

051518 Air Force Association, Reserve Officers Association and National Defense Industrial Association Capitol Hill Seminar with Franklin Miller, Principal at the Scowcroft Group, on “The Important Things the Nuclear Posture Review Does and Does Not Do: Myth and Reality” (For additional information on AFA/NDIA/ROA seminars contact Peter Huessy at phuessy@afa.org).

MR. PETER HUESSY: Hi, everybody. My name is Peter Huessy and on behalf of the Mitchell Institute for Aerospace Studies and NDIA and ROA, thank you for being here for the next in our series of seminars on national security issues, missile defense, nuclear weapons, nuclear deterrence, arms control and proliferation.

A reminder, tomorrow Brad Roberts is speaking about “escalate to win,” as General Hyten calls it. It will be at the Air Force Association headquarters at 1:30 p.m. to 2:30 p.m. He is in town, but he’s completely booked, so that’s why we’re doing it over at AFA tomorrow.

Also, on the 22nd of this month, we have two events. One is at the Heritage Foundation, my program on the Reagan Legacy on Arms Control and Nuclear Deterrence, at which our speaker today is also going to speak. That is at 10 to 12 in the morning and a luncheon that is going to follow. Frank is going to be speaking with Keith Payne and Sven Kraemer, myself, Ty McCoy and Susan Koch. We’re going to look at the lessons of the Reagan legacy and how that applies to what we’re doing today.

In Kings Bay, Georgia on July 12th through the 15th, we have our next triad event. Let me know if you’d like to attend or you’d like to sponsor. Our Space Power to the Warfighter breakfast series begins again in June with General Thompson on June 8th.

On May 22nd, we also have Joe Bosco, who used to be with CSIS, and Bruce Klingner, who are going to talk about North Korea and China. On June 5th Rebecca Heinrich and Matt Kroenig are going to talk about extended deterrence in Europe. On June 12th we have two of my friends from the Foundation for Defense of Democracies. Claudia Rosett is going to be speaking about the connections between Iran, North Korea and China, on June 12th, ironically, it’s a total coincidence that on the day the president is meeting with the head of North Korea in Singapore.

Mike Rogers was originally going to be June 6th is now June 21st. We have two new speakers. On July 20th Rob Sofer will talk about the Missile Defense Review. To conclude the series for the year on August 10th, General Selva, the Vice Chairman of the Joint Chiefs of Staff, will be speaking about both the Nuclear Posture Review and the Missile Defense Review.

Today we’re very honored to have my friend, Franklin Miller. He used to be with OSD. He used to be in the White House. He’s now with the Scowcroft Group. As I always write him, I said, I’m looking forward to your mild-mannered Clark Kent

conversation with us about the myths, mythologies and truths about the Nuclear Posture Review. I'm always looking forward to hearing from you, Frank.

Thank you all here, and especially our friends from Belgium, Germany, Japan and our other friends from around the world. Thank you for being here. And again, thank you to my sponsors. Without them we could not do this program. As I've said, this is our 35th year and it has been quite a run.

Again, Frank, thank you for being here. On behalf of Larry Spencer, our president, and General Deptula, my boss, welcome to this our next breakfast series. Would you give a warm welcome to Frank Miller?

(Applause).

MR. FRANK MILLER: Thank you, Peter. It's a pleasure to be back, it really is. I'll try the Clark Kent thing for a while.

I do want to offer my sincere thanks to you, Peter, for asking me to speak, and also for all of the work you have done over the years to keep preaching from the book of deterrence. Thank you.

As I've done here recently, I am going to divide my remarks this morning into three parts, sort of my personal tip of the hat to our strategic triad. To begin, I'd like to talk about the Nuclear Posture Review, and I want to clarify what the 2018 Nuclear Posture Review calls for, and equally as important, what it does not advocate. Why should I do this? It was rolled out in February, for goodness sake, it's three months ago.

One major reason is that three months after the NPR's release major misconceptions about it continue to abound, largely thanks to ill-informed or ignorant or even malign critics who continue to caricature the document. If one perused the spate of articles which emerged after the leak of an early NPR draft in January, and other articles which followed their lead, one might be forgiven for believing the following. First, that the NPR initiates a new nuclear arms race, that it represents a dangerous departure from long-standing U.S. deterrence policy, that it proposes an unaffordable and unnecessary plan to modernize U.S. nuclear forces, that it creates a new class of so-called useable nuclear weapons, that it threatens nuclear retaliation of cyber-attacks, and indeed, that it abandons arms control efforts.

None, absolutely none of these criticisms are accurate or valid. First, let's deal with the spurious charge that the NPR is creating a new nuclear arms race. The United States has not fielded a new nuclear system in the 18 years of this century. Since 2008 Russia and China have embarked on major upgrades to their nuclear forces.

Russia is deploying, that is to say fielding -- putting in the field today -- two new types of ICBMs, three new types of SLBMs, and a new long-range air-launched cruise missile. It has reopened the Blackjack strategic bomber line. It has three new SSBNs in

the water. It is also deploying a host of new dual-capable air-, sea- and ground-launched cruise missiles. And it's in the final stages of developing a follow-on to the SS-18 ICBM, which because of the large number of warheads it carries, has long been regarded by the West as a destabilizing system.

For its part, China is deploying -- again, to be clear, putting in the field -- two new types of ICBMs and a new SLBM, and has four new SSBNs in the water, and has the most dynamic ballistic missile program in the world. As former U.S. Defense Secretary Ash Carter remarked, there is a nuclear arms race, but the U.S. is not in it.

The NPR does call for modernizing all three legs of our nuclear triad, essentially endorsing the previous administration's plan to do so. That said, no new U.S. programs will be fielded until at least the mid-2020s, which will be, as General John Hyten, the commander of our Strategic Command says, just in time. By the mid- to late 2020s our bombers, our strategic submarines and our land-based missiles will have been deployed well past their anticipated end of life dates, and they will have to be retired, with or without replacements.

Critics of modernization like to throw around a 30 year life cycle cost to produce a sticker shock reaction. But this obscures two points. First, 30 year program costs always look large, regardless of the program. Second, the cost of the modernization program, even when it is in full spring by the 2020s, is not expected to exceed three to four percent of the defense budget, and that's a defense budget before the sequester caps were lifted.

The current operating costs of the existing deterrent, those current operating costs will continue as the new systems are (emplaced ?) also run about three percent of the defense budget. So the total cost of protecting America and our allies from nuclear attack is between six to seven percent of the defense budget, and less than one percent of the federal budget, which is not too much to pay to prevent an existential threat. Let's turn now to the allegation that the NPR is not consistent with long-standing U.S. nuclear deterrence policy.

The NPR is squarely in the policy mainstream, but it's important to remember what that means. The mainstream did not begin with NPR 2010 and the Prague Initiative. The mainstream began in the early years of the nuclear age.

From those early years to today, the fundamental policy is deterrence. The goal is to prevent major non-nuclear attack, and nuclear attack, on the United States and our allies, and that's a constant you find in the NPR. Uncomfortable as it may be for some, deterrence relies on presenting potential enemies with certainty that U.S. retaliation will exact costs which exceed gains aggressors seek to make. That's a constant, and you'll find that in the NPR.

Since 1949, to make this threat credible, targets have included a mix of so-called counterforce and counter value systems. This is a constant which you'll find in the NPR.

U.S. policy provides the president with options.

Since the 1960s U.S. policy has explicitly sought to raise the nuclear threshold. Options are flexible, and since the 1970s comprise both small and large responses. That's a constant which you'll find in the NPR.

Since 1980 policy and options explicitly threaten what a potential enemy leadership values most, and you'll find that in the NPR. Here's a quote from 1983. "If the Soviets" -- and you can substitute Russia, China or North Korea -- "it still applies." This is from the Scowcroft Commission.

"Deterrence is the set of beliefs in the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to deter as best we can what would deter them from considering aggression, even in a crisis. Deterrence is, therefore, and has been for decades, tailored. Deterrence is dynamic. It is not static."

As then-Defense Secretary Caspar Weinberger wrote several decades ago, "In order to deter successfully, our capabilities must change as the threat changes and as our knowledge of what is necessary to deter improves." You will find that same theme in the NPR.

U.S. policy since 1960 relies on a triad. Since 1980 the air leg has included penetrating and standoff systems. That's a concept you'll find in the NPR. Since the end of the Cold War, U.S. policy does not seek to mimic or replicate or match Russian non-strategic nuclear forces, another constant you'll find in the NPR. So the NPR is precisely where it should be, squarely in the mainstream of U.S. deterrence policy.

Let's talk about arms control and nonproliferation. Critics say that the NPR doesn't focus enough on arms control efforts. But the NPR explicitly supports the Non-Proliferation Treaty and commits the United States to help strengthen it. It maintains the U.S. moratorium on nuclear testing.

It contains the following key phrases, I quote. "Arms control can contribute to U.S., allied and partner security by helping to manage strategic cooperation among states. Progress in arms control is not an end in and of itself, it depends on the security environment and the participation of willing partners. Further progress is difficult to envision, however, in an environment characterized by nuclear-armed states seeking to change borders and overturn existing norms, and by significant continuing noncompliance with existing arms control agreements and commitments," end-quote.

So when the NPR was being drafted, we were aware that Russia was in violation of: the Helsinki Final Act, by which it pledged not to use military force to change borders in Europe; the Budapest Accord, wherein it guaranteed the sovereignty of Ukraine; the Istanbul Agreement, where it pledged to take its forces out of Moldova and also the Georgian provinces of Abkhazia and South Ossetia; the Presidential Nuclear Initiatives of 1991 and 1992; the Open Skies Treaty; the Vienna Document; the INF Treaty; and now

as Britain and the world is acutely aware, we also know Russia has violated the Chemical Weapons Convention. Now, it's really difficult to do business with a government that so blatantly violates its international commitments and lies about it. We should be quite clear.

International agreements are intended to be honored by their signatories. When one party violates agreements it has signed continually, and does so without penalty, it establishes a pattern that undercuts even the value of treaties and discredits the entire practice of such diplomacy. Indeed, when one party violates treaties while the other party complies, the national security and the credibility of the complying party is endangered.

Let's talk a bit about declaratory policy. NPR 2018 does break from NPR 2010 by emphasizing the primacy of deterrence rather than the Prague Speech goals. The Prague Speech goals were rejected by all nuclear weapons states except the U.S. and the UK., resulting in a more dangerous security environment today than in 2010.

Now this is now a criticism of the Obama administration, much as some of the former Obama policymakers have taken umbrage at the NPR. It's a recognition of how the world changed due to policies set forth in Moscow, in Beijing, in Pyongyang and elsewhere. Second, the declaratory policy in NPR 2018 clarifies the circumstances under which the United States might -- and I stress, might -- be forced to contemplate the use of nuclear weapons.

IN 2020 the NPR said the following. I quote, "The U.S. would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners," close-quote. That may be excellent nonproliferation policy, but it's not very good deterrence policy. It does not clarify for potential enemies what we would consider unacceptable.

NPR 2018 contains that same sentence, but it continues. I quote, "Extreme circumstances could include significant non-nuclear strategic attacks. Significant non-nuclear strategic attacks include, but are not limited to, attacks on the U.S., allied or partner civilian populations or infrastructure, and attacks on U.S. or allied nuclear forces, their command and control or warning and attack assessment capabilities," close-quote. That provides very clear warnings as to what types of attack we would consider unacceptable.

This has been interpreted as threatening to use nuclear weapons to respond to a cyber attack. It doesn't say that. That thought does not appear in the NPR, and it has been specifically rebutted by senior U.S. officials. That the thought appeared in the leaked version, but not in the final version, should tell you something. It wasn't accepted as U.S. policy.

Finally, let's turn to two programmatic initiatives proposed in the NPR. For the long-term the NPR, responding to Russian duplicity in the long-standing INF Treaty, calls for exploring the building of a new class of cruise missiles for general purpose

submarines, and also potentially for surface ships. To affect any gains, and offset any gains, Moscow might hope to achieve by deploying its prohibited INF missiles. The NPR is clear that if Russia were to return to compliance with its arms control commitments, and would reduce its non-strategic nuclear arsenal, the U.S. might re-examine the need for a proposed new naval nuclear cruise missile.

The second initiative, which is designed for rapid implementation, has drawn the most controversy, largely because it has been caricatured and misunderstood. The NPR proposes to modify a small number of existing submarine-launched warheads to have significantly reduced yield. This adjustment in our deterrent capability is necessitated by serious concerns about developments in Russian military thinking over the past 10 years.

The Russian military has devised a doctrine which is characterized in the Western press as “escalate to win,” which envisions using a very small number of low yield weapons to attack NATO forces defending alliance territory. They have retained former Soviet systems they pledged to eliminate, and have deployed new tactical nuclear systems, making that doctrine credible. They have exercised it, using those weapons. All of this has occurred in the face of our and NATO’s existing force structure, leading to the very real concern that the Russian high command may have come to believe we lack a credible deterrent to such a low yield threat.

Modifying a small number of U.S. Trident II warheads will enhance our deterrent capability, and will therefore be important to dissuade the Kremlin’s belief they could achieve tactical victories by using low yield nuclear weapons. The NPR’s critics counter this by saying the DOD is trying to create, quote, “more useable,” close-quote nuclear weapons. But here’s what the NPR actually says, quote, “Expanding flexible U.S. nuclear options now to include low yield options, is important for the preservation of credible deterrence against regional aggression. To be clear, this is not intended to enable, nor does it enable, nuclear war fighting, nor will it lower the nuclear threshold. Rather, expanding U.S. tailored options will raise the nuclear threshold and help ensure that potential adversaries receive no possible advantage in limited nuclear escalation, making nuclear weapons employment less likely,” close-quote.

Let me point out something about the low yield Trident which has largely been ignored in the debate. The United States does not need a low yield Trident warhead to deter attack on the United States. This initiative strengthens our ability to deter Russian attack on NATO Europe. It is an undertaking which underscores the American commitment to the defense of the European members of NATO, and it is in NATO’s interest that this initiative be realized. And the United States deserves both the credit and recognition, which it hasn’t received, for re-emphasizing in these turbulent times that we are fully committed to Article V and to the NATO alliance.

Let me pivot now to the second segment of my remarks, which will be very brief. I want to comment on the extreme incivility on the part of the disarmament crowd during the initial rollout of the NPR. The snarky, caustic and ad hominem tweets which marked the anti’s reaction to those supporting the NPR, were disgraceful. They have no proper

place in this business.

Americans should be capable of debating important issues, including nuclear deterrence policies, in a civil and respectful fashion, even in 2018 Washington. But the anti's did not do that. They hardly addressed the issues. They focused instead on character assassination and smears. As Americans we can, we must, rise above that. That's all I want to say about that with just one footnote. If Joe Cirincione has any friends here this morning, please go back and tell him that the work I performed advising the Defense Department on the NPR was performed on a pro bono basis. Contrary to what Joe suggested darkly in some tweets, I was not subsidized by any defense company or any other entity to do that work. I did it for free, because I was asked to do so. It's called patriotism.

Let me turn now to the disarmament view of what U.S. nuclear policy should be. This takes us to a very confusing area, because it's difficult to ascertain what the disarmament community would set forth as a platform. We know what they're against. We don't really know what they support on a broad scale.

In the absence of a definitive statement of policy, how can we have a real debate? So as a straw man, therefore, and one which I would ask the opposition to restructure where I've got them wrong, let me set forth the following points as the disarmament community's statement on U.S. nuclear deterrence policy. First, U.S. nuclear deterrence policy should be based on minimum deterrence theory, which threatens only an enemy's cities and allows us to reduce our force to some convenient low multiple of 10. We should do this because it is the moral thing to do and regardless of what enemy leaderships believe about the utility of nuclear weapons or how they deploy their forces.

And because we believe in a small city busting deterrence, we believe nuclear use, should it ever occur, will only be in a spasm war and we therefore reject a U.S. policy which has for 40 years sought to create limited use options to deter less than all out attacks.

Second, because we believe in minimum deterrence, we disagree with NATO's head of state who repeatedly endorsed in recent summit communiqués, the continued forward basing of U.S. nuclear weapons in NATO Europe. Rather, we agree with the Russian government that those weapons are provocative and should be returned to the United States.

Third, we oppose all nuclear weapons, but since we know we cannot change Moscow's or Beijing's policy, we will focus almost exclusively on inspiring the U.S. to lead by example. In this vein, we oppose the modernization of U.S. nuclear forces.

Fourth, despite the fact that Russia and China are deploying dual-capable cruise missiles of multiple ranges, and therefore do not appear to view such systems as destabilizing, we believe U.S. nuclear-armed cruise missiles are destabilizing and ought not to be built.

Fifth, we believe U.S. ICBMs are on a hair-trigger alert and pose a threat of accidental nuclear war and that they should therefore be de-alerted and scrapped. We offer no comment on the alert status of Russian and Chinese ICBMs, and understand that both Moscow and Beijing are not major sea-going powers. They, therefore, distrust naval forces and require alert ICBMs for strategic balance.

Sixth, we believe U.S. unilateral disarmament initiatives provide a beacon and a path which other nations will inevitably and most certainly follow.

Seventh, we believe in the continued existence of arms control treaties and believe the U.S. and its allies have a moral obligation to continue to adhere to such treaties, even when evidence clearly indicates the other party is in material breach. On the other hand, we have no moral obligation to uphold our part of political bargains we cut for tactical reasons, for example to achieve ratification of the New START Treaty, once our initial objectives have been attained.

Eighth, we that believe nuclear weapons are the problem, not who holds them. Therefore, a U.S. nuclear weapon is as dangerous to world peace as a Russian one.

And last, we believe nonproliferation is best served by unilateral U.S. nuclear cuts.

Now I may have gotten some of this wrong. I may have missed a few. So I say to the disarmament lobby, come out and debate this in public. Show us all where I have mischaracterized or misunderstood your positions. Perhaps, Peter will be kind enough to give us a stage. Don't do the usual cowardly thing and attack me on Twitter, come out and face the music.

And so, Peter and friends, thank you for your time and I look forward to your questions.

(Applause).

MR. HUESSY: Clark Kent indeed.

MR. MILLER: Questions? I don't bite.

MR. : (Off mic).

MR. MILLER: I think you've characterized some of the comments made by U.S. officials accurately, and if it was retained because of deep underground targets in North Korea, and if there is a significant and massive change in North Korea's policies -- I assume, I'm not speaking for the government, I'm speaking for myself -- that that could be on the table. Obviously what President Trump seeks to accomplish is a tectonic shift in our relationship with North Korea, as well as the complete denuclearization of North

Korea. If that is achieved, Lord knows what the implications and changes would be. Actually, though, it's one of the very small changes in an otherwise immense landscape.

MR. : In our markup for the NDAA last week in the HASC, we heard some arguments regarding our U.S. nuclear deterrent and how China structures its nuclear deterrent with several hundred weapons and a minimum deterrent force. You reflected on that a little bit here, in your ending (comments ?) there, but could you elaborate on the argument that China gets by with a couple hundred weapons and a minimum deterrent, and therefore so should we.

MR. MILLER: If we had a minimum deterrent policy we could get by with a couple of hundred weapons, maybe even multiples of 10. We don't, we don't. We have a policy which extends our nuclear deterrent to some 30-odd allies around the world.

We do that in order to preserve peace, having been drawn into two World Wars in the 20th century at great cost of blood and treasure in order to prevent future world wars. And we do it, although we get no credit for this anymore, as a nonproliferation measure. If we did not extend the nuclear deterrent to allies, several of those allies who are capable of building nuclear weapons, and who indeed have nuclear material, could build their own weapons. The arsenal that we have is dramatically smaller than the arsenal we had when I first got into this business, which was sort of in the age of the great white fleet.

But seriously, the arsenal has come down about 90 percent. We completely eliminated our tactical nuclear arsenal, with the exception of a small number, several hundred, air-delivered weapons in Europe. The strategic arsenal went down from General Chain's famous quote on the Hill in the mid-80s, "I have 10,000 targets and I need 10,000 weapons, to what we have today which is permitted by the New START Treaty. So it's much smaller. But again, the security situation is changing. I don't think that requires a growth in our arsenal unless the Russian policies become even more aggressive than they are. But when you're trying to defend allies in the Pacific and in Europe, you need more options. It's as simple as that. I'll leave it at that.

Thanks, Drew.

MR. HUESSY: Could you address the question of both the long-term effort to get a SLCM and also the D5 low yield option, which is both within the NPR?

MR. MILLER: More than what I said in remarks? Sadly, to pun, I apologize. The SLCM is an over the horizon option. It's sort of 2030s and beyond. The Navy will be undertaking an analysis of alternatives soon as to what the weapons system should be. It will also decide whether it should be launched by general purpose submarines alone or by general purpose submarines and surface ships, whether it should be deployed on a 24/7 basis, like the old T-LAMN was initially or whether it should have a concept of operations more like the T-LAMN had at the end of its life, although I hope it to be more realistic than what that was.

In part it represents a potential global capability to offset Russian cheating on the INF Treaty. Speaking personally now, and outside what the NPR says or doesn't say, I think a nuclear sea-launched cruise missile provides additional deterrent options in the Pacific in the face of ongoing Chinese nuclear modernization with missiles of all ranges: short- medium- and intermediate-range, nuclear tipped and conventional missiles. But that's for decision makers eight years from now or so.

The NPR is very, very clear, and anybody in this room who is interested in this and hasn't read it, I urge you to read it. It's very clear about the concerns that the U.S. government has -- and the British government and the NATO secretary general, and I can roll out some French academics who are friends of mine -- about the Russian "escalate to win" doctrine. When you take a written doctrine, when you support that doctrine by buying weapons systems that are suited to carry out the doctrine, and when you exercise it, and when as frosting on the cake you have statements from very senior Russian military, diplomatic and even high government Kremlin officials talking about how they would use nuclear weapons to escalate a conventional conflict and to therefore end that conflict on terms favorable, you have to say why are they doing that?

What weakness do they perceive in our deterrent posture that allows them to even believe that kind of an approach would be acceptable, that it would provide a military and diplomatic victory? After much thought, the U.S. government came to the conclusion that a promptly delivered weapon, with a probably to penetrate of 1.0, would provide an escalatory capability to de-escalate this whole situation.

One of the charges that has been made recently is that a low yield D5 is another tactical nuclear weapon and one we don't need. It's an enormous stretch of credulity to call D5 a tactical nuclear weapon. The United States has made clear that we do not intend to engage in limited nuclear war fighting.

So in my opinion, what the D5 does is to say to Mr. Putin, if you use nuclear weapons on NATO territory in the theater, we're going to escalate the conflict to mother Russia. We're going to go after targets of importance to you. They will be important, not vital, but they will be very important.

So the gamble for Mr. Putin then, in making the initial decision to attack NATO and to use nuclear weapons when that attack fails, is are you prepared to risk the existence of the Russian state, and indeed the world, on grabbing a slice of NATO territory? It's the view of the NPR, very clearly stated, that that gamble will not look attractive to Mr. Putin or whoever succeeds him. That's the purpose of the D5.

Again, the NPR is very clear that that weapons system is designed to affect the Russian calculus, Russian decision-making, particularly in a crisis. It's not that we believe that limited nuclear war is a good thing. It clearly raises the stakes for any Russian government contemplating the use of -- well, contemplating aggression against NATO in the first place.

MR. : I was going to ask about counterforce and counter value, because I really don't get that. You mentioned the employment doctrine that came out in 2013 said we reject -- which one was it, counter value or counterforce? But I've got a better one, unless you've got a response about that one.

In an article that came out yesterday in Dutch.

MR. MILLER: No, I certainly haven't read it.

MR. : He wrote the Dutch F-35s from the U.S. have been in the Netherlands for a couple of months so the population could see what the noise footprint was, because that's one of the objections over there. His point of view, though, is very pro. He was suggesting that the non-nuclear NATO allies continue to have a role in the nuclear deterrence for NATO. You mentioned the defense of NATO in the U.S. context. Do you see the allies continuing to have a role?

MR. MILLER: I hope so. I think the continued -- again, I hit it with a sideswipe, but NATO heads of government have endorsed the forward deployment and the broadest possible participation of allies in nuclear risk-sharing and burden-sharing in the last two summit documents, 2012 and 2016. The continued participation of European nations in the nuclear defense of the alliance is critical to alliance solidarity. I think it would become increasingly difficult, particularly in the current environment, to sell on the Hill the idea that we need to extend our nuclear deterrent to NATO if no other NATO nation is prepared to have nuclear weapons as part of the bargain.

So yes, when the F-35s come in they will provide a much more capable deterrent than the aging F-15s, 16s, and Tornados, particularly against the enhanced Russian integrated air defense system. I've been writing publicly for a long time that I think we ought to look at innovative ways to enhance and increase risk-sharing and burden-sharing in the alliance. The NPR has a section which suggests that there are a number of steps NATO can take which would, even with the current force, enhance the credibility and capabilities of that deterrent. So yes, I endorse that completely.

Since you mentioned that I mentioned counter-force and counter-value, I'll go on my little rant about that. Those are terrible terms. They were introduced in the '60s by Mr. McNamara as a budgetary tool as he was trying to curtail the proposal then made by the Air Force for 10,000 Minuteman systems.

By spurious (knee of the curve ?) arguments he sought to constrain the size of the U.S. arsenal, which he did. But in doing so, he supported this notion that once upon a time there was a category of targets known as counter-value, which in his day was Russian cities. In U.S. deterrence policy, knee of the curb actually touted Soviet population deaths and industrial destruction, against counter-force targets, which he initially in the early '60s supported as a way of potentially limiting the damage from a nuclear war. You'll find that in his American Bar Association speech in 1962. He completely confused that and made it seem like the only thing that we did was assured

destruction.

Now, it's very clear from declassified documents that he knew exactly that our war plans at the time featured a mix of military targets, leadership targets and military-industrial targets. But the myth has been propagated throughout the universities for years that there's sort of this dichotomy which never existed. As I said, since 1949 U.S. deterrence plans have included a mix of targets which go into those two rubrics. U.S. deterrence policy today is designed to focus on what potential enemy leadership's value.

In autocratic and despotic societies those tend to focus on the ability to keep themselves in power. They focus on military forces and internal security forces, and they focus on the industrial potential to sustain war. As we continue to study leaderships, as they evolve, Putin is different than Brezhnev and the gerontocracy. Deterrence policy may change. But the fundamental is to say to potential enemy leaderships, don't start a war because you will end up far worse when this is all over than you are now. So, thank you for allowing me to rant.

MR. : In the '80s we deployed (bow-launched ?) cruise missiles, ultimately to remove them in a negotiation to lower the risk of conflict. Do you see the D5 low yield as potentially the same type of deployment?

MR. MILLER: No. In the late 1970s the Russians began modernizing their theater nuclear ballistic missiles. They had these very old things called SS-4s and SS-5s which were liquid fueled and had to be erected on concrete stands, and were not very survivable. So they started replacing those with mobile solid-fueled MIRVed systems called the SS-20. That was a normal and logical evolution given what was going on in the '70s.

When the West reacted adversely, the Russians stepped on the gas pedal and the number of SS-20 deployments went way up. NATO decided it needed a counter. The ground-launched cruise -- more particularly the Pershing II ballistic missile -- served as a counter to Russian use of those particular systems. The far-reaching INF Treaty did away with all of those systems and eliminated a class of weapons.

The low yield D5 is not going to cause Putin to get rid of his nuclear artillery and nuclear short-range ballistic missiles and short-range cruise missiles. I don't think it's going to get him to change Russian military doctrine. But I do think it will cause him to think five times before putting that doctrine into action. So I think it is a necessary deterrent and I think it is a very measured step. The administration has made very clear and the Department of Defense has made very clear, it's not looking to build large numbers of these things. But I think it is a measured response and important deterrent to developments which were not envisioned by President Obama when he did the Prague speech.

MR. BILL OSTENWARD (ph): Bill Ostenward, as a former career submarine officer carrying nuclear weapons on a bunch of submarines, I just want to comment. The

clarity of your discussion of why we need a low yield SLBM is the best articulation of that that I've heard for the five or six NPR sessions I've been to. So I just wanted to say what you said makes a lot of sense. You said it very well. I've carried TLAM-N on SSBNs. I've been walking around this stuff for 40 years and I just want to thank you for clarifying.

MR. MILLER: Thank you, thanks, Bill. But let me piggyback on your comments to go to two other places. There are two particular criticisms that actually prompted me to write an op-ed in "War on the Rocks" about the low yield D5 that I want to address, since I've got the opportunity. The first, which kind of circulated in the disarmament community, and it was even endorsed by a former official in the Obama NSC, was that the launch of a single D-5 from a Trident submarine was going to give the location of that submarine away and the submarine would be sunk. That is preposterously wrong. The only way that could happen, the only way, is if there was a Russian submarine trailing that SSBN from the beginning. If that happened, the SSBN's skipper would have compromised his mission to begin with. So let's rule that out.

So let's go through the mechanics of this. I mean, the idea is a Russian satellite would spot the launch location and somehow get the message back to the Moscow center and an ICBM would be launched and take out the SSBN. First, that assumes that Russia has water penetrating RVs that can survive a ballistic trajectory of several thousand miles and hit the water at high speed and sink to depth and explode. To my knowledge, that doesn't exist.

Second, in the 20 minutes that it takes to do that, the U.S. submarine is going to be traveling several tens of miles. Your areas of uncertainty is about 160 square miles of ocean. Knowing that, you probably have to target lots of ICBMs, so make it 30 minutes from launch detection to impact.

By that time the submarine has now created an area of uncertainty of 300-odd square miles. You can't do it. It's just physically impossible. So that's one myth that I think we put a bullet in the head on. But, you know, they stick around.

The other is, if the U.S. launched a single SLBM at Russia, all hell would break loose and the Russians would launch every force that they had. One can believe that if one wants to. I can't tell people what to believe. But as I say, since the 1970s the United States has had in our arsenal and in our plans, limited nuclear options.

So this is not a new argument. If you believe, as I said, if you believe in spasm war let's debate that. But the notion that a single D5 launch is going to cause a nuclear cataclysm is pretty farfetched. But thanks for you giving me that opportunity to make that point. I appreciate it, Bill.

MR. : (Off mic) -- from the Japanese embassy. Our foreign minister has stated that -- (off mic) -- so my question is on the cyber-attack that you mentioned. Some people say that because the NPR mentions attacks against infrastructure, maybe that's

why there's (criticism ?) of cyber-attacks. How would you respond to that?

MR. MILLER: Well, there are many ways to attack infrastructure. We'll leave it to enemy planners to figure out how and in what way they might do so. But the point that the NPR makes is that anything which causes significant disruption in our way of life and significant civilian casualties in the United States and/or our allies, is a red line for us and we'll respond.

We're not going to say anything more than that, but we are going to say don't attack our civilian infrastructure, don't attack our people, don't attack our warning systems, don't attack our nuclear forces, don't attack our nuclear command and control. Those are red line and we don't advertise the kinds of responses a president might be presented.

Remember, only the president of the United States, this president, his predecessors, his successors, only the president of the United States actually determines what the United States will do when faced by a major attack. That has always been the case. There is no play book, there is no if A, then B. So, that's probably all I should say on that.

MR. : So a major cyber-attack is out of the --

MR. MILLER: I didn't say that. I said an attack on our civilian infrastructure which causes major destruction and significant loss of life, is the kind of an event which could -- the NPR says could -- trigger a nuclear response. How that attack is carried out, we leave to the enemy and we hope we never find out, because we hope to deter that attack in the first place.

MR. HUESSY: With that, thank you, Frank.

(Applause).

For those of you -- Brad Roberts has got a really extraordinary speech tomorrow. It's at 1:30 at AFA headquarters. We're not going to provide you anything but coffee and tea, but meet a very extraordinary teacher.

His book back in 2016, if you remember, gave us the escalatory policy of the Russians. I think it was very interesting. General Hyten points out that the speech that initiated that change in Russian policy was by Mr. Putin in April of 2000, at the end of a decade in which we were hoping the end of history and things would work out.

So please come and hear Brad because he really is an extraordinary thinker on this. If you don't have his book, please buy his book, because it is extraordinary. This debate is very, very important, so please come by and see us if you would.

Then on the 22nd of May I urge you to come over to the Heritage Foundation, as

well as come to breakfast in the morning. Again, I want to say, thank you, to our friends, not only from Japan and Belgium and Germany, but also I believe here from the Danish embassy as well. Thank you for being here.

Thank you for our military officers who are here. Thank you for your service. Thank you to our sponsors.

Thank you, Frank, again for an extraordinary set of remarks.

(Applause).