

041719 Air Force Association Mitchell Institute for Aerospace Studies National Defense Industrial Association, and Reserve Officers Association Capitol Hill Seminar with Steven Blank, Senior Fellow at the American Foreign Policy Council; and Mark Schneider, Senior Analyst at the National Institute for Public Policy, on “Russian Nuclear Threats and Strategic Objectives”

(For additional information on AFA/NDIA/ROA seminars contact Peter Huessy at [phuessy@afa.org](mailto:phuessy@afa.org)).

MR. PETER HUESSY: I want to welcome you all here today. My name is Peter Huessy and on behalf of the Mitchell Institute for Aerospace Studies, I want to thank you for being here. This is the 27<sup>th</sup> year we have been doing these national security breakfast seminars on nuclear deterrence, arms control, missile defense, proliferation and defense policy. I want to welcome you all for coming here today.

We’ve added a couple of new breakfasts. If you go to our Mitchell Institute, AFA website, you’ll find them. We’ve added the CNO of the United States Navy, Admiral Richardson, to be one of our speakers. Ironically, that is the first time we’ve ever had the CNO come over here and speak. Also, Uzi Rubin is going to be speaking to us in July, coming here from Israel.

A couple of other notes, our next Space Power to the Warfighter breakfast is May 3<sup>rd</sup> and will be here in this room. And I have two Triad Conference coming up in August 22<sup>nd</sup> and 23<sup>rd</sup> we’re doing a triad event in Crane, Indiana. That is in the middle of Indiana. It is in the middle of a corn field. It is also the second largest Navy base in the United States of America. We’re going to handle triad issues and hypersonic, and celebrate the 60<sup>th</sup> anniversary of SSP and their relationship with Crane.

Then on October 8<sup>th</sup>, here in this room, in this building, we’re going to have our second triad event of the year. Any of you interested in speaking or sponsoring, please let me know.

We have two wonderful speakers today, and the reason I have chosen Mark and Steve to speak is, one will talk to you about what the Russians are doing in terms of their modernization of their nuclear deterrent, both strategic and theater, and kind of what the lay of the land is with what they’re doing. Steven, from the American Foreign Policy Council, will talk to, what are they going to do with these things? In particular, today, he’s going to talk about the Russian post-INF arms control and nuclear strategies.

Mark Schneider, as you know, is with National Institute for Public Policy. If you read his material coming out, he’s done work on Russian conventional forces, on Russian nuclear policy and Russian missile defense, and has a new study in the Comparative Studies Journal, which you should take a look at.

I also want to thank our friends from Germany, Belgium, the Netherlands and Japan, that are here today. I want to thank our sponsors for their help that enables us to put this on. And I just would like to make one quote from Steven's new paper that he's going to get published, which he's going to address today.

He's talking about Russian nuclear strategy and he says this. This is an audacious strategy of limited war where nuclear weapons are always there to deter and allow Moscow to take risks to achieve any transformation in the status quo it desires. That is the theme of today's breakfast.

Would you first welcome our dear friend, Dr. Mark Schneider from the National Institute for Public Policy?

(Applause).

MR. MARK SCHNEIDER: Thank you very much. Before I start speaking, maybe I should apologize in advance. This is not going to be a pleasant talk this morning. We're facing a very serious threat from Russia, and I think there's more consensus on that fact than we've ever had, certainly since the end of the Cold War.

There isn't any consensus at all, I believe, on what we do about it, but certainly it's now pretty much universally recognized that Russia is extremely hostile right now, it is building up its nuclear forces in a very dangerous way, has a nuclear weapons use doctrine which is extremely dangerous, and if anything it is getting worse. I will talk about this a little more after I get through the threat part of this.

Certainly, we have seen more Russian nuclear-related threats in the last several months than we have in any year prior to this, including the peak year which is when this whole business of making nuclear attack threats started in 2007. Official U.S. government documents [really for several years now prior], going back to the Obama administration, have talked about our relationship with Russia as being competitive. Well, yes, it is, but that's not an adequate word. Lockheed and Boeing compete, but they don't make nuclear pre-emptive threats against each other. Although in this case it's really unilateral on the part of Russia, because we literally have never made a counter threat since the beginning of these threats in 2007.

Putin's economic policies are very much a disaster for Russia. In spite of this he puts enormous priority on the military buildup, and within the military buildup, the first priority is always the nuclear forces. They openly say that all the time.

According to Russian Defense Minister, General of the Army Sergey Shoygu, the development of their strategic forces, nuclear forces, is their first priority and that Russia will, quote, "Continue a massive program of nuclear rearmament, deploying modernized ICBMs on land and sea, and modernizing the strategic bomber force." You see pretty much the same thing in the 2018 Nuclear Posture Review. It states, "In addition to modernizing the legacy Soviet nuclear systems, Russia is developing and deploying new

nuclear warheads and launchers. These efforts include multiple upgrades for every leg of the Russian nuclear triad of strategic bombers, sea-based missiles and land-based missiles. Russia is also developing at least two intercontinental-range systems, a hypersonic glide vehicle and a new intercontinental nuclear-armed, nuclear powered, undersea autonomous torpedo.”

Last week Secretary of Energy Rick Perry and the head of the National Nuclear Security Administration, which is semi-autonomous within the Department of Energy, Lisa Gordon Hagerty, in prepared testimony to the Congress stated that Russia and China are investing massive resources in upgrading and expanding their nuclear arsenals at a time when they seek to challenge U.S. interests and unravel U.S. alliances around the world.

Putin talks a great deal about his nuclear super weapons. According to Russian Ambassador to the United States, Mr. Antonov, these are not subject to the New START Treaty, and he’s mainly right on that. He also said, just before that, they will not change the New START Treaty to bring these systems in. So, we have simultaneously the Russians beating the war drums on nuclear super weapons -- I mean, it has been so common since December of 2018 that hardly a week or two goes by without another high level speech talking about the nuclear super weapons.

They were originally announced by President Putin in his March 2018 State-of-the-Nation address and was extremely provocative depicting nuclear attacks on the United States by these new weapons systems. Five of them were in that speech. And then in February of 2019 in his State-of-the-Nation address he promoted the Zircon hypersonic missile to one of the nuclear super weapons.

They start out with the Sarmat heavy ICBM. It’s going to be their main counterforce weapon. It reportedly, according to state media, carries either 10 800 kiloton nuclear warheads or 15 350 kiloton nuclear warheads. It is supposed to have sufficient range to attack the United States over the South Pole, which obviously is intended to evade radar detection capability which is focused to the north.

This is probably only one of the super weapons which clearly is inside the New START Treaty. Everything else is either clearly outside, or in one case, possibly outside.

The Russians have developed the Poseidon and are in the process of testing, according to Putin. Poseidon, an underwater drone submarine according to the Russian state media, carries a 100-megaton warhead. According to some other Russian sources, it possibly has something called a Cobalt Bomb, which is an enhanced radiation weapon, which was conceived of in the Cold War, but apparently never ever actually developed, and is clearly outside of the New START Treaty.

We have a Russian program, according to Putin, to develop a nuclear powered, obviously nuclear-armed, cruise missile. He says it has unlimited range. It’s clearly outside of the New START Treaty. They have, according to Putin and the Russian

Defense Ministry, developed and actually deployed already the Kinzhal hypersonic missile. It's more accurately characterized as an aero-ballistic missile, a maneuvering ballistic missile. It is nuclear capable and is likely to be very widely deployed. It is clearly outside of the New START Treaty.

Then you have the Avangard hypersonic boost glide vehicle. It is inside the New START Treaty, but the Russians may very well deny this. The only reason it would be in the treaty is the booster is an SS-19, which is an ICBM under the New START Treaty, and the old START Treaty for that matter.

The Russians may deny this, claiming that it's a new type of ICBM, and since you don't have a new type of missile that has never been tested as an ICBM, that would be a lie. But in light of the limited characteristics of New Start Treaty verification regime, they may get away with it. They've actually done this before and gotten away with it with the SS-27, where you have one MIRVed version and one non-MIRVed version of the same missile, which are declared to be two different missiles. They may play that game here, or they may just mean, as according to Russian press, they're only planning to deploy 12 of these particular systems.

And we have the newly promoted Russian super weapon, the Zircon. The Zircon is a powered hypersonic missile, nuclear capable. It is clearly outside -- when you put it on a submarine or a surface ship, it's clearly outside of the New START Treaty, and they can build as many of them as they want. So, this is something that's likely to be deployed in very, very large numbers.

The December 2018 update on Russian strategic forces by General Shoygu, said that 82 percent of their strategic forces had been modernized. My guess is the real number is probably closer to 70 percent. The Sarmat heavy ICBM had completed pop-up tests which involved first stage ignition. We don't know how long the actual flight duration was from open sources.

In 2019 they say the Avangard will be operationally deployed. He indicated that a total of 31 Yars, the MIRVed ICBM, and the Avangard will be deployed in 2019. In addition, one of the new Boray A Class Ballistic Missile Submarines carries the Bulova 30. He talked about salvo launches of submarines and nuclear-capable missiles from the TU-160 bomber. According to TASS, the new version of the TU-160 is now in production.

Now a lot of this is confirmed in the Nuclear Posture Review that is really for the first time since the 1990s we have a serious amount of information that can be compared to what the Russians say. General Hyten, in a speech, said take these systems seriously. They are real, and there's no question about that. The capabilities may be exaggerated to some degree by the Russians, but they are certainly real and very threatening.

Overall, if you count the Zircon as now in the strategic category of its mission, according to Putin, we have 23 new or modernized legacy systems that the Russians are

simultaneously developing, and either deploying or preparing to deploy. How many deployed nuclear weapons they actually have, it's not absolutely clear. It certainly is a large number, much higher than the notional 1,550 limit on the New Start Treaty.

According to Khristianson and Norris at the Federation of American Scientists, they have 2,532 actual deployed strategic nuclear warheads, about 1,000 above the so-called treaty limit, which is not real. According to the commander of the strategic missile force, they've made a 66 percent reduction since the end of the Cold War in strategic nuclear warheads. That's very important, because the official number is 85 percent. The difference between 66 percent and 85 percent is almost 2,000 additional strategic nuclear warheads above the notional New Start limit.

The Russians are also modernizing their non-strategic nuclear forces. They've retained essentially the entire Cold War inventory of these systems. They are modernizing them, including according to the vice chairman of the Joint Chiefs of Staff, developing new types of non-strategic nuclear warheads. That's very, very interesting, to put it mildly.

Putin, of course, developed their nuclear strategy. It's based on the first use of nuclear weapons in circumstances that no Western president or prime minister would consider using nuclear weapons. This includes, according to the Secretary of the Russian National Security Council staff, local wars as well as regional wars. So that's a pretty low nuclear weapons use threshold. He also said that their policy was pre-emptive nuclear strike.

This was recognized in the last two years or so of the Obama administration, where they talked repeatedly about the danger of the "escalate to de-escalate" nuclear strategy the Russians have. You can read about that in many statements by the secretary general of NATO. There's no question that this is Russian strategy.

The use of nuclear threats, as I mentioned, has escalated dramatically since October of last year. I found 11 nuclear missile targeting threats, and the threat itself has migrated from talk about nuclear missiles to talk about hypersonic nuclear missiles. So, this is a new element of this, and the really bad news here is when Putin went public -- hinting in his February 2019 State-of-the-Union -- hinting about a decapitation attack on the U.S. national command authority, within days this appeared all over the Moscow press, including the state media, which depicted attacks on national command authority targets, and even listed them. Then the next month you have the Chief of the General Staff, General Gerasimov, openly endorsing pre-emption. This is apparently a preview of the next version of the military strategy, and basically he talked explicitly about nuclear decapitation.

That's real dangerous, because that's something you only do when you're fighting an all-out massive nuclear war. Nobody does a decapitation attack with nuclear weapons unless that's what they're fighting. So we've moved from limited use of low yield nuclear warheads, which is very dangerous in and of itself, to what I think may well be

their new war winning strategy, which is take out the U.S. nuclear command authority. Nobody is alive to order a retaliation attack.

So we have this very, very dangerous development. The Russians are not in any way interested in arms control, unless its unilateral constraints on the United States. They'd love to have a new ABM Treaty, as long as it doesn't affect them and affects us. That's easy enough to draft. You have many historical examples of the U.S. arms control community succeeding in doing pretty much that.

We now have a lot of threats relating to non-existent U.S. programs to deploy intermediate range missile in Europe. This has been linked now to nuclear hypersonic missiles. We face a quite considerable threat here. It's not a very pretty picture, and the really bad news about this is there's really no consensus on how to deal with this at all.

The Washington arms control establishment either endorses minimum deterrence or no deterrence, with fantasies about nuclear zero. They support either minimal missile defense or no missile defense at all. They ignore almost completely what Russian nuclear strategy is about, ignore the scope of the modernization programs that are underway and the implications of these modernization programs.

They are increasingly opposing the modernization of the U.S. deterrent. The NPR decisions were largely the Obama triad program plus a few improvements, which were by the way endorsed by the senior leadership of the Defense Department during the Obama administration. That's now not liberal arms control policy at all in Washington today. So we are facing a very serious threat from Putin, and I wish people would take the Russian nuclear threats a little more seriously. I think it's a lot more lethal than social media postings.

Thank you.

(Applause).

MR. HUESSY: Out next speaker is Steven Blank. I've known Steven when he was at the Army War College in Carlisle, Pennsylvania. I went up there a number of times to speak about nuclear issues.

Steve and I had the privilege of going to Germany to talk to one of the major shiftungs a number of weeks ago to a collection of Ms. Merkel's staff, some of the military, some members of the Bundestag, and some members of the German industrial complex that builds some of the weapons systems. We talked in particular, Steve did, from a video from here about the Chinese and Russian cooperation, which I really urge you to spend some time looking at his testimony before the Congressional U.S. China Commission, where -- how many words?

MR. STEVE BLANK: Eighteen thousand.

MR. HUESSY: Eighteen thousand word document about everything he could find under the sun about Russian-Chinese cooperation, particularly in the nuclear area, which is very, very critical. He also has, as I said, an article coming out about Russia's approach to arms control, post-INF. It also includes their strategy with respect to nuclear employment. As General Hyten said, "escalate to win" is what they're about. My phrase is, as Mayor Daley said about voting in Chicago, the use of nuclear weapons early and often.

Would you please give a warm welcome to the Senior Fellow at the American Foreign Policy Council, Dr. Steven Blank?

(Applause).

MR. BLANK: Thank you, Peter, and good morning ladies and gentlemen. I like the reference to Mayor Daley because I went to grad school in Chicago while he was still. A famous story is a reporter asked him once, Mr. Mayor what do you have to say about the fact that there's corruption in South Vietnam? This was during the Vietnam War. Daley looked at this guy like he had fallen off a truck and said, well, there's corruption everywhere.

Unfortunately, as far as Russia is concerned, there are nuclear weapons also everywhere also, as Mark pointed out. I'm going to give you the bad news. Mark laid out, and he has done this for year and he's a master at it and I don't know of anybody in the United States doing this kind of work the way Mark does, the extent of the Russian nuclear modernization program, which is now about 15 to 18 years old.

MR. SCHNEIDER: It began in 1997 with the original version of the SS.

MR. BLANK: Alright, so it's 22 years old. But it goes back at least to the Bush Jr. administration, if not the Clinton. In other words, there's a strategy here. They're not just throwing money at nuclear weapons, even though there are some people who think that they are producing nuclear weapons because that's all they can do. That's clearly not all they can do, if you look at the conventional side.

The question is, why? And then after a certain point, you don't need that many nuclear weapons if your purpose is to deter and to intimidate. Those two go together, obviously, because the intimidation factor, the information weapon aspect of this. That is, I have a weapon that if you cross my red lines I will use and you will no longer be around, or you will suffer what the Russians call unacceptable damage, and they have coefficients for what that is.

So why are they building 23 new projects: counterforce, countervalue, short-range, intermediate-range, long-range? I would argue -- and again, this is a minority view and I'm famous for being in the minority -- that the Russians are doing this because they have a strategy. I'm not going to get into the question of whether it's a good strategy or a bad strategy, because that's a different issue.

But it is important to get people in this town to understand that the Russians try to think strategically, for better or for worse, and try to implement that strategy; while we have no concept of what strategy is and are completely unable at the present, for a lot of reasons, to implement a true comprehensive national security strategy. After the collapse of the INF regime, which formally will be, I think, August when both sides have formally withdrawn, we are going to be in a completely new world. We're already in a completely new world and ball game and we have to understand the strategic aspects of that game and what the other side is doing.

The INF collapsed, as we all know, due to Russian cheating. To be fair, China's massive build-up of IRBMs played no small role in shifting American thinking. But it's the Russian nuclear violations of INF, the 9M729 Novator missile, that is the culprit here.

They deployed up to 100 of those missiles. So in other words, it wasn't well, we made a mistake or we tried to cheat and got caught and we stopped. They had a plan in mind and they've been doing this -- and given the length of time it takes to produce and deploy and think about all this, they've been doing this for over a decade.

Moscow has, as of today, at least four battalions of this missile in its armed forces, threatening both European and Asian targets. Latvian Foreign Minister Rinkevics just commented in a Foreign Policy article that Latvia knew Russia was violating the treaty long before Washington decided to withdraw. If you remember, Obama first called them out on this in 2014. We and Latvia also knew that Moscow had already targeted the Baltic states with four different types of missiles banned under the INF Treaty, and we deployed either in Kaliningrad or in European Russia. Think about that, four different kinds of missiles alone violating the INF Treaty over a period of years.

So, where do we go from here? A lot of people, when the Trump administration announced that it was exercising its legal right to withdraw from the treaty, went like this, screaming oh God this is the end of arms control. The architecture is gone, and so forth. Well, the architecture is not gone, for two reasons.

One, as Secretary Pompeo just testified, we've already begun preliminary discussions with Russia on a new START Treaty. The State Department contends that Russia is in compliance with this. Mark and I happen to be among those diehards that think that they're dead wrong, and I think we could probably make a good case for that. But that's the policy now of the administration.

Therefore, nobody has to worry too much about, quote, "the architecture of arms control." However, the problem is very simple. If architectures are about building buildings, you can't build a building on one side. It's like the Japanese line, "What is the sound of one hand clapping?" What is the sound, in an arms control architecture, the sound of Russia violating every treaty under the book? No one knows.

The question is, therefore, what will be in this new treaty? In December 2017 Bill

Gertz reported that the Pentagon believed that Russia was aggressively building its nuclear forces and was expected to deploy a total force of 8,000 warheads by 2026, and modernizing bunkers underground. And they will be strategic warheads, low yield and very low yield warheads, to circumvent the arms treaty limits, and so on. So Russia is in the middle of this massive arms buildup, not only INF, violated all the treaties, and yet we are about to enter into an arms control negotiation with them. Supposedly that is going to restore verification, or some form of verification, and so on.

Furthermore, Antonov admitted yesterday -- and Mark sent this out last night and blew us away with this -- Antonov admitted last night that all the weapons they have been building circumvent the START Treaty, as General Hyten had said in his testimony. In other words, all these new weapons, or most of them as Mark described, are not subject to negotiation as far as Russia is concerned. And you can be sure they will not willingly negotiate about them.

So what is an arms control treaty going to be about? Probably about our missile defense, and that's not a basis for a treaty. So as I said to you, they're building a comprehensive nuclear -- I'll use that word again, architecture, if you like. As General Selva, who is the Vice Chairman of the JCS, said, they're also developing new tactical nukes to tailor forces to virtually any contingency.

That begins to get you to the question of, what is this new strategy? As I mentioned just now nuclear weapons, apart from their destructive capability that we all know, they're an information weapon. They convey a certain amount of information. I have it within my capability to obliterate your society. Do you want to cross me?

That's an information and a psychological weapon threat, at the same time that it is a physical threat of I can kill you. And it is deployed, as Mark has pointed out, ruthlessly by the Russians in order to intimidate Europe and the United States. And in many cases, it has had some success.

Leaving the INF Treaty, one option for the United States would be to deploy some new nuclear weapons in Europe to deal with the Russian threat. Good luck. They have no nuclear consensus whatsoever, and most NATO European members will reject the idea of deploying nuclear weapons of any kind on their territory.

So from Moscow's point of view part of that strategy has been successful. They have intimidated Europeans into not wanting to defend themselves in this particular manner. There are other alternatives that may actually fill the requirement, but nuclear weapons are ruled out and one reason is Russian strategy.

But the strategy goes beyond that. Peter called it "escalate to win." General Dempsey, when he was chairman of the Joint Chiefs of Staff, called it "escalate to de-escalate." I see it as something different.

Beyond the well known facts that nuclear weapons can destroy and so forth,

Moscow is building this extensive, tailored nuclear force to control escalation in any crisis from the start of the crisis to the end of the crisis. In other words, nuclear weapons for Moscow is a weapon of escalation control that will be deployed not in the sense of necessarily being shot off, but deployed prominently in any local crisis: Ukraine, Syria, Venezuela.

This is therefore an attempt to do escalation control from a position of admitted conventional inferiority, although they have superiority in the Baltic and Black Sea theaters right now, in any immediate conflict, in order to deter NATO and to be able to dominate the former Soviet peripheries. Once having dominated those peripheries I can assure you that they will not know where to stop and will threaten everybody else. They're already, for example, threatening Romania in the Black Sea, because by seizing Crimea and Ukrainian territorial waters they are now the maritime neighbor of Romania.

There have been incidents, over flights, threats, they are the energy neighbor of Romania and so on. You've seen in the newspapers, the Black Sea has become a very hot place, relatively speaking, in the recent past. That's not the only place where we can see this, because obviously Venezuela is another thrust. They're moving in Africa and the Middle East, and soon. So the weapon is there to deter NATO and control escalation throughout the entire length of a crisis, and that includes the period in which there may be an actual hot war.

Russian military theory has, basically going back to Chief of Staff Makarov eight years ago, outlined a progression that's almost seamless from local war -- as Peter used the term -- all the way up to the big one, if you like. And the possibilities there are real as far as Moscow is concerned, because they believe that without nuclear weapons NATO and the United States would be intervening all over the former Soviet territories. And from their point of view, and given their premises, they're not altogether wrong.

They also believe that our purpose is to undermine and destroy the Russian state, a complete fantasy. And they have a complete fantasy about what our missile defenses in Romania and Poland are able to do. Nonetheless, they believe they're in a state of war with us, even if it's not a shooting war.

I mentioned the case in Berlin where I got up and said that Europe needed conventional disarmament, but more than that it needed peace because Russia is at war with Europe. And, of course, the German delegation let out a collective sigh. The Russian general sitting there shook his head and said yes, we're at war.

Therefore, escalation control is what this is all about, and it's escalation control in regional crises wherever they may occur. Let me quote to you, for example, Major Amos Fox, an American Army officer, who wrote a few years ago that, "The presence of nuclear weapons is perhaps the first critical component for modern hybrid warfare," a term you're all familiar with. "Nuclear weapons provide insurance against a massive ground response to an incremental limited war."

“The offensive nation that possesses nuclear weapons knows that the adversary or its allies will not likely commit large ground forces” -- it says naval and air -- “for fear of the aggressor employing those nuclear weapons against those forces. This dynamic emboldens the aggressor nation. In Russia’s case its possession of nuclear weapons emboldens leaders to take offensive action because they know that even the threat of nuclear employment forces potential adversaries to a standstill.”

Russia has talked about limited nuclear war on and on and on. The strategy for Russia is that if they are attacked they believe that they can use a nuclear weapon, which will inflict this calibrated or assigned damage -- the term in Russian is *zadannaya ushcherb* -- and will force the adversary, NATO, to sue for talks and some sort of political negotiations, leaving them, or so they think, in possession of the status quo ante. In other words, their strategy is to raise the ante to limited nuclear war, and if necessary even go that way, with the threat of going to full scale nuclear war in order to intimidate, deter an opponent, prove that they’re a great power, and secure their territorial objectives.

Therefore, it is not “escalate to de-escalate.” It is “escalate to win.” And within that framework of escalation control that I’m outlining, the strategy does therefore leave options for the use of nuclear weapons, if necessary, that will bring about this victory by inflicting unacceptable damage upon an adversary and then supposedly forcing him to talks. Or, simply by the threat of nuclear weapons, will you die for Riga, will you die for Damascus, and so on.

In Russian theory, in Russian military thinking, that makes the possibility of basically a seamless line -- and there are analysts who have written this -- from conventional right up to nuclear war. It goes back to what Makarov said eight years ago about the trajectory from local wars expanding into major nuclear wars. So nuclear weapons are critical instruments for prevailing in an environment of international rivalry, and Moscow’s view is characterized by the fact that we are now in a battle with the United States for relative rather than absolute gains, a climate of small clashes in what is called the gray zone, and that can be or are controlled in Russia’s favor by Putin’s nuclear capability and proclaimed readiness to use it first across a range of contingencies.

Russian scholar Stanislav Tkachenko observes, and this is in the Routledge Handbook of Russian National Security, a really fine book, despite the fact that I have an essay there, that Rutledge has put out. It’s \$150, I’m sorry to say, but it’s one of those rare occasions when it’s worth it. Tkachenko says that Russia’s economic and military resources would allow a standoff against any opponent along Russian borders for a limited period of time, while its nuclear weapons prevent the conversion of a conflict into a full scale war.

But it is no longer the case that these conflicts only take place on Russia’s borders. We are not only dealing now with Ukraine and Georgia. Take a look at Venezuela.

In 2009 the late unlamented Hugo Chavez gave Russia permission to build a base

in Venezuela. They didn't do it then. That was the height of the reset. They realized that would be unduly provocative.

But since then, Chavez has died and his successors have driven the country into the abyss. This is beyond a failed state. We are threatening to overthrow the government and applying non-military pressures to do so, because this government, mindful of both domestic opinion and past events, is very wary of sending in troops or even getting Latin America to send in troops to Venezuela to throw out a bunch of gangsters, that make even the Russians blush, in their corruption, and have brought the country to a nightmare. You're reading about it every day in the paper.

What has Moscow done? First, it sent private military forces to help support President Maduro. Now it has just sent 100 men under a three-star general to create a military group, which means it's going to be a permanent deployment. They said, these troops will stay as long as possible. Their exact mission is not known, but one suspects it is to reconnoiter the situation in Venezuela to see to what extent Russia can keep him in power and, if possible, now take over the base that Chavez bequeathed to them.

In 2014, on the very day that Russian troops were entering Ukraine, Shoigu made a speech talking about Russian navy and air forces desire for bases. He listed among them: Nicaragua, Cuba and Venezuela, the three Russian clients in the Western Hemisphere. I wrote a couple of months ago that the Russians are building a base in Venezuela. These forces, as far as I'm concerned and maybe some other analysts as well, are evidence of that.

The nuclear weapon is their ultimate shield. So it's not Ukraine. It's not just the border. It is a weapon -- the nuclear weapon is now a weapon for power projection beyond former Soviet borders. Syria is another example.

We have private Russian military forces now operating in Africa. No doubt, if it's necessary, they'll be supplanted or supported by regular forces, especially as some African states are offering Russia military bases in Africa. And in the Middle East Russia is seeking bases all over the place.

We know that Russia has a base in Syria. It has two bases and a naval base in Syria. They want to re-establish essentially the Soviet base structure they had in the Middle East when we were all young men back in the '70s: Alexandria, Socotra, Horn of Africa.

There's a facility in Somaliland, not Somalia, Somaliland that they've been offered. Eritrea has offered them a facility. If Haftar wins in Libya they may well want a base.

Egypt, they've asked for both Alexandria and an air base. Alexandria was a major base back in the day. If the situation in Algeria opens up and stabilizes, they may well try to get a base in Algeria, because it has superb ports.

In all of these cases the conventional forces that are there are supported and shielded by the nuclear weapon. So the nuclear weapon is not only a weapon of deterrence, it is not only a weapon of intimidation, it is not only an information and psychological weapon, it is not only a weapon for use in a limited nuclear war that Russia believes it would then work in its favor, it is also now the shield behind the strategy of opportunistic power projection wherever possible.

This is one of the reasons why they're continuing to build the whole panoply of weapons that Mark described; short-range, intermediate-range and so on, because these weapons can be used in any contingency. Let me conclude with one other example. As Peter mentioned, I just testified to the U.S.-China Congressional Commission. That was March 21<sup>st</sup>.

In the three weeks since then Russia has announced that it is going to sell China the Su-57 fighter, it's new fighter, 5<sup>th</sup> generation. It can also have some sixth generation capabilities. There's a lot to discuss beyond the nuclear issue here.

But the last point is that the Su-57 can -- as Dave Majumdar pointed out in the National Interest -- can carry tactical nuclear weapons. In both Russian and Chinese doctrine there is a mission for air-delivered tac nukes. Now if they sell the Su-57 to China, I'm not saying China will put nuclear weapons onboard or that the Russians will put it onboard their version of it, but the possibility is there.

So what we really have now, apart from everything else I've said, is the possibility -- and I emphasize that word possibility -- of the proliferation of launch vehicles, because that's what it would be. This is a highly aggressive nuclear strategy. It ties into the alliance that I believe exists between Russia and China, but it is also part of a program that includes within its capabilities for nuclear weapons the option of projecting power right up against the United States in Latin America. Because if they do get an air and naval base in Venezuela, none of us should be surprised if they have nuclear capable delivery vehicles there.

Every Russian missile that is now being built is dual-capable, except for the ICBMs. What's more, as Putin said, if you walk out of the INF Treaty I am prepared to have another Cuban Missile Crisis with you if you want that. This could be the equivalent of a Cuban Missile Crisis.

So this is not a time for complacency. It is a time for the most serious consideration of Russia's nuclear strategy. China also, but that's a different question. And it is also a time for us to understand that much as we might like to do arms control, if we want to have an arms control regime with the Russians, whether it be INF, ICBMs, short-range or any and all of the above, we have to do a better job than we've done in the last 10 years.

Thank you.

(Applause).

We will now take questions.

MR. : Sir, if we had not declared our withdrawal from the INF Treaty, would anything have changed except for the rhetoric?

MR. BLANK: In Russia?

MR. : Yes.

MR. BLANK: I don't know, because the departure of the U.S. from the INF Treaty and the collapse of that treaty regime, opens up opportunities as well as dangers to them. One of the reasons they've now called for arms control negotiations is because they want to stop missile defenses, and I think they want to stop us from rebuilding our nuclear capabilities.

Mark may not fully agree with that. But they were pretty confident about our not going to challenge them too much on the nuclear end, given all the capabilities they are building. Now that may not be the case.

MR. SCHNEIDER: All the threat systems that have emerged as supposed Russian responses to the U.S. decision on the INF Treaty withdrawal, are actually programs that have been around a long time. They were originally intended for covert deployment under the INF Treaty the four missiles that Steve mentioned, that Latvian account, are clearly these. The ground-based Zircon, I pointed this out two or three years ago, that there were Russian press reports in the state media that this was being tested from a ground-based launcher.

They talk about getting that system and the ground-launched Kalibr operational by 2020. Now that's impossible unless you have a long duration pre-existing program, and I think that's exactly what we have. The great irony here is the best source of information we have on Russian violations of the INF Treaty is not the Department of State, it's Russian state media, because they publish a great deal. Most of it is intended to be threatening, and to threaten you've got to tell us what you're threatening us with. Over a period of many years a lot of that has appeared in Russian state media.

I think it's absolutely correct in terms of what they will try to get in follow-on negotiations on New START is no improvements in new START. That includes no change both in the verification regime and in substance. They want all the loopholes to continue so they can deploy higher levels of forces. They will oppose any improvements in the verification regime.

New START is unique in the history of post-Reagan arms control in that not a single inspection allowed under the treaty can establish a violation of the treaty. The

reason for that is the lack of attribution rules. That means under the original START Treaty a missile had 10 warheads. If you had 11 on it during an inspection, it's an overt violation of the treaty. If you do the same inspection today, if you have five, six, eight, 10, 20, whatever number you want to pull out of a hat, that's not a violation of the treaty because there are no restrictions on that.

Take a look at Article V of the old START Treaty, thousands of words, many, many dozens and dozens of prohibitions. Not one of those exists in the New START Treaty.

MR. : Your presentations harken back to a period where there was a communist under every bed and they're seven feet high. The capability is important to recognize, but you haven't addressed the vulnerabilities or potential weaknesses. Can you discuss them?

MR. BLANK: I'd be happy to discuss them. We weren't asked to do that. The vulnerabilities in the Russian case is the massive vulnerabilities in the Russia economy. We're targeting that with the sanctions regime.

Second, technologically they are not as advanced as Europe and the United States. Third, the longer the economic strangulation takes place, and that's what's happening, you can see rising popular discontent. The evidence is there for everyone to see. How and where it manifests itself is an interesting question, and we don't have time for that, but it's there.

The question then becomes, how long can Putin keep pulling rabbits out of the hat and providing imperial circuses, as I call them, for his people until the demand for bread and reform becomes overwhelming? I think as long as Putin is there he can do it, because he has total control and because everybody in the establishment depends on Putin. None of them trust each other, and with good reason. We saw that in 2007. They started arresting each other's clients when they thought Putin might be leaving.

After Putin, whenever that comes and however he leaves the scene, the next man - - it won't be a woman -- who takes power will have to build a coalition to support him and will have to address some of the major problems, and there will have to be reforms. That's the most dangerous period in Russian history, because when you start to reform that system all the repressed demons come out, so to speak. This is what happened to Gorbachev.

It happened under Alexander II. It almost happened under Khrushchev back in the '50s when he incited de-Stalinization and it led to enormous political and social unrest. He was almost kicked out, seven years before he actually was. So that's the longer term period, but as long as Vladimir Putin is in there I expect more of the same.

MR. SCHNEIDER: I agree with that completely. I'd add one thing. Putin's creation of the National Guard is a very monumental development. This is not the U.S.

National Guard, it's not a reserve organization.

It is a domestic security organization designed to fight the Russian people and prevent the recurrence of the demise of the Soviet Union. Putin has put the entire armed forces of the Russian Federation under the National Guard Command, if there is a serious internal problem. That, I think, is unique in the world, putting the armed forces under basically the equivalent of the FBI, although it's not the FBI obviously, it's something more like the KGB.

MR. : More like (the NKVD ?).

MR. SCHNEIDER: I'm thinking in old terms, FSB. In China they have the equivalent of an army of 700,000 people to fight peasants. That is also fairly unique in the world.

MR. MITCHEL MCKAY (ph): My name is Mitchel McKay. I'm more concerned about the North Korean nuclear weapons they have over there. Can you talk about that a little bit for us?

MR. BLANK: Can you be more specific as to what's your question? We can say a lot of things about North Korean nuclear weapons. I'm not sure --

MR. MCKAE: How bad?

MR. BLANK: How bad? Well, I don't have any better intelligence than anybody else does about what North Korea's capabilities are. But for the moment, they're not testing. Although there's no barrier to them to develop and build and so on, and they are, they're not testing for the moment.

Now I suspect that as a result of the failed summit in Hanoi, we're going to see Kim Jong-un, if he can, revert to a tougher line. He has essentially given the United States an ultimatum in the last few days, including in a speech he made yesterday. If you don't change your attitude and your policy within a few months, if President Trump doesn't, then we're going to go back to a different policy.

As of this very moment, I think that threat has calmed down quite a bit. But there are a lot of disturbing factors out there, like the failure in Hanoi and the apparent reversion in North Korea towards a tougher line as a result.

MR. SCHNEIDER: I have an article, it's 2014 in Comparative Strategy on the North Korean nuclear capability. It's out of date, but it still has a lot of information on the first 10, 15, 20 years of the North Korean nuclear weapons program. The test of a thermonuclear weapon a year or two ago is a very, very important development because that gives them a level of capability, including an EMP threat capability that they didn't previously have.

With the new missiles, they're still enormously outgunned by every other nuclear power, but they can do horrendous damage both in Asia and potentially in the United States because, if nothing else, the EMP vulnerability is so extreme right now that a single high-yield nuclear weapon detonated over U.S. territory could take out our electric power grid. If you take out the electric power grid we're back in the 19<sup>th</sup> century. People are going to starve by the tens of millions.

MR. : We're modernizing each three legs of the nuclear triad. We've withdrawn from the INF and we're putting more resources in missile defense and hypersonics. In your view, are they sort of necessary but still not sufficient steps? If that's the case, do you have a few thoughts you might sketch out on what else we might be doing?

MR. BLANK: My sense of it is I'm not an expert on U.S. weapons systems. I think it is necessary, but whether or not it's sufficient I don't know. I think we are going to have to have a serious debate in NATO about nuclear weapons, and that may involve shorter-range or intermediate-range and tactical nukes.

I don't know what the answer to that debate is. I know the necessity for the debate exists and that NATO members have to, for their own benefit, face the realities of the world. But I don't know where that's going to go.

My concern is that we're doing all this modernization and I don't know that we have a clear goal in mind, or a clear strategy, on what we intend to accomplish thereby, other than to modernize our nukes and confront Russia and China.

MR. SCHNEIDER: Well we certainly want to do deterrence, and that's the main focus of the modernization program. Absent the modernization program our deterrent will collapse. Many of the recommendations I made in 2015 are actually in the 2018 Nuclear Posture Review. From my standpoint, that's the good news. The bad news is it's only the cheapest ones recommended. So there are certain areas that we ought to be doing more.

One of the biggest concerns I have is the reliability of the U.S. nuclear weapons complex. We have unique safety standards, and unfortunately that results in much greater vulnerability in a non-testing environment. There is significant evidence Russia has conducted nuclear tests covertly. We haven't, so the decline in reliability could be dramatically asymmetrical. The statements by senior U.S. generals that they're developing new types of nuclear weapons, in my mind, says that they are covertly testing on a much higher level than the reported hydro-nuclear tests.

MR. HUESSY: With that, I want to thank both Dr. Blank and Dr. Schneider for extraordinary presentations.

(Applause).

Just a note, tomorrow Chris Ford from the State Department will come and talk to

us about the administration's proliferation policy, or counter-proliferation policy, and particularly the role of American missile defense and military power in being a force for nonproliferation. That, again, will be at 8:30 a.m. tomorrow. Please let us know if you'd like to attend.

Again, Dr. Blank and Dr. Schneider, you two are heroes in my book for the extraordinary amount of work you do in trying to warn us of the dangers we face. I always go back and read "The Gathering Storm" by Winston Churchill, because that's where we are. Again thank you, gentlemen, very much.

(Applause).