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THE NUCLEAR POSTURE REVIEW AND THE FUTURE OF NUCLEAR WEAPONS

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P R O C E E D I N G S

MR. O'HANLON: Good morning, everyone. I think we are now live and light, and we're delighted to have you here on this rainy spring morning in Washington. Welcome. I'm Michael O'Hanlon from Brookings. Tom Donnelly and I would like to particularly welcome you along with Keith Payne. The there of us were privileged to run a task force or working group of sorts on the future of nuclear weapons over the past year with the American Enterprise Institute, the National Institute for Public Policy, and Brookings all being organizations that cooperated in this endeavor. We also have my colleague Steve Pifer on the pane. I'll introduce everyone in a moment, but Steve has also been working on nuclear issues over this year and many other years.

We are doing a couple of things today and our timing is I think fortunate and fortuitous, and we're delighted again that you share our interest in this topic. These are a number of reasons to be interested in essentially the future of nuclear weapons which is what we're talking about today. This has many aspects and many things are in the news with regard to the future of nuclear weapons, the START follow-on treaty that was agreed to apparently last week and will be formalized in coming weeks and then considered by the Senate for ratification as well as by a comparable body in Russia, is one big issue. We know that President Obama's Nuclear Nonproliferation and Security Summit is coming up in Washington in a short time, in about 10 days. We also have many other issues on the docket including the Comprehensive Test Ban Treaty with possible Senate consideration of that over the next year so; the Nonproliferation Treaty Review Conference, and that happens every 5 years.

I know I'm already throwing too much alphabet soup at you for a Monday morning so let me simplify and summarize by saying we're here to talk about the future of

nuclear weapon in terms of what this treaty was signed or not assigned but agreed to last week means, what the Obama administration may be doing in the coming months and years with its Nuclear Posture Review, again more potential acronym, the NPR to throw at you but it's part of the mix. Then whether the speech that President Obama gave last year in Prague about the future of nuclear weapons and the idea of possibly eliminating them forever from the face of the earth has any relevance whatsoever to the current debate and whether or not it should. In summary, what should be the future of nuclear weapons? That is our topic today.

We're going to come at it from a few different directions and I'm sure you as well will want to do so in the discussion period that follows the opening presentations. We're going to essentially speak in the order you see before you. Tom Donnelly is going to speak first about some broad issues in nuclear deterrence and really take a strategy perspective on the issue. Then we will have Keith Payne talk about the concept of Global Zero, and I think it's fair to say that Keith is a skeptic to put it mildly about this notion that we can meaningfully pursue the elimination of nuclear weapons multilaterally. I'm then going to give a somewhat friendlier but still skeptical view of Global Zero and I'll do that briefly I hope. Then Steve Pifer will talk more about what we just saw in Moscow last week, in Europe and then involving Moscow in Washington, with regard to the new treaty.

Let me say one brief word with relevance to current events. Our hearts go out to friends in Russia and the tragedy this morning in their subway system, and in a sense this is a sober reminder of the stakes of terrorism and many other issues that could in theory involve nuclear weapons at some future date. We're all constantly following news about Iran and its effort to develop nuclear weapons. And so many of the contemporary security issues that we see grabbing headlines are also in one way or

another relevant to the question of the future of nuclear weapons and what we can do about it.

I'm going to say one additional sentence about each one of my distinguished panelists. You have their bios. This has been a wonderful group to work with and we've also enjoyed very much the participation of other people on the task force from the defense industry, Lockheed Martin, Northrop and elsewhere, from other think tanks and regional experts and nuclear arms control experts. We've tried to have a bit of a real conversation among different interest groups, different constituency groups and different points of view on this question and we hope you will feel a little bit of that diversity of viewpoint today.

Tom Donnelly is as I say at the American Enterprise Institute and worked on the House Armed Services Committee staff in the 1990s, has had a number of think tank jobs since that time and a very good friend of mine and a very impressive scholar who's done a lot to drive the American defense debate writ large. One of his both strengths and real assets in this whole venture is that he can put nuclear weapons in a broader context. Keith Payne has been one of the most fresh, provocative, thoughtful and simply smart thinkers on nuclear weapons that I've had the benefit of studying and learning from over the years. He has been part of the defense department at times, was also part of Mr. Rumsfeld's Task Force on Ballistic Missile Proliferation back in the late 1990s, the task force that as you may recall was I think pretty well vindicated when 6 weeks after it said that we might have to worry about long-range missile threats sooner than we thought, North Korea launched one of its Taepo Dong missiles back in I think 1998. Then Steve Pifer who is here at Brookings as a Senior Fellow is a former Ambassador to Ukraine and a longstanding Foreign Service officer who worked on nuclear issues, arms-control issues and U.S.-Russia issues for much of his career and

has been writing recently on the topic including a Brookings paper that I will promote here just briefly, "Resetting U.S.-Russia Relations" in the context of the arms-control issue. With that we'll hear from each of our panelists for about 10 minutes and then we will go to you. Tom?

MR. DONNELLY: Thank you, Mike. Mike's very generous introduction very delicately glossed over the fact that when it comes to nuclear weapons I don't know really all that much about it. However, the remarks I'm going to make have been informed by the expertise of my longtime friend and colleague from committee staff days, but also Dave Trachtenberg served several in several positions in the International Security Policy office in the Pentagon as Principal Deputy Assistant Secretary of Defense in that regard, and so Dave is a genuine expert so that I'm not making this entirely out of whole cloth.

I do think however that the current moment is one where the basic approach of figuring out what American strategy is should come before decisions on arms-control treaties or indeed on what our nuclear force posture should be. This is very a much putting-the-horse-before-the-cart exercise in my judgment, and although there really hasn't been what I would regard as a durable formulation of American strategy throughout the entire post-Cold War era, we have nonetheless behaved in relatively consistent ways so that it is possible to look at our behavior and pretty quickly I think what our enduring interests are and what our enduring approach to strategy is. Then I think it would make much more sense because at the end of the day arms control and indeed military force posture are tools of statecraft rather than actual statecraft so that if we had a better and clearer statement of what are our goals and how we intend to achieve those goals then a lot of these questions on arms control, nuclear force posture and indeed conventional force posture would be much more easy to answer. The thing

that particularly concerns me about the approach that not only this administration but previous administrations have taken is a very backward looking one. I would regard a lot of these treaties and indeed a lot of the force decisions that have already been made because we hear from the administration that the limits in the START follow-on treaty are to be consistent with the Nuclear Posture Review that should be forthcoming fairly shortly, we have a pretty good understanding of what the administration's thinking is in that regard.

What I would like to do in the 5 minutes or so I intend to continue on is give you a summary version of what Dave and I are working toward in this paper. It's turning out to be an epic of biblical proportions in the sense that we want to begin with a basic understanding of American strategy and then follow the chain all the way through to some thoughts about nuclear force posture and an approach to negotiating treaties. We are not opposed to arms-control treaties. We just simply think they should be expressions of the underlying strategy.

Again if you look at the way America has behaved not only in the post-Cold War years but I would say since America has been a global great power and certainly since 1945, there are some things that are obvious and constant. We care very deeply about the balance of power in East Asia, and certainly since 1979 about a favorable balance of power in the Middle East. In recent years we've understood that the Greater Middle East which is a kind of term of art is not simply the Persian Gulf but extends to South Asia for example. It's not necessarily coterminous with the Muslim world or the Islamic world, but our understanding of what the Greater Middle East is, is constantly expanding and is reflected by increased American engagement both diplomatically but obviously militarily.

Then the United States has always cared about access to and the commercial exploitation of the global commons. That used to be just the high seas, but since the invention of the airplane it's included the aerospace atmosphere, it now includes space itself and increasingly the electromagnetic spectrum or what we call cyberspace. All of these things are areas of American interest and the goal has always been to reserve to speak most broadly a favorable balance of power.

Our nuclear force posture has always been a subset of those goals. The United States is the only nation ever to have used nuclear weapons. Whether one regards that as an abomination or the least bad choice that President Truman had before him, it certainly suggests that some Americans at some point have understood nuclear weapons as a useful tool of statecraft. Indeed our nuclear posture since that time has always reflected some version of that basic underlying recognition. Thus through the Cold War years the United States both maintained and expanded its nuclear arsenal to the point where we could make the -- bounce thousands of times over and it did seem that the actual destructive power of our nuclear arsenal may have exceeded any immediate strategic purposes. Nonetheless the comprehension that nuclear weapons were an essential part of American strategy persisted for more than fifty years and it's only in recent years that we've come to rethink that.

I don't know whether Global Zero or any particular force level either larger or smaller than we currently maintain is necessarily the right answer, but I'm sure that the measuring stick for figuring that out beings with this global understanding of American strategy. And the world that we live in, the world in which we're trying to implement this strategy, is changing profoundly. Most worrisomely in recently the emerging narrative is one of American imperial overstretch or American decline. Again I wouldn't necessarily accept that, but it's becoming a broadly accepted narrative. In that

regard and in light of enduring American strategic interests, my own personal view and I think Dave would agree with me on this, that we need to slow down and stop the momentum of both our arms-control negotiations and our force posture discussions until we better understand whether the nuclear force structure that we have and the arms-control treaties that we're pursuing are relevant to continuing to preserve the favorable balance of power, the international order that's guaranteed by the United States and whether in future the perceived truths of arms control or again force posture are relevant to the world that we see.

In particular I think tying ourselves to Russian force levels leaves out much more than it includes because regardless of the fact that Russia maintains a large nuclear arsenal, Russia is no longer a superpower of the sort that it was when there was the Soviet Union. Anybody looking forward, and I'm not breaking any new ground to say, that future great power challenges and even the lesser power challenges that the United States faces include Russia as an element in that but only a lesser or secondary element. In particular if you're talking about global great power challenges to the United States, we're much more concerned about China's rise than we are in managing Russia's decline.

It's not just the Chinese. It's the question of what role India will play in the world. India is a nuclear-capable power, a power that wants to have a strategic partnership with the United States but does not currently have a nuclear arsenal capable of deterring the many challenges that it faces. In other words, has the opportunity that technological, financial and other means to go forward to expand its arsenal if it thinks its interests are in danger but first of all wants to know whether the United States is going to be capable of extending a deterrent in ways that will protect Indian interests.

You can go on around the planet to ask these questions, the Gulf Arab states that are deeply worried about Iran, the Northeast Asian states that are not only worried about North Korean nuclear proliferation but Chinese emerging power and potential hegemony and domination. In that regard I think looking at the nuclear requirements for the United States whatever they are, they're not strictly tied to the size of the Russian nuclear force. Therefore, again the first principle that Dave and I offer in our paper is simply to do no further, to stop, slow down and think this true to try to figure out what's coming down the pike at us rather than looking in the rear-view mirror.

When it comes to particularly thinking about our nuclear force posture, that are principles that I think one can easily see that are necessarily. In fact, while it may be the case that the number of warheads for example announced in the START follow-on treaty might well be sufficient to guarantee our interests and the interests of our allies and to assure our allies, the arsenal itself would be of a very different quality where you would have a much wider range of capabilities in the mix. I don't see anything in the administration's plan or in any of the other similar writings among the arms-control wise men who really discuss this in great detail.

More importantly, even warheads or the amount of destructive power available is the question of delivery systems. Again I think the argument should be for not simply maintaining the triad but ensuring that that triad is more relevant to strategic conditions of the future when in fact it really is a legacy of the past. To talk briefly about one aspect of it. If we're going to build a new nuclear submarine built around an upgraded version of the Trident missile which makes a lot of program sense and budgetary sense and technological sense that would be a very different submarine than the Ohio Class submarine that we currently field. It would have far fewer delivery tubes and the missile itself would probably have many fewer warheads than it's capable of,

possibly even a single warhead because you would want to proliferate the means of response to ensure deterrence. You should take this same fundamental approach to other forms of the nuclear arsenal as well.

I will conclude at this point without going further into the weeds either on arms control of force structure questions, but I simply want to toss out that the approach that we've inherited from the past seems very much to me to be one that's increasingly irrelevant to the future and before we make any decisions that we may live to regret or may constrain us in ways that we will live to regret, we should simply take a time out, slow down, stop, not walk away from the prospect of negotiations but understand that negotiating with the Russians captures only a small part of the problem, that any future arms-control negotiations should include many other powers and likewise to approach the modernization of our arsenal with a quite different set of references and in a quite different frame of mind than we currently have.

MR. O'HANLON: Thank you very much, Tom. Before I pass the baton to Keith, I'm going to have one clarifying question with you, Tom, and then a couple of other quick points to mention administratively.

Let me not put you on the spot but still ask are you taking a position on the START follow-on treaty? You're voicing a general note of conservatism about the future course of negotiations and nuclear force planning. Are you actually opposing the START follow-on treat, haven't you made up your mind, do you need to see more details, where do you stand on that?

MR. DONNELLY: There are some details I do want to see particularly when it comes to the launcher question and any modifications of the counting rules. Those are a couple of things that, yes, of course I do want to see them in greater detail. I'm not necessarily opposed to the limits that are in the treaty. However, I want to

understand where they fit not just in today's world or whether they achieve a sufficient deterrent against the Russians, but whether as we look down the road into a multipolar nuclear environment where deterrence is inherently more complex because it's multisided if for no other reason. Before I sign up to these limits I want to think through in some greater detail whether they will be sufficient for that future. I would put myself in the agnostic category, agnostic but skeptical, and again think that there is a lot of energy being devoted to answering the wrong questions.

MR. O'HANLON: Thank you. The administrative point is that the papers that we are producing out of this project will be certainly in due course very soon on the Brookings.edu website. I believe also we'll try to cross-link with the AEI and IPP websites. Of course as you can tell, everyone here is not only speaking for themselves but trying to keep up with world events and trying to be responsive so that we will have a number of viewpoints. This is a let-a-thousand-flowers-bloom kind of project and this time of year is not an inappropriate time in Washington for that philosophy I hope.

Let me quickly advertise one of Keith's great recently writings in "Strategic Studies Quarterly" last spring which I should have mentioned which already dose exist and can already be ready be read, but we're about to hear some new thoughts from him today. The one additional clarifying point is that those of you in the audience will have the added treat of some PowerPoint slides. Those of you watching on TV please don't worry. Keith is one of the clearest speakers and he is well aware that you may not be able to see the PowerPoint slides on television, so I think you'll be able to follow him very neatly and nicely nonetheless. Over to you, good sir.

MR. PAYNE: Thank you, Michael. It's a pleasure to be here this morning. I think I may just skip the PowerPoint slides if that's okay to keep things simple.

MR. O'HANLON: Fair enough.

MR. PAYNE: I actually generated two papers for this particular project, one on force sizing answering the question how much is enough, and another, a broad review of the Nuclear Zero proposal. The one I'd like to talk about here this morning just for a few minutes is a broad overview of the Nuclear Zero proposal and we can talk about the new START treaty later, Michael and Tom, if you'd like.

Let me start off by pointing out that Nuclear Zero and global nuclear disarmament is not a new goal. This has been an announced goal of the United States since roughly 1946. It was embraced by President Ronald Reagan for example. What I see different in the way the Obama administration has presented Nuclear Zero is the priority that it's placed on it. In the past both Republican and Democratic administrations have pursued a dual track, a balanced approach, looking forward to nuclear reductions when possible, but also modernizing the U.S. nuclear deterrent when necessary. For example, the Clinton administration's general policy along those lines was called Lead and Hedge, lead in reductions but hedge against possible negative developments in the international arena. For example, the Clinton administration did both. They led toward developments in nuclear reductions, but they also hedged and the hedging included the development and deployment of new nuclear capabilities. The more recent Bush administration also pursued this dual track of keeping a balance between the priorities of nuclear reduction and nuclear modernization. And contrary to the revisionist history that I see springing up around me, the Bush administration did a great deal in terms of arms reductions. The Moscow Treaty reduced by treaty U.S. and Russian nuclear weapons down by two-thirds from what those numbers were when the Bush administration started, sizable, significant nuclear reductions.

The question I guess that I would pose and that I'll and present at least a brief answer to is why should we be wary of the Obama administration's shift away from

this prioritization of this dual track, because what I see in the Obama administration is placing priority on one track and that is on the Nuclear Zero side so that you see for example much discussion on the idea of new nuclear capability is now expressly forbidden as part of this exercise so that it's a prioritization issue not the idea that nuclear disarmament is a goal of the United States.

Why should we be concerned? Let me suggest very briefly a couple of reasons. One is that the feasibility of Nuclear Zero is going to depend on many countries coming to the strategic decision roughly simultaneously that nuclear weapons are unnecessary for their security, and yet despite the warm rhetoric that's been generated by the most recent Nuclear Zero vision, much of the rest of the world including U.S. allies, including U.S. friends and including U.S. foes continue to see great value in nuclear weapons.

For example, some close allies of the United States; these are countries with centuries of pain experience, recall the nonnuclear past as the destroyer of nations. There were no nuclear weapons to deter those bent on war in 1914. There were no nuclear weapons to deter those bent on war in 1939. The results respectively, approximately 40 million mostly European casualties in World War I, and somewhere between 50 and 70 million European and Asian casualties in World War II. In both cases some countries and nations literally ceased to exist as a result of these conflicts.

To go back a little earlier you can look to the 13th century Mongol invasions of China and Central Europe where probably 8 to 12 percent of the world's population was destroyed in those conflicts. This horrific pre-nuclear history contrasts sharply with the past seven decades in which another such conflict did not erupt despite multiple crises and titanic struggles and conflicts. It's no coincidence I believe that there

has been a steep decline in global casualties due to war since the onset of the nuclear age and nuclear deterrence.

French Ambassador de Rose recently noted that the rapid succession of two world wars during the first half of the 20th century and the absence of a third world war during the second half of the 20th century demonstrates in the most dramatic way possible the deterrent value of nuclear weapons. Former Prime Minister Margaret Thatcher poignantly observed that the casualties of World War I and World War II are a silent testimony for any of us who care to remember that conventional deterrence, i.e., nonnuclear deterrence, does not preserve the peace. She says there are monuments to the futility of conventional deterrence in every village in Europe and these monuments have lots of names on them.

Many key allies and friends believe that it is nuclear deterrence that has prevented a repeat of past global catastrophes and understandably they have no great desire to return to that nightmarish world. They continue to see great value in nuclear weapons as the deterrent to war. This isn't true of all allies, but it is true of many allies. It's for this reason that Winston Churchill warned the United States in his final speech, "Be careful above all things not to let go of the atomic weapon until you are sure and more than sure that other means of preserving peace are in your hands." Many of our allies rightly fear U.S. enthusiasm for Nuclear Zero. They fear it because they don't believe that we are close to meeting Churchill's requirement to eliminate nuclear weapons, that is, we have not yet found the alternative for preventing war. French President Sarkozy made the point in his response to the Nuclear Zero proposal in typically French fashion or French flair when he said we live in a real world, not a virtual world. As a Czech commentator recently observed with regard to Nuclear Zero, a starry-eyed view of the world could not only put the United States at risk but also cause its allies

to lose their confidence in the superpower's ability to meet its allied commitments. U.S. movement to zero has the potential to increase nuclear proliferation by compelling these allies to see the need for their own or alternative nuclear deterrent capabilities. Several allies and friends have made this point explicitly and openly including Turkish, Japanese, South Korean and Saudi officials.

Even if the countries of the world were to unite and agree to eliminate nuclear weapons, allies and friends would continue to see great value in nuclear weapons for deterrence. For example, Syria would still retain its reportedly ample stocks of chemical weapons. Should Israel be expected to promise to forego nuclear deterrence in such an environment? Other allies and friends would continue to face daily biological threats. Are we to expect them to forego nuclear deterrence in the face of those threats? These would be naïve expectations indeed.

How can we prudently lead the world to Nuclear Zero when many of our own closest allies and friends continue to see U.S. nuclear weapons as a pillar of their security and the reason why they can remain nonnuclear? Remove that U.S. pillar and some allies will be compelled to find an alternative means of security including their own nuclear capabilities or other weapons of mass destruction.

I should note that proponents of Nuclear Zero have not offered any plausible basis for squaring this circle other than the hope that allies will stop seeing the world as a dangerous place and that the threats of chemical and biological weapons will somehow go away. Bonne chance. The reality of course is that allied apprehension about Nuclear Zero is understandable and their fears are reasonable. Nobel Laureate Thomas Schelling makes the material point simply, "One might hope that major war would not happen in a world without nuclear weapons, but it always did." In addition, some prospective proponents are no less eager to retain nuclear weapons. They see the

U.S. drive for Nuclear Zero as a malevolent U.S. trick to undercut the nuclear capabilities they see as vital to their security. Russian officials have openly said this. They certainly have no interest in following the U.S. lead toward Nuclear Zero. According to the "Washington Post," when Nuclear Zero proponents presented the Nuclear Zero option to President Putin in a private meeting in July 2007, the Russian president, "Scoffed at the proposal as just another trick to weaken his country." Numerous senior Russians including former President Gorbachev have said that because Russian conventional forces are so inferior and weak compared to those of the United States, NATO and China, that Nuclear Zero would threaten to put Russia in the intolerable position of inferiority. Russia understandably rejects a world in which U.S., NATO and Chinese conventional forces are so much superior to its own and Russia has no nuclear weapons to serve as the great equalizer.

Concern about an unbeatable U.S. conventional superiority should come as no surprise and such a prospect can hardly encourage Russia or China to embrace the vision. Most recently Russian President Dmitry Medvedev emphasized that nuclear weapons are the sine qua non for Russia, "The possession of nuclear weapons is the defining condition for Russia to conduct an independent policy and to preserve its sovereignty." Again, proponents of Zero have offered no plausible basis for squaring this circle, just continuing expressions of hope that these countries' fears and conflicts will come to an end so that Nuclear Zero can be realized.

Finally, an effective Zero agreement would require a fundamental transformation of the international system. Why? Because most states will not give up the weapons they see as essential to their security in the absence of some alternative form of protection. The international system of sovereign states with its inherent security threats would have to be replaced by a reliable, effective global collective security system

that would protect all who would give up the forces they see as essential to their security. When states no longer need to rely on their own forces for security and instead can rely on a trustworthy system of global security, then and only then will the conditions called for by Churchill be necessary for nuclear disarmament to take place. Mohamed ElBaradei who was recently the Director General of the International Atomic Energy Agency readily acknowledged this connection between the plausibility of Nuclear Zero and the requirement for a reliable collective security system. He said, "The Security Council must be drastically reformed so the world can rely on it as the primary body for maintaining international peace as foreseen in the U.N. Charter." Unfortunately the international system that we live in, the international system of sovereign states, is extremely resistant to the fundamental transformation of itself. The creation of a reliable global collective security system has been an unmet dream for 100 years, first the dream of the League of Nations and more recently the dream of the United Nations. Unfortunately I believe this century-long dream is sure to remain unmet because sovereign states follow their own individual and competing sense of interest and there is no evidence that this reality is fading. The international community's failure even to cooperate sufficiently to control the nuclear weapons of a weak pariah state like North Korea reflects this ongoing problem. In short, the international system is missing the mutual trust and the common interest necessary either to create a global collective security system or to inspire states to give up their ultimate means of security which includes nuclear weapons.

When might the international system escape this unfortunate condition? Under Secretary General of the United Nations Brian Urquart suggested that international unity and common purpose would become feasible "when there is invasion from Mars." Perhaps. I think that may be a bit optimistic because he forgets the potential of playing humans against each other.

In summary, there are numerous reasons for being wary of Nuclear Zero. Premature steps toward the elimination of nuclear weapons could degrade the deterrence of war and a war fought with today's nonnuclear weapons could easily destroy civilization. At Gettysburg there were roughly 50,000 casualties over 3 days, roughly 11,000 fatalities. That was with 200-year-old technology. I want you to think about what a conventional war would look like today. Steps toward Nuclear Zero could degrade extended deterrence for our allies, leaving allies more vulnerable to attack and leaving some to seek their own nuclear weapons. It's important to remember in this regard that our alliance commitments tie allied security to our security. Their wars become our wars. We don't want extended deterrence to fail. Nuclear Zero as a priority U.S. goal could easily lead to U.S. nuclear reductions that would make sense only in the context of the dramatic transformation of the international system in the direction of unity, common purpose and effective collective security. No evidence points to the reality of such a benign transformation taking place now.

The fundamental problem with the Nuclear Zero initiative is that it reflects no appreciation of Churchill's warning. It threatens to degrade the brakes to war provided by nuclear deterrence. It threatens to end the breaks on proliferation provided by the U.S. nuclear umbrella for allies. Yet at the same time it offers no plausible alternative mechanism to prevent war or to assure our allies. The late British nuclear expert Sir Michael Quinlan captured I think in a single sense the fallacy of elevating Nuclear Zero to be the priority U.S. nuclear goal in the absence of a realistic, collective global security system. Sir Michael said better a world with nuclear weapons but no major war than one with major war but no nuclear weapons. I see to reason to believe that Sir Michael got the tradeoffs wrong. Thank you.

MR. O'HANLON: Thank you, Keith. Now I have the unfortunate task of putting on my hat as a panelist and trying to partially respond to Keith with a slightly friendlier view of Global Zero. I'm going to try to do that briefly, and then we'll hear from Steve Pifer as you know on the recent treaty and more current issues.

I think both Keith and I see this as a debate that while it may sound theoretical at one level is relevant to current issues. He's mentioned very clearly the relevance to extended deterrence and assurance of our allies that we try to encourage people to feel secure under current relationships, current arrangements, and any kind of move that seemed to precipitously get rid of American nuclear backup or a nuclear umbrella for our allies could be quite dangerous and really serve to weaken the nonproliferation agenda rather than to strengthen it so that I take very seriously all of these concerns.

Let me say a couple of things by way of the vision of Global Zero I would articulate myself and then a reason why I still think it's worth trying to emphasize that vision a bit more as President Obama did last April in Prague. I think President Obama has a huge challenge with the next speech, how do you make Global Zero relevant once you've given the big vision speech and you want to actually affect near-term policy? That's a bigger challenge because one point where I think Keith and I very much agree and frankly most current advocates of Global Zero would acknowledge this too is that we're not in the position to move toward the elimination of nuclear weapons anytime soon. I see this as the sort of thing we can talk about now. We can't really think about even writing a treaty for one to three decades and that would be until some of the great power stability that Keith referred to has at least arguably been improved. My guess is Keith and I would draw the line differently as to where we thought that the progress was sufficient in terms of Russia feeling secure, in terms of the United States and China not

being in a position where Taiwan remained a potential casus belli and other such issues, but we would both agree that we're not in a position now to move toward the world.

If and when we are, and again I'm thinking one to three decades as a plausible, optimistic timeline, I think the vision for Global Zero should be thought of in the following ways. First of all, this is not abolition. This is not viewing nuclear weapons as the military equivalent of slavery and we finally invalidate or make illegal something that is fundamentally immoral or inhuman and inhumane. I accept Keith's point that this has to be viewed in terms of a broader agenda for reducing the costs and likelihood of human conflict and if it's not viewed in those terms which also are the terms that Tom Donnelly has suggested we employ, then I think we're making a mistake. So when I talk about Global Zero, I don't imagine getting to this nirvana moment when we finally eliminate the last nuclear weapon and then know forever that we have finally eliminated the scourge forever from the planet. I believe Global Zero is best thought of as a very low state of readiness. By that I mean that the weapons themselves should be eliminated and I hope some day that fissile materials will be eliminated as well, but we can't assume that even if that happy day arrives that it's permanent for a number of reasons. One is of course someone could cheat. Two, someone might have cheated along the way and our verification systems will probably not be good enough to be sure. Three, the threat of conventional military rearmament and aggression is still always going to be there. And four, advanced biological pathogens I think could be a potential reason why we have to consider nuclear deterrence again in the future.

Many of my friends in the nuclear arms control community would reject that last argument, they'd probably reject all of the arguments I just made, but especially the last one that nuclear weapons could be relevant to deterring any kind of conflict besides nuclear war and specifically biological agents. But I would submit to you there's

nothing more fair, decent or humane about an advanced biological pathogen than a nuclear weapon. I don't see the moral distinction. If in fact we're talking about a very well-weaponized anthrax that could kill hundreds of thousands or heaven forbid a contagious pathogen which combines the transmission qualities of a flu with the lethality of a smallpox and is bioengineered at some future date perhaps by a country able to build its own antidote for its own population, why is that threat something that we should not be willing to use nuclear deterrence against?

I am sort of a hawk on how I define Nuclear Zero as a vision, but I still think it's worth doing, and so rather than elaborate more about my vision having sketched out those thoughts, let me leave you with three motivating cases or motivating arguments of why I think we should keep this conversation on the table and why President Obama was essentially correct to try to elevate it in our consciousness even if again his next step is not so obvious or not so easy. One is of course the history of the Cold War. Many people get nostalgic for the Cold War and they talk about stable deterrence and they talk about the tradition of nonuse that we established, and I tend to say to all that nonsense. When I read the Cold War I get goose bumps and I get sweaty palms just rethinking some of the crises, the Cuban Missile Crisis is exhibit A, but there are many others. And there are nuclear accidents that even with all of the money, resources and expertise the United States and the Soviet Union put into trying to maintain arsenals, we still have a lot of airplanes crash with nuclear weapons on board, we still had weapons go missing, we've had weapons go missing in the last couple of years for at least a few hours. These are scary things that are hard to keep control of. We do a very good job 99.999 percent of the time but that still leaves opportunities for accidents, miscalculation or scary crises. So that's the history of the Cold War and I'm happy to discuss that more. But again you don't have to accept President Kennedy's view that the odds of a nuclear war over Cuba

were between 1 and 3 and 1 and 2, even if you believe McGeorge Bundy and he thought the odds were much lower, he still thought the odds in some sense were unacceptably high. What you do about it, it's easy to say they were unacceptably, it's not clear how you get to the point where they are acceptably low, but nonetheless, the history of the Cold War was not a period of great power stability over long stretches of time and I'm not sure frankly that we want to relive that kind of experience.

Argument number two or motivating argument number two, we may not need to relive that kind of experience, but let me look at India and Pakistan. These are two countries that of course in the last dozen years have weaponized their nuclear capability which was latent for a long time before that. I don't see those nuclear weapons as fundamentally stabilizing in South Asia and I think it's pretty scary the plausibility that they could be used in South Asia. If you spend time talking to Indians and Pakistanis and understanding their conventional military debates, a lot of what's going on is both sides trying to think about the kind of conventional aggression that could happen even below the nuclear threshold and how they respond to that or how they carry it out themselves. This is for example as you'll see in Steve Cohen's new book on the Indian military one of the concerns of India is how they figure out a way to respond in a significant way and yet a manner that does not lead to Pakistani nuclear retaliation in the event of another Mumbai-like terrorist strike. Heaven forbid that such a thing occur, but it's not out of the question, and Pakistan is a small enough country that there's a pretty fine line between a significant military incursion for retaliation and something that Pakistan would see as a threat to the state, to Islamabad, to the core of the state. I would encourage people to think about those kinds of situations and ask themselves to what extent are nuclear weapons really benefiting the situation in each and every such case and to what extent can we imagine a world going forward for many decades and centuries where that kind of

crisis does not escalate to nuclear use perhaps inadvertently, and people like Barry Posen have written of the danger of conventional military systems, communications system, warning systems, being struck in the course of a conventional war but people either misinterpreting that or worrying about what come next and the potential for a conventional action to have nuclear implications and repercussions. I'm sketching out brief arguments here, but I want to at least mention them.

The third very briefly is when I watch the U.S. and international deliberations over how to respond to Iran and North Korea and their nuclear ambitions. I would concede right away the point that if we went toward Global Zero in a more enthusiastic and more transparent and more sincere and more accelerated way, it would not in any manner change the calculations of Tehran of Pyongyang. In fact, it might even increase their incentives to build nuclear weapons in theory. But the international community more broadly is now trying to figure out enough way to put enough pressure on Iran and North Korea and there could be other cases like that in the future where we actually make them pay such a high price for these kinds of nuclear shenanigans and adventures that they either change their policy or at least we can contain them with time from acceleration of the building of these arsenals and ultimately force them to walk them back some day and send a clear message to other would-be proliferants that it's just not worth the cost.

Unfortunately with the current international system I think we losing for the most part in these efforts and I think a big part of the reason is that many countries do see a double-standard. They say, you're right, Iran and North Korea are worse in terms of their behavior, in terms of their forms of governance than the established nuclear powers, but there is still an unfair double-standard here. It makes people reluctant to apply sanctions. There are many other reasons they're reluctant to apply sanctions as

well, economic self-interest being reason number one, but nonetheless I do believe that a more sincere and credible vision for Global Zero could at least help us marginally in international negotiations over sanctioning Iran and North Korea and these are presently negotiations that I think we are losing in the sense that whatever pressure add is not fast enough, not persuasive enough, not punitive enough to change the calculations of Pyongyang and Tehran before they acquire their nuclear arsenals. I admit this is a nuanced argument because nothing about a full-throated endorsement of Global Zero is going to make this kind of process easy and it might still fail, but I am struck by the fact that our current approach of holding onto our nuclear weapons while we try to convince others not to acquire them is at best a holding operation and I don't think it will be sustainable indefinitely.

Thank you for your patience. Now I'm going to take that hat off and become Mike the moderator again and turn things over to Steve Pifer.

MR. PIFER: Thank you, Mike the moderator. I want to make a couple of comments about nuclear deterrence before I talk about arms control and say I agree with a lot of things that have been said so far, and getting nuclear deterrence and getting deterrence in general is going to be difficult. It's challenging. It's much more difficult than during the Cold War where you had this bipolar model. Now you have to think about now only how do you affect the calculations and perceptions in Russia, but how do you affect the calculations and perceptions in other potential adversaries? I believe and I hope one of the things that we'll see when the Nuclear Posture Review comes out is what is the administration's answer to that in terms of strategy, doctrine, declaratory policy and force structure.

It does seem to me that we ought to think though in a broader term about deterrence in the sense that we ought not to ask nuclear weapons to be the only part of

the spectrum that contributes to deterrence. We ought to look at the entire spectrum of U.S. military capabilities which include some very substantial and very impressive conventional forces in terms of land, sea and air power projection and in terms of precision strikes. We ought to look at the potential contribution of missile defenses which I don't think will reach a point in the foreseeable future of being able to blunt a Russian missile attack but have the potential to deal with an Iranian or a rudimentary North Korean capability. So when you look at deterrence it's not reasonable I think to put all of the burden on nuclear weapons although they are certainly a key part of that, but we ought to look at the full spectrum of U.S. force capabilities.

Let me now talk a little bit about arms control and the vision of President Obama. I guess on this argument I would come down with Mike's point of view that the vision is something that we ought to put out there. It's a good vision. I think it's an important vision in terms of signaling that, yes, as one country along with Russia possesses about 95 percent of the nuclear weapons; the United States is prepared to be serious about reducing the number of those weapons. But I also think that whenever I've seen President Obama speak about this, he's also said that a lot of things have to happen before you can reach that goal. I think he almost always says it's probably not going to happen in his lifetime which I think is a shorthand way of addressing many of the concerns that Keith mentioned.

Let me talk a little bit more about what happens in the near-term and specifically the new START treaty which was announced on Friday. I think this treaty is going to be good for the United States. It's going to reduce the number of strategic nuclear weapons that Russia could target at the United States by between 30 and 40 percent. It's also going to inject a degree of transparency into the U.S.-Russia nuclear relationship. With this treaty, assuming that it's ratified by both the Senate here and the

Duma in Moscow, we're going to know a lot more about Russian nuclear weapons than we would know without because of the verification provisions. I also think the treaty is going to be important looking to the nonproliferation treaty review conference in May, and the nonproliferation treaty always embodied this basic bargain that nuclear weapons states would reduce and the nonnuclear weapons states would agree not to acquire nuclear weapons. I don't think the new START is going to suddenly affect a calculation in Tehran or North Korea to give up those nuclear weapons programs, but I do think it will strengthen the hand of the administration at the review conference in terms of trying to press to tighten the nuclear proliferation regime in terms of putting more impediments in the way of other states that may want to follow the course of Iran and North Korea and that's to the advantage of U.S. security. Finally, it does seem to me that typically when you look over the last 40 years when you've had an arms control agreement between Washington and Moscow, it tends to have a positive impact on the broader relationship. Going back I think to a year ago it's fairly clear that one of the goals behind the administration's approach in terms of trying to find an arms control solution on strategic nuclear weapons with Russia was the desire to build a more positive relationship in which it could secure Russian assistance on issues such as Afghanistan and Iran.

But one test I think for arms control in general and for the new START treaty in particular has to be does it allow the United States to maintain an effective nuclear deterrent. Going back to his speech in Prague last year, President Obama was very clear that until that time when you can in fact get rid of all nuclear weapons, if you can ever reach that point, you need to have in the United States an effective nuclear deterrent. I think based on what we've seen so far of what the treaty looks like, obviously we haven't seen the text of it yet, but I think the answer is going to be yes. First of all, 1,550 strategic warheads is a pretty formidable nuclear force. I think it's going to be

sufficient to give us confidence that we're going to be able to deter the range of potential adversaries out there. I think this through when I look at what will be the force characteristics of the U.S. force when we implement the reductions and it seems to me that in fact when you look at the force structure, and where I'm talking about missiles and bombers, in fact the force structure after this treaty is not going to be that much different than the force structure that we have today. That is in large part because the United States is going to reach its limit of 1,150 warheads primarily by downloading, that is, taking warheads off of intercontinental ballistic missiles, taking warheads off of submarine-launched ballistic missiles but still keeping the basic force structure about along the lines that it is today. I would anticipate that after the treaty reductions are implemented you'd have a force structure that has either 400 or 450 Minuteman intercontinental ballistic missiles as opposed to 450 today, perhaps up to 336 submarine-launched ballistic missile tubes and probably some reduction in bombers, but as I understand, the reduction in bombers will be made by taking some of the bombers that are currently in the nuclear force and keeping the aircraft but assigning them conventional-only roles and as the treaty I am told will come out, in fact those sorts of aircraft would not be captured by the treaty's limits. So it does seem to me that we are going to maintain under this treaty a very strong, a very robust, a very powerful triad that in sorts of terms that you look at for deterrence is going to be very positive. First of all, the survivability of the force. When you look at the Minuteman silos in hardened silos there is no reason to suspect that the invulnerability of submarines at sea is going to be decreased. You would present a potential attacker and here when you're talking about a major attack on the U.S. strategic forces you're only talking about Russia as the country that has the capability even to contemplate it. Their problem is they still have the same

number of targets to shoot at with the treaty as before but they're going to have fewer weapons to use in that attack and I think that's a good thing.

I think the force that we'll have is going to be agile. It will present the president should he need to use it a mix of capabilities both to execute small and large attacks and it's also going to have the capability to inflict upon an aggressor a devastating response. When I look at that force it seems to me that it's going to be a force that will deter any rational potential adversary that we might face.

I ask myself who might not be deterred by this and I think there are some cases out there where we say maybe they won't be deterred by that force, but I guess I would argue that in that case if there is a country out there that's not going to be deterred by 1,550 weapons, they're probably not going to be deterred by 3,000 or 10,000 or 15,000 weapons so that we're going to have to think about a different way to affect their calculations.

Just a couple comments on next steps because I think in some sense this is probably going to be the last easy arms control agreement because the next step, and President Obama and President Medvedev have said this is the first step in a process, is going to get into some fairly difficult questions. Tactical nuclear weapons for example. That's going to be difficult because you have a very large numerical asymmetry that favors the Russians on this plus as Keith mentioned, the Russians over the last 10 years have adopted a NATO policy on nuclear weapons from the 1970s which is to say they will use nuclear weapons to offset Russian conventional inferiorities vis-à-vis NATO or vis-à-vis China. That's going to be a hard question to get into and it's going to touch on those issues related to extended deterrence. One thing that I hope that NATO is looking at now in terms of defining a strategic concept which it's supposed to have by the end of the year is what role does NATO see for nuclear weapons in its overall defense

structure and concept. A second hard issue is going to be how you deal with nondeployed strategic weapons because I suspect if we push on tactical nuclear weapons, The Russians are going to come back and say what about limits or reductions in those nuclear warheads that you took off the submarines and off the Minuteman intercontinental ballistic missiles which in theory at some point you could always put back on? Then a third question is going to be what to do about third countries. At some point, and I'm not sure what that number is, it's very difficult for me to see the United States and Russia pushing the numbers of strategic forces down without having some handle on what happens to third countries. The clearest example of this is expressed as does China at some point reach a conclusion that with a relatively modest investment it in fact can build up and become a third nuclear superpower? I think in this next round of negotiations you begin to have to think much more clearly about what you do about third countries which aren't all that relevant at this point. The United States and Russia after these reductions are going to still have 5 to 6 times as many weapons as any third country, but as you push those numbers down you've got to think in a more direct way about third countries. My hope is that the Nuclear Posture Review comes out will talk about doctrine, declaratory policy and force structure that will look not only at where we are today but will begin to answer some of those questions as to how you can manage the more difficult questions in what comes in the next round of arms control talks.

MR. O'HANLON: Thank you, Steve, and a quick clarifying question of you before we open things up. Do you have any sense now of when the administration's Nuclear Posture Review is likely to be released?

MR. DONNELLY: Because we'll have to finish our papers.

MR. PIFER: The original goal was February 1, and when we were told March 1 and now I'm hearing sometime in April.

MR. O'HANLON: Thank you everyone on the panel. Now we'd like to involve you. We'd like to request that you stand, wait for a microphone, state your name and then pose a brief question. Does anyone care to kick things off?

MR. COFFEE: John Coffee, retired State Department. Two questions if I may. First, why is there such nostalgia about nuclear weapons which are after all inanimate things like a gun? A gun is only a danger depending on who holds it and what his intentions are. I dare say no one lies awake at night worrying about French or British nuclear weapons. It's who holds them. Yes, there's a double-standard. That's why we worry about some people and don't about others. Secondly, the nasty little stickler of verification has only been passively mentioned up here. It seems to me that it would take such an incredibly intrusive global inspection regime that no one would ever accept such a thing. Then what happens the morning after zero is reached and we wake up and country X says we've got two left and unless you do so and so you're going to find out?

MR. O'HANLON: Keith, would you like to start?

MR. PAYNE: Let me address the second half of the comment and that is the issue of verification. We don't know what kind of verification capabilities we might have 10, 30 or 40 years from now. It may be much better than they are now. On the other hand, where I take the point of the comment is that unless countries feel absolutely secure in the verification capabilities that are available, they're not openly going to be willing to give up what they see as the ground floor of their security. That's why my suggestion in the comments was that in addition to whatever verification capabilities are available in coming decades, the basic requirement for an actual Nuclear Zero agreement would be an effective, reliable, global collective security system. In the absence of that, countries are simply not going to be willing understandably so to give up these weapons. In the context of a global, reliable, effective collective security system,

then countries may be willing to trust a verification technology that we have at this point, but in a sense that global collective security system solves much of the problem and if you actually have confidence in the global collective security system you worry less about the verification because that system is supposed to deal with security threats. That's why I say that ultimately that condition is a necessary condition to meet Churchill's requirements where he said don't give up atomic weapons until you have the alternative means of keeping peace.

MR. O'HANLON: Steve, do you want to add anything in regard to whether the verification mechanisms envisioned for START follow-on at least push us in the direction of addressing some of these concerns or is it night and day just two separate issues?

MR. PIFER: I think getting to the point where you would have a verification regime that would allow you to have confidence in a Global Zero, that's a long way down the road. But we're getting better at verification. The START treaty that was signed in 1991 for example had a dozen types of inspections, on-site inspections or warheads and such, and in the course of that treaty I think over 600 U.S. inspections were conducted in Russia, Ukraine, Kazakhstan and Belarus and the Russians conducted about 500 here so that it's becoming sort of a normal thing. In the new treaty that they'll sign in Prague next week there will be provisions for example for on-site inspection of warheads where how they will determine the number of warheads that are carried on an intercontinental ballistic missile or a submarine-launched ballistic is inspectors will have the right to and count. We're getting into areas that I think 25 to 30 years ago would have been way too sensitive, but we're going to have to go much further in terms of coming up with a verification regime that most countries would feel confident in, in terms of monitoring the absolute elimination of nuclear weapons.

MR. O'HANLON: Next question?

MS. DAUGHERTY: Jill Daugherty from CNN. Keith, I have a question. Talking about the point that Steve made about Obama and his approach about this, Steve is making the point that Obama is actually says you need an effective nuclear deterrent until you have the possibility of Global Zero. I'm wondering if you're taking Obama too much at his word or his rhetoric? We've seen it with Iran and North Korea on the issue of engagement, the president coming out with this very strong statement that we will engage, we'll reach out our hand and then it doesn't happen, and now we're at least with Iran moving toward stronger sanctions. Is it possible that perhaps the president is stating something that actually is a very, very far ideal and why do you question that he doesn't have an idea for effective nuclear deterrence?

MR. PAYNE: First of all, I didn't say that he doesn't have an idea for effective nuclear deterrence. What I said is if you eliminate nuclear deterrence you create a whole panoply of problems that you need to have solved before you move in that direction. Far be it from me to think that my president is not presenting a serious position when he makes these kinds of speeches in very serious international conferences. I believe his word and I believe what he says. But even in the construction that you just presented that we need nuclear deterrence until nuclear weapons are eliminated, I want you to understand what that says. That says if we get rid of nuclear weapons in a global agreement that we don't need nuclear deterrence anymore. I and some of the other folks on this panel said what about chemical weapons? What about biological weapons? As I said in my presentation, do we really expect Israel to be willing to give up nuclear weapons when Syria reportedly has a vast quantity of chemical weapons? Do we expect countries who are allies who face biological threats that could be every bit as destructive nuclear weapons to be satisfied if we pull away nuclear deterrence and leave them naked

to biological threats? That's why I don't accept the construction that says nuclear weapons are only useful for nuclear deterrence. We have no alternative to deter chemical and biological threats that are plausible so that even that construction as you've just describe it I have some concerns about.

MR. O'HANLON: Tom?

MR. DONNELLY: It is interesting that you can cherry pick your Obama quotes to suit your needs, but particularly if you look at these speeches, for example the Prague speech, it's not just the snippets about Global Zero on one hand or that we understand that nuclear weapons will be around for a long time and we'll all be dead before they go away. The overall tenor of the speech was a celebration of collective security and human cooperation as the way of political progress. He stood there and said we're in Prague at the end of the 20th century, a very violent century and this reflects the fact that people can get together and solve their political problems. That would be a minority view of the history of the 20th century particularly for most Czechs so that it's the overall framework in which these ideas that are advanced. And presidential rhetoric has consequences. When the president says the most important thing for me is to create an international system not that's held together by the exercise of American power but that is held together by a system of cooperate security and in which the measure of success or a measure of success is the elimination of nuclear weapons. There are perfectly good reasons as Keith says to take him at his word and then ask what does he mean when he says that. So he creates a set of expectations and even if he ultimately returns to a policy that's more incremental and more sensible, the rhetoric itself has consequences particularly if you see international politics as competitive, a sort of traditional competition for power and you have a leader of the United States who finds

it difficult to talk in those terms, again you can see how people would pay attention to that.

MR. O'HANLON: I'm going to add a quick word myself if I could. I accept what Tom and Keith have both just said, although of course one of the notable things about President Obama and you got at it yourself, Jill, is that in the time he's been in the White House he's become frankly a bit more hawkish and in a golden opportunity to talk about new forms of human security, the acceptance speech for the Nobel Peace Prize, he sounded practically like Henry Kissinger. I thought it was an excellent speech and most of my Republican friends that I spoke with thought it was a very solid speech for its practicality. He's been pragmatic on real national-security decisions like the Iran and North Korea nuclear crises, the Iraq and Afghanistan wars, defense planning and so forth. But this does raise the point, and Tom just mentioned it, that he has a disconnect here, he has a challenge trying to link the Global Zero vision in any meaningful way to near-term policy. We've heard a lot of cautionary notes today about how hard it is to do that and how it could be counterproductive. I'm going to throw out one very specific possible suggestion but in a way it's so mundane that it may underscore the dilemma and it builds on what Steve Pifer just talked about, and that is excess warheads and the next round of arms control. If you believe in Global Zero or at least the hope of Global Zero or maybe Sam Nunn's idea that we should take a couple of steps and see where we are, this concept of base camp, that we can't really see the summit yet of getting rid of nuclear weapons but let's take a couple of more steps in that direction and see where we stand, what might a next couple of steps be? Maybe a U.S.-Russia agreement that would essentially cap their tactical warheads. The Russians may not be in a mood to agree to a common ceiling for the reasons Steve mentioned, but maybe we can at least cap them, commit to an informal gradual reduction almost in the spirit of George W. Bush's more

informal arms control, and then have some monitoring on the U.S. and Russian side to get each other in the habit of being instructive in that regard with each other's business. That may be the kind of step that allows us to be pragmatic on offensive reductions, secure nuclear materials a bit better and at least get some more experience on warhead dismantlement and monitoring procedures of the type that will ultimately serve a Global Zero vision. But it's also at some level a fairly matter-of-fact sort of thing, it's incremental, it's step by step, it will be very hard to negotiate, but it's still in some sense not a huge milestone toward Global Zero and that may be the best sort of thing or the biggest sort of thing that President Obama can really consider given the daunting difficulty of really moving toward this kind of a world. I would still suggest that he consider it myself.

MR. SWEETMAN: Bill Sweetman, "Defense Technology International" magazine. We've talked about the next steps in arms control, the need to become perhaps more multilateral, to start considering third parties. Can you talk about how that could be helped or hindered by an underlying rhetoric that calls for Global Zero?

MR. O'HANLON: Steve, do you want to begin on that?

MR. PIFER: I think in terms of how you approach third countries, the first question in this next round between the United States and Russia is how low do you go? There may still be one number that you could go to in strategic forces where you don't actually have to engage third countries but I suspect we're getting pretty close to that point. Then you have to think about how do you bring these countries in. I would suggest starting with baby steps. For example, rather than all of a sudden bring into negotiation where every nuclear power is around the table, could you say the United States and Russia are prepared to go to this level but it assumes that other countries are prepared to cap at their level so that's going to mean no build-up? That's going to require a lot more transparency for example in the Chinese forces than we've ever had. So I

think you need to take very modest steps in this area because you're not going to succeed by going immediately to bring everybody into the game at one point.

The question of how you use Global Zero and I think part of the reason why the president has articulated that vision of going to a world without nuclear weapons is to put some pressure on other states and say if we're talking about reducing the nuclear danger, if we're talking about reducing nuclear risks, this is not just about the United States and Russia. Other countries have to do their part as well and before too long that includes China, Britain, France and other states that have nuclear weapons.

MR. O'HANLON: Keith or Tom do you care to comment on either the question or Steve's idea?

MR. DONNELLY: I would say that a step that we could take that would prepare for the multipolar world that we're looking at; it doesn't have to be necessarily on arms control. We could actually start creating a nuclear force that anticipated this that suggested this is the way we see the world unfolding and we are prepared for it and if people want to talk about how to preserve a favorable balance of power at lower levels of nuclear armament, an expression of seriousness on our part would be to prepare for it and therefore to be in a position to structure arms control talks to get the outcome that we would be again however we would define that, but to again anticipate this multipolar world by taking steps ourselves to build a force that would be quite different from the legacy force that would be an expression that this is the world we see coming and we're happy to talk about it with anybody who wants to talk about it.

MR. PAYNE: Let me take a quote from President Sarkozy and say we live in a real world and not a virtual world and in the real world we have opponents who literally see Nuclear Zero as a trick on the part of the United States to get them to give up their nuclear capabilities which puts them at a disadvantage because of U.S.

conventional superiority. If you think that that's an improper or unfair interpretation on their part, I want you to understand that U.S. administration officials have said just that, Nuclear Zero is to be an advantage for the United States because it gives the United States conventional superiority in a world where it could accomplish its military goals because it has conventional superiority. If you're sitting in Beijing or you're sitting in Moscow that probably doesn't look too attractive. So our foes have this dilemma. They see the United States on the one hand saying Nuclear Zero is the way that we ought to go and the United States can go in that direction because we have such great conventional superiority. We have potential foes and foes who say given that, the last thing we want to do is give up nuclear weapons which are the great equalizer vis-à-vis U.S. conventional superiority. There is this inherent dilemma that they face and it's a circle that hasn't been squared or a square that hasn't been circled in this whole discussion. John Adams said facts are stubborn things. That's a stubborn thing that's a fact.

MR. O'HANLON: Let's start taking two at a time. We got about 15 minutes left I believe. There are two hands right over here. I'll have both of them, please, and then we'll have people respond.

MR. MCDONALD: Bruce McDonald with the United States Institute of Peace. Thanks to all of you for your great presentations. In some of the comments that were negative about Nuclear Zero, and frankly Keith in particular I found myself agreeing with about 95 percent of what you said and I think that there are more cautions you could cite for example once you down to zero, the assumption is that then life will be great, but when you're at zero then life gets really nervous because one or two nuclear weapons suddenly makes a huge difference. But there was an undercurrent it seemed to me in your remarks that the Obama administration seemed hell bent to go to zero no matter

what else was happening outside. I hear that it is very conditional that only when circumstances permit, probably not in our lifetimes and so forth. Am I misreading you or are there some steps or words that the Obama administration is saying or taking that are making you uneasy that it's going to drive down to zero no matter what else is going on?

MR. O'HANLON: And we'll take the question right behind you, please.

SPEAKER: -- from South Korea, a GW graduate student. Dr. Payne, you commented on the allies' role in extended deterrence. Could you please elaborate on South Korea's or Japan's blackmail on diminishing U.S. nuclear capabilities?

MR. O'HANLON: That was for who? For which panelist?

MR. DONNELLY: Keith.

MR. O'HANLON: So two for you, good sir.

MR. PAYNE: I'm sorry, I didn't understand.

MR. O'HANLON: You're interested in extended deterrence.

MR. PAYNE: For South Korea and Japan.

MR. O'HANLON: Official demand for extended deterrence.

MR. PAYNE: Let me respond to Bruce's question first. As I said in my remarks, every administration since 1946 or most administrations since 1946 have posited nuclear disarmament as a goal. I don't see anything wrong with that. As I said, Ronald Reagan posited that as a goal. The difference I see in the current expression of that goal is the prioritization that's placed on it, and Bruce your question is where does concern seem to become real? I'll give you an example. During the Clinton administration, the Clinton administration saw a new type of nuclear capability as necessary for deterrence in its view and it went ahead and developed and deployed that nuclear capability. Various spokesmen from the Obama administration have said there will be no nuclear capabilities and this is in part in pursuit of the goal of Nuclear Zero.

Now I pose the question to you. How can we know now what nuclear capabilities are going to be necessary for deterrence a year from now, 2 years from now, 5 years from now? We don't know that. We can't know that. Nobody on this stage knows that. Nobody in the audience knows that. Nobody in Washington knows that. We don't know what type of nuclear capabilities may be essential for deterrence. So I'm very concerned, Bruce, when I hear the notion that there can be no new nuclear capabilities in support of Nuclear Zero when some sort of new type of nuclear capability may be absolutely essential for deterrence regardless of whether the numbers are 15, 50 or some other number. That's one of the points of concern that I have.

With regard to extended deterrence, I'm sorry, I still don't understand exactly the question, but let me make a couple of comments and hope that I capture it. What we see particularly with South Korea and our Japanese friends and allies is the continuing need for extended nuclear deterrence. That shouldn't be a surprise. Our friends and allies have expressed the point that they see themselves and their security intimately tied up with the U.S. extended nuclear deterrent. So there have been expressions from South Korean officials, for example South Korean leaders who say if the U.S.'s extended nuclear deterrent loses its credibility we will have to find an alternative. Japanese leaders have said exactly the same thing, that if there is a lack of credibility for the U.S. nuclear deterrent, we will have to find an alternative and some Japanese leaders have added we could reach a large number of nuclear weapons in a short period of time if necessary. So my concern is that the premature elimination or the premature reduction of the credibility of the extended U.S. nuclear deterrent really compels allies who have staked their security on the U.S. extended nuclear deterrent compelling them to seek some alternative. That alternative might be some other alliance relationship. That alternative might be seeking some other form of weapon of mass

destruction. It might be seeking independent nuclear capabilities. I don't know which alternative form of security it might take, but none of them seem very helpful to international security to me and what we've seen as extended nuclear deterrence has allowed key allies to remain nonnuclear and be fully assured of their security. That strikes me as a very positive thing and is something that we should challenge only very gradually and with great sensitivity to their security requirements. My fear with Nuclear Zero is that that sensitivity may be lacking.

MR. O'HANLON: Both Steve and Tom want comment, but I think what I'll do is take two more quick questions and everybody can comment on whatever is outstanding and we'll wrap.

MR. THIELMANN: Greg Thielmann, Arms Control Association. Steve Pifer gave us three ways in which follow-on negotiations will be hard following a new START, but I didn't hear strategic missile defense mentioned and I wanted to ask Steve whether you think any kind of follow-on negotiations can be successfully pursued if Russia and the United States do not have a meeting of the minds on strategic missile defense. Then related to that, how can we engage other countries like China in arms control if we don't have some meeting of the minds with them on strategic missile defense.

MR. O'HANLON: Then the last question, right here, please, and apologies to others.

SPEAKER: -- the Pentagon has been investing a lot to ballistic missile defense, laser technology or standard missile -- in a perfect world that may be a good deterrent, but it may stimulate other countries to overinvest to go through those barriers. What would your position on the BMD future in your Nuclear Zero scenario?

MR. O'HANLON: Why don't we start with Steve and then just work this way and everybody can comment as they wish?

MR. PIFER: Let me start with Greg's question about missile defense. As I understand it, the treaty that will be signed next week will have language in it that acknowledges that there is an interrelationship between offense and defense, that's just a fact of strategic life, but that it will not have any limits that will affect current or planned U.S. missile defense programs. I should have mentioned missile defense. It's an issue that will come back in the next round because I believe that the Russians are going to push much harder on this question in subsequent negotiations. I go back to a conversation that I had with a couple of Russian arms control experts about a year ago. What they were saying was that from Russia's point of view if you are talking about a strategic warhead level of around 1,500, at that level Russia probably did not need to have any limits on missile defense. They said if you went down to a 1,000 or below that, Russia would want to have some understanding and perhaps some regulation limits of missile defense. So we may not want to get into that subject, but I think the Russians are going to probably push it in a more forthright way than they did in this current negotiation. Quite frankly, I can understand that. From my perspective there is some number that I would not want to reduce U.S. strategic forces below without having an understanding of Russian missile defense plans because what often gets lost in the debate when we focus on missile defense is it seems to be entirely about U.S. missile defense plans but today Russia still maintains an operational antiballistic missile system around Moscow and Russian air defense missiles such as the S-300 or the S-400 are actively marketed as having capabilities at least against tactical ballistic missiles. So missile defense is on both sides and from the perspective of that interrelationship at some point I think the

United States needs to worry about how low we go given the Russian missile defense effort.

The second point I would make would get back to I think Keith's point on that first question he took on no nuclear capabilities. I think the White House is very clear that it does not want to at this point in time adopt a new nuclear weapons capability. It specifically does not want to decide to build a new nuclear weapon. But what I found interesting and the administration did it with a certain amount of fanfare was that they have this year between $500- and $600 million increase in the budget that goes to support the nuclear weapon complex, the labs at Livermore, Sandia and Los Alamos. I see that as an investment in saying you may not need a new nuclear capability now but what it does seem to me is that the administration is making an investment in the nuclear weapons infrastructure or the nuclear weapons complex so that if at some point down the road we discover that in fact there is a serious need for that new nuclear capability that we will have a more robust complex that is capable of delivering that.

MR. O'HANLON: Keith? Any final words?

MR. PAYNE: With regard to new START and missile defense I think is where we were headed on this part of the discussion, I'm actually quite concerned about the language in the fact sheet. The language in the fact sheet is as Steve described it, it says the new agreement doesn't capture current U.S. current or planned missile defense programs. Anybody who has been around Washington as long as I have learns that when you see words parsed like that what it suggests is that other things may be captured in the area of missile defense. Here what I'm concerned about is seeing the actual details because there may be no capturing of current or planned missile defense but the question is are there other restrictions on missile defense that don't happen to be part of the current or planned program because the language makes it sound like there

are such limitations and I'd like to see if there are. The reason why I'm a bit concerned about this in addition to the very fine parsing of the words in the fact sheet is because the Russian press is full of pronouncements that say the United States and Russia have an understanding on the limitation of missile defense as part of this treaty exercise. I don't know whether that's true. That is in the Russian press. So again it's a basis for concern with regard to how missile defense is treated.

I'll give another example. The discussion that there are 30 percent reductions in this new treaty from the Moscow treaty numbers of 1,700 to 2,200, again look at the fine points. That's why I'm holding back on making any kind of pronouncement until I actually see the fine points. But the fact sheet itself says that bombers will be counted as one weapon. If you look at the counting rules for bombers now, bombers could have 16 or more weapons which means if you have, let's just take an easy number, 100 bombers and you have 16 weapons per bomber, you have 1,600 weapons but they're counting as 100 because a bomber load of weapons counts as one weapon. You got to look at the fine print. Who has announced a strategic bomber program? The Russian Federation. Who has announced a new nuclear cruise missile for the bombers? The Russian Federation. So what you see is a discounting of bomber weapons such that it would be easy to envision 3,000 to 3,000 weapons as actually being there under the counting rules because a bomber load of nuclear weapons counts as one weapon. That's just from the fact sheet. I'll be interested in seeing the find print and the details to see what more issues there are lurking like that before making any kind of specific suggestion as to whether the treaty should be supported or not.

MR. O'HANLON: If I could just take a quick prerogative, do you know anything more about this issue because you've been following this too?

MR. PIFER: I think on the missile defense side when the treaty comes out I think you're going to be reassured. In part I think the administration has been taking some very careful soundings over the last 6 or 8 months and they understand that there is a very strong view on missile defense and they're very sensitive to making sure that the treaty is not only signed but also that it gets ratified so that I think when the words come out you'll be comfortable.

MR. O'HANLON: Tom?

MR. DONNELLY: I would offer Keith a hopeful interpretation of his last point that this means that some day we too will have a bomber modernization program. This whole discussion really does reinforce my view that this is such a Russia-centric discussion particularly when you introduce the zero thing it so distorts any calculation of what the requirement is for the foreseeable strategic future that it really does more harm than good. In our discussions in our group for example one of our colleagues -- rules suggested a person who's devoted a good deal of his life in figuring out what sensible arms control means said that anything below 1,500 would require a multilateral negotiation because the world is going to be more -- and so on and so forth. I'm interested because I know Steve is well-plugged into where the administration -- and he suggests that there's another number out there. So if you have the tug of zero as your ultimate goal, it frames the way you think about the current moment in a way that I think is profoundly distorting. It could be that the difference between 1,500 and say 1,000 is really immaterial even in a multipolar world, but that's an untested proposition. So I return to my fundamental view that we need to have a better understanding of where we're going before we not only take this step but think about follow-on steps and again in particular, expanding the consideration beyond just U.S.-Russia bilateral relationship and even if this does improve U.S.-Russia relations overall, the question is, is this a net

positive in the broad sort of global strategic sense about which there's been almost no discussion. Again I'm trying to be agnostic about it. I look forward to reading the language, in particular planned missile defense systems for example would tend to cut out laser and other forms of directed energy programs that have been recently sort of terminated and the question is whether there would be a follow-on program that current and planned term of art needs a careful bit of parsing. But again, I just wanted to reiterate one last time let's figure out where we're going before measuring progress.

MR. O'HANLON: Just a very last thought from me, I think you can already gather from this discussion and I'm sure from many others you're having that we have a lot of issues before us even with the treaty that was originally seen as a fairly straightforward almost interim measure that had been envisioned as a 2009 treaty and I would offer the not-so-bold prediction that the debate about this treaty is going to consume enough of the Senate ratification discussions of 2010 that you'll let me off the hook for not having forced more of a discussion about the Comprehensive Test Ban Treaty ratification debate today because maybe we'll have time for a framing conversation on that 6 to 12 months from now. I don't anticipate that the Senate will working on that anytime soon.

Thank you all very much for being here and thank you to my fellow panelists.

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I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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