we can agree that there's confusion in the Trump Administration missile defense policy. His view was missile defense expands and enhances extended deterrence. Inherent in that argument is that we will be protected so that we can go and defeat the adversary over there. I understand that desire, that's right in the context when you have strategic stability with Russia and when there is a sense of mutual vulnerability. But as that erodes, I think that's more problematic than we are giving attention to and one that we have to spend more time working on.

MR. ROSE: And, John, what I would argue is that it kind of goes back to

the point that Elaine mentioned a little bit earlier, if you look at the Missile Defense Review, it clearly states that we will rely on nuclear deterrence to deal with Russia and China. But if you actually look at the President's statement at the Pentagon on the Missile Defense Review, he said we will develop a system that will shoot down any missile, any place, at any time. So we've got a bit of a disconnect.

Let's take another round of questions. Right there.

MS. BLAND: Hi, Jessica Bland from the British Embassy.

Thank you for your comments, particularly around the importance of messaging with allies. And one of the comments you kind of put in there was about burden sharing. One of the concerns that's come up recently has been around this Cost Plus 50, potential demand for U.S. base in overseas and ally countries. My question is more regarding what your thoughts on whether, one, that's likely to actually be implemented, sort of the likelihood of it. And, two, is there anything the allies can do to explain why it's important for the U.S. to be there not just for allies benefits, but for the U.S. benefits.

SPEAKER: Hi, Carolyn Diroster, National Defense University.

My question is specific to NATO. And as NATO is facing diverging priorities, some by force of geography, others by domestic political factors, what role can the U.S. play and what does the alliance writ large have to do with its deterrent policy as it's facing this increased rhetoric from Vladimir Putin and the media regarding the lower threshold for use of nuclear weapons? What can the alliance communicate and how can the U.S. help shape that communication?

MR. ROSE: Let's go right there.

MR. SIMPSON: Hi, Charlie Simpson, also British Embassy.

You spoke earlier a little bit about non-nuclear deterrence, specifically with regards to hypersonics, something that has been identified by the U.S. government as a major threat, specifically to restricting the freedom of movement of carriers in the Pacific.

How do you deter that threat specifically when you can't (inaudible) between

the two sides?

MR. ROSE: Great. Who would like to start?

MS. BUNN: What can NATO say with regard to the rhetoric, the Putin rhetoric? I think constancy in saying basically what we came to in the 2016 Warsaw Summit Statement, which was a very clear -- and it was very much aimed at Russia, and it took about nine months to negotiate that statement, but I think it bears repetition, which is to point out that any use of nuclear weapons would fundamentally change the nature of a conflict. You know, high, low, a little bit, not a -- it would fundamentally change the nature of a conflict. And I think that's a theme that NATO needs to just continually in a united way say.

MR. ROSE: John?

MR. WOLFSTHAL: Yeah, it gets to the same point. I mean if you were to tell me what our deterrence posture and where our defense lines are with Russia and this Administration, I couldn't tell you. I mean I can read the documents, but I don't know what President Trump would do and wouldn't do. And I think there's a lot of reason to be concerned about what he would be willing to do in a time of crisis.

I think the NATO alliance has to maintain the vocal nature of our deterrence statements until the U.S. can get its act together, whether that's under this administration or a replacement. And I think it does have to get to this fundamental basis that any use of nuclear weapons is unacceptable, opens up the nuclear response option, which is a credible thing for NATO to say, which is again why I think no first use is part of this discussion. I think it lacks credibility to say we will initiate a nuclear war with a nuclear power.

What I want to make sure we have the ability to do is to defeat any power on a conventional basis. If they want to cross the nuclear threshold and take on the responsibility and the consequence of that, we don't want that but we're prepared to respond to that, and that's credible. So I think we have to be thinking in that context.

MR. ROSE: Kath?

MS. HICKS: I'll take the other two.

So Cost Plus 50, I never ever discount that something that the President says won't happen, but I think what would create a Cost Plus 50 reality is if there's an ally who agrees to Cost Plus 50. I cannot think of an ally who would agree to Cost Plus 50. And my favorite example, which my colleague Alice Friend always points to, is Djibouti. I think the Djiboutians would be very happy to work with the Chinese at something less than Cost Plus 50 when we attempt to charge them for our presence there at Plus 50 percent, which is what Cost Plus 50 is.

So I don't think it's a reality. The President has -- or the Administration has attempted to clarify that the President was talking about the Pacific when he said that, not about Europe. The only way I can interpret that is because there are active negotiations right now about U.S.-South Korean cost sharing going on, and perhaps that was the context in which it was occurring.

So I think more at risk in the near-term is what the U.S. is willing to put on the table. I should say more specifically what the President is willing to put on the table with regard to extended U.S. presence and capabilities on the Korean Peninsula and what the cost arrangement is around that.

You asked how can the U.S. express itself better in this. I mean a thousand ways to Sunday. The United States has had trouble being strategic about this issue across the aisle and for decades. In the 1980s I remember -- and the early '90s -- dealing with sort of -- really the early '90s -- dealing with sort of the left in the United States focused on the peace dividend coming out of the Cold War. And a big part of that was bringing the troops home, if you will, and that the dollars would flow back.

When you go fast forward, I mean there are many other examples, but fast forward to the removal or the reduction of U.S. Army forces in Europe under the Obama Administration, which I was deeply involved in those decisions and discussions, and there was a very strong congressional push in the United States to make sure that the forces didn't -- as we reduced the size of the Army after Afghanistan, that we weren't pulling those

primarily from districts in the United States, the same thing of course plays out in the UK. The UK has had the same problem, the Germans have had the same problem. So anytime you have a force, if you will, forward outside of your nation, there is this push to bring it back in because it's looked at as a game for the local population.

We just imply have to be more strategic about that, and we have a lot of work to do on the defense side to -- and particularly those in uniform who are so credible on these issues, to help to explain the issue. And we've got to get members of congress to stop looking -- and which I actually think is weirdly, perversely kind of happening because the President has made it so crass on those to now, that you see folks on the left and the right starting to reevaluate how we talk about this.

But it is a real challenge in the United States. And a similar thing happens around of course the 2 percent debate, which has overcome all rational conversation and capability, development where we have a lot of problems as an alliance. And those are real problems, but they're not really about 2 percent, fundamentally.

Hypersonics, or hypersonic systems, I should say. Fundamentally this goes to the bigger issue on where is the Department going. The fundamental major gap in the Department right now is it has rhetoric and some goals, including things like we need to be stronger ourselves in hypersonic systems and we need to be able to counter them. And it has budgets, which put money against that. And in big black magic box in the middle, where in theory one would be doing a lot of operational concept development, experimentation, and exercises at scale in regions, some of that is going on. I don't want to undersell what the Department is doing, but the conclusion of the commission on which I served, the National Defense Strategy Commission, and certainly the work I do in my job at CSIS, is trying to point repeatedly to this is where the problem is. It's not so much about how much we're spending, it's about how we're going to do it. And we have to change the way we think about the challenges in these regions. Hypersonics is an excellent example of how that can fundamentally change the way we think about how we operate -- you spoke specifically

about China, so I will say in the Pacific.

So in the Pacific, or anywhere else, when you're looking at new concepts, you're trying to think about how do I exploit my asymmetries and minimize my vulnerabilities. And I think there are some areas we can do that, I'll just say, where the U.S. can both bring to bear new technologies, to include its own hypersonic capabilities, but also can change its deployment patterns, its reliance, for example, on undersea warfare, where we have a particular strength -- that's an asymmetry for us -- to balance out and put different things at risk for the Chinese that create that deterrent stable situation where they don't want to try to use them.

MR. ROSE: You know, John and Kath, both of you have raised the point on the importance of improving our conventional capabilities. I remember reading an article in the *New York Times* about a year or two ago, and the article noted that the United States was always able during the Cold War to maintain a conventional superiority based on the technologies that we developed. But most of those technologies were developed in government labs, whether it be nuclear weapons, precision guided weapons. But what we've seen since the late 1980s is the fact that a lot of these new technologies are now produced by the commercial sector and therefore the ability of the United States to kind of control that technology is limited. Indeed, if you look at some of these investments, especially in artificial intelligence, quantum computing, and a whole host of other areas, the Chinese are putting a lot more resources than the United States is towards these technologies.

How do we deal with that? And what are the implications for extended deterrence?

MR. WOLFSTHAL: I will be very brief so Kath can collect her better and more informed thoughts ably.

I mean I think we have to be smarter, I think we have to prioritize, and quite frankly, I think we have to avoid this desire to race and match. I mean I think we heard the

right things, but I'm hearing a lot of rhetoric from this Administration. The Chinese have this, we've got to get that. INF range systems, hyperglides -- the Russians and Chinese are cleaning the clock -- we've got to get those. Why? What's the rationale? What's the tradeoff?

And so the example I use is we're very concerned, rightly so, about critical infrastructure in this country and cyber. Our systems are potentially vulnerable, our power grid, communications grid. And we're saying that in order to play defense we're to play offense. So our nuclear weapons, we're going to expand the mission so that we will threaten the use of nuclear weapons to deter any attack on our critical infrastructure and cyber. Questions about credibility aside, that's \$50 billion a year for maintaining and expanding. How much would it take to actually improve the redundancy and resiliency of our power grid, of our cyber capabilities, of our space options? That's one of the things -- now, I'm not saying we that we should gut nukes to build new -- but we have to look at those tradeoffs, and it seems to me we could be doing a lot more with operational concepts, redundancy, defense, and depth, as opposed to just saying oh, well, we'll push a button and it will be okay.

MR. ROSE: Well, John, you know you raise a very important point. About a year ago I had to testify before the House Foreign Affairs Committee on Russian and Chinese nuclear policy and doctrine. I spent a fair amount on Russian and Chinese policy and doctrine, but I also spent a lot of time on these asymmetric vulnerabilities and the need to work with our allies to close those asymmetric vulnerabilities.

Kath?

MS. HICKS: Yeah, I mean I go back to what I said before, that our greatest strengths really -- and they are strengths -- are the degree to which we can continue to put forward or model ourselves in a way that attracts both our domestic population and others around the world to sort of strive for freedom, which is built into how we describe ourselves constitutionally and to attract allies and partners who are like minded and have the same

views about rule of law, et cetera, overseas.

So going back to that, what makes us highly competitive in that kind of a world, to achieve those goals, is igniting our private sector and working effectively public-private. It is not going to be a model like the Chinese have, where they have to underwrite the private sector or Chinese companies, however you want to put that, to give them state backing. And it doesn't mean we're trying to drive the -- it shouldn't mean we're trying to drive the Chinese economically into the ground. What it means is we're trying to enforce that there's an appropriate way to interact with your companies under the rules of the WTO, et cetera.

So what does that mean for the United States? I think it means taking what's in the National Security Strategy as just rhetoric, which is a national security innovation base, which is a good concept. I applaud them for putting that forward. There has been nothing done on that. I think taking a concept like that and really putting it into action, which is fundamentally about things like STEM education, investment in R&D in the universities, as well as government R&D, which needs to go -- in the defense budget, for instance, that was just put forward, there is a two year jump in research and development that then just drops off again. So I think demonstrating a sustained investment in how we're going to get on top of things like AI, quantum -- and I just want to add there are many areas, but I really want to add bio because we always -- we always focus on sort of the non-bio, the computing and information side, and that piece of the game, if you will, both normatively, ethically, and in terms of the advance of capabilities that's happening overseas, is significant, and the economic implications.

So I think that's another area where the United States has some really clear advantages that it ought to be galvanizing.

MR. ROSE: Elaine, anything you'd like to add?

MS. BUNN: I think that's right. I think that making sure that you've got the seed corn for exploring and figuring out what's possible in the future, what's possible that

others are doing, but what's possible for you and your allies is a key. And we do tend to stent the seed corn. We do that. And I think we don't know what the future is going to look like, we don't know which of these capabilities are going to manifest themselves in what ways, and with what use.

And I mean the thing about alliances is you can't say exactly what the future is going to look like, but you can say these are the folks, these are the likeminded nations, that I want to work with to deal with whatever comes with the future.

MR. ROSE: Great. Well, we have time for one last round of questions. Let's start there.

MR. YOUNG: Hi, Steven Young with the Union of Concerned Scientists. Thanks, panel, for good answers.

The 2010 Nuclear Posture Review, as you all know, said that the U.S. (inaudible) was not prepared at that point to say the sole purpose of nuclear weapons was deterrence. But the fundamental role of nuclear weapons is deterrence and said it was a goal that the U.S. should be able to say its sole purpose is -- what nuclear weapons are for. And in January 2017, Vice President Biden gave a speech next door where he said he and the President concluded at that time the U.S. had reached that point where the U.S. should be able to say that the sole purpose of U.S. nuclear weapons is deterrence, and he added that in his view he couldn't imagine a scenario under which the U.S. first use of nuclear weapons would be advisable or a good choice.

Does the panel agree with the Vice President's assessment at that time?

MR. ROSE: Right here.

MS. KENNEDY: Hi, Laura Kennedy, also with Arms Control Association, but since Tom's got that covered maybe I'll say Foreign Policy for America. (Laughter)

I mean I wondered if you all could address China, which of course does have a no first use declared policy, and perhaps comment on are they reacting to perceived changes in U.S. and Russian policies or are they just operating on their own trajectory in

terms of their own military and nuclear modernization?

Thank you.

MR. ROSE: Right there.

SPEAKER: I was interested in your comments about how we should improve -- there was a number of people talking about how we should improve conventional capabilities.

It does strike me though that in a place like Europe, which is what I'm most familiar with, the -- you know, even if we had the kind of force that we had there at the height of the Cold War, because of the kind of threats that we're dealing with, wouldn't really help us much. I mean what would we have done in Crimea or other kinds of cases there where we're not looking at sort of the great Warsaw Pact forge coming through the Fulda Gap. But I'm wondering what kind of measures we could use, or is there something we could do to deal with this kind of asymmetrical situation?

MR. ROSE: And let's take one more.

SPEAKER: My question has to do with the renewal of the New START Treaty. And today in the paper again was another story about the Russian undersea, multi megaton, autonomous drone. They've also got a hypersonic system they've been testing, the Avant-garde, also a hypersonic cruise missile, nuclear powered cruise missile.

Should we renew New START if it doesn't include those systems? Because they are clearly strategic systems.

MR. ROSE: Great. Well, let's turn to the panel for one last round. And also please feel free to provide any kind of last comments.

Elaine?

MS. BUNN: So, Laura, on your question about China and their long-standing -- since they first tested nuclear weapons -- no first use policy and are they considering changing it given that U.S. and Russia don't have no first use policies. Is that --

MS. KENNEDY: Yeah, I (inaudible) a little broadly. Or if you do think there

are cases where they might change that no first use policy. I guess I was thinking more broadly in terms of are they adjusting deployments, developments, and so on in reaction to how they perceive U.S. and Russia. But, sure if you think there's a chance they might change no first use, I'd be interested.

MS. BUNN: I was going to say on that, I don't foresee them changing it. There was a debate in China that you could glimpse, oh, I don't know, 10 years or so ago where they considered -- there was -- the experts thought well, in every case is that the right policy to have or not. But it became pretty clear that the leadership had said the debate is over, we're keeping the no first use policy. I assume they had decided that the deterrence benefits of not having a no first use policy were outweighed by their long-standing history, what they wanted to portray to the world on the no first use policy.

I do see China -- of all the things China does, its nuclear forces are about the least of my worries. I see them doing so many other things where they are adjusting as they are gaining confidence, gaining -- well, they are doing in space and cyber and other categories. And so, yes, they're adjusting, but I don't think it's so much in their nuclear forces.

MS. KENNEDY: I guess I was thinking also in terms of say in a post INF world and how that regionally might affect China.

MR. ROSE: Kath.

MS. HICKS: Well, let me just pick up on that last point. I think if I understand, Laura, what you're saying, so the Chinese are not bound by INF. I think the U.S., if we are in a semi-permanent or permanent post INF world -- question mark -- then I think there is a question of what that means in terms of U.S. capability development or deployment really in both regions and how the Chinese then react to that. But that's a cycle one would have to then spin out I guess, which I haven't thought thoroughly through what that would look like on the U.S. side, and therefore what Chinese developments might be.

But my inclination would be to believe that Chinese developments even on

that cycle would largely be in the non-nuclear space. But to be seen.

I think there was a question on global zero, or as the (inaudible) and deterrence is the only purpose of first use. Again, I'll go back to what I said before, I can think -- I get paid to worry, I can think about a lot of things that worry me and I am more comfortable having that ambiguity that you can provide to a policy maker without being able to know -- in the current environment we're in where we have, in particular the Russians, highly capable and clearly adversarial in terms of many of their actions. That's where I am today.

China, we covered. Conventional forces in Europe, there are definitely limitations in the Cold War for sure, and I think you're right to point that out. And in the Cold War we never had conventional superiority in Europe. That was not the line we chose to draw. The investment that would have required would have been significant. And I don't just mean the U.S., I mean NATO. The interior line advantages that the Russians have are significant. The ability to concentrate or their choice to concentrate forces in that way is significant as an advantage to them.

So what we are really looking to do I think in the U.S., alongside our NATO allies, is figure out what's the right deterrent mix, and that is a mix of conventional, frankly, nuclear, and this gray zone challenge set where the Russians are very comfortable going because they can avoid that conventional trip line.

I want to say, because it hasn't come up yet, that one of the big disconnects is that the U.S. tends to talk conventionally and militarily and that is not what the Russians are doing. We all know what the Russians are doing is they're thinking much more a long a spectrum. And so we need to be thinking that way too, which is not simply how we might choose to fight, if you will, in a conventional deterrent way, but how the Russians might choose to escalate and win.

And I think that's all the questions.

MR. ROSE: John, last word to you.

MR. WOLFSTHAL: Great. And I know Elaine would have gotten here if she had a chance to answer all the other questions, and shame on you. Of course we should extend New START. It is the --

MR. ROSE: I'm shocked, John. (Laughter)

MR. WOLFSTHAL: It is the definition of security malpractice for this Administration to have been in office for two and a half years and not even have a position on New START.

Yes, we should be seeking to capture more Russian systems. Under New START you can declare new types. The heavy Sarmat, the Russian ICBM, would be covered under New START. If that agreement expires in February 2021 we will have no controls over it and there will be no controls over the number of strategic offensively deployed weapons that Russia can deploy as our modernization program works to catch up.

So we want the security benefits, the predictability, the transparency, that comes with that agreement for five years, and we want to engage Russia on their violations, on strategic stability. That has to be part of the dialogue. We are operating in the blind or with one eye and we're about to stick a fork in our other eye, which I don't understand.

On China, I think, Laura, if I understand the question, it really is, is China going to react to what the United States is doing across the board in terms of missile defense, if we deploy INF range systems in the region as -- and the answer is of course they will. What they will do I think remains to be seen, and it's one of the interesting questions that's come up. A number of advocates for getting out of INF have said get out, get out, we can do all these things with China, what's the net assessment, what does it look like in 5-10-20 years, all the things you worry about? I'm not sure that's to our advantage. It may be, but let's examine that before we just rush wholesale into it.

Steve, I'll get back to you on the last point, which is yes, Vice President Biden said that he and President Obama believed there was no scenario that they could envision where the United States would need to use nuclear weapons first. But they

believed that that was an issue that was left to their successor, because it is a presidential level decision. And I think that's where we probably all are, which is we can give our advice in terms of what the risks and the benefits are, but the next president will have to determine whether he wants -- or she wants to make a change in that policy with a clear examination of what that means. And I will be bold enough to speak for everybody here, saying that's not something cannot be done by fiat, that's something that has to be done as part of a sustained dialogue with our allies. We're going to be doing a lot of work to repair our alliances in the post Trump era, assurances about commitment and capability. We are low on commitment and we are high on capability but coming down. We need to really bank that, but we have an opportunity as we re-assert our leadership and our commitment and our will to make some adjustments and talk with allies about what that might mean for their security and how to compensate.

MR. ROSE: Great. Well, well said, John.

I thought that was an absolutely fantastic discussion. You know my key takeaway from our discussion this morning is that extended deterrence is a very complicated issue. Therefore, we need to take the time to get it right because if we don't it could have many negative consequences.

On that note, let me thank the panelists for a fantastic discussion and thank the audience for joining us at Brookings. (Applause)

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