Center for Strategic and International Studies

TRANSCRIPT

Event

"Nuclear Threats and the Role of Allies: A Conversation with Acting Assistant Secretary Vipin Narang"

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FEATURING

Dr. Vipin Narang

Acting Assistant Secretary of Defense for Space Policy

CSIS EXPERT

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Heather Williams: Good morning. Thank you all very much for being on time. Thank you for being in your seats. Welcome to CSIS. I am Heather Williams, the director of the Project on Nuclear Issues, affectionately known as PONI here. And we are just really delighted to welcome you all today for a conversation with Acting Assistant Secretary of Defense for Space Policy Dr. Vipin Narang on the topic of nuclear threats and the role of allies. But I suspect we might touch on some things other than just allies and cover a whole lot of topics on nuclear issues.

Before we begin today's event, I would like to share just a little bit of information with you. First is our safety information for those of you who are here in person. Overall, we feel secure in our building but as a convener we have a duty to prepare for any eventuality. I will serve as your responsible safety officer for this event. Please follow my instructions, should the need arise. And please find your closest exit. It's probably going to be one of those two doors or the ones behind me.

I also just very briefly wanted to share some information about PONI. PONI leads a series of fellowships and conferences for early- and mid-career nuclear experts. And we take a really big-tent approach. We really welcome a diversity of views, diversity of backgrounds. Our programming includes folks from the military, the national labs, government, academia, think tanks, NGOs. And I also want to give a plug for two open applications – calls for applications that we have right now.

The first is a call for applications for our fall conference, which will be at the end of September at Stanford. And we'll be doing this in partnership with Scott Sagan and his team at CISAC, which we're really excited about. So if you are an early-career researcher and want to apply to present, please go to our website. The second one that I'm also very excited about is our call for applications, open today, for the 2025 Nuclear Scholars Initiative. And so, again, if you want to get some experience in the nuclear field, hear from leading experts, please go to our website and apply.

Also, we have some exciting current research activities going on. We recently released a report on the health of nuclear norms and looked at things like the risks of a return to nuclear testing. And we are currently finishing our Project Atom 2024 study, which looks at intra-war deterrence and how to respond in the event of nuclear weapons use.

So today's event comes at a complicated moment for America's role in the world and the role of its nuclear arsenal. The United States asks more of its nuclear arsenal than any other country on Earth, because not only do U.S. nuclear weapons deter attacks on the U.S. homeland,

but also against our dozens of allies and partners across the globe. The worsening security environment, collusion between authoritarian adversaries, and new technologies are presenting some familiar but also a lot of original challenges for our U.S. arsenal. Looking ahead, we have to consider – given what we ask of our U.S. arsenal in the United States, given its central role to our alliances, how do we adapt both the arsenal and those alliances – the structures and institutions behind them – how do we adapt those to this new threat environment, defined by two peer competition?

This administration has made strides in strengthening partnerships, both in Europe and in the Indo-Pacific. And Dr. Narang has really been at the heart of those efforts, to include in the Nuclear Consultative Group with South Korea, along with serving as chair of the NATO HLG. Dr. Narang is the Acting Assistant Secretary of Defense for Space Policy, a portfolio that includes space, missile defense, nuclear deterrence, and countering WMD policy. Prior to his entry into government, he was the Frank Stanton Professor of Nuclear Security and Political Science at MIT, from which he is on public service leave. His key academic work includes "Nuclear Strategy in the Modern Age," and "Seeking the Bomb: Strategies of Nuclear Proliferation." Dr. Narang holds a B.S. and M.S. degrees in Chemical Engineering from Stanford University, an M.Phil. in International Relations from Balliol College, Oxford where he studied as a Marshall Scholar, and a Ph.D. in Government from Harvard University.

After Dr. Narang's remarks, he and I will sit down up here. We'll start the discussion. And then we will open it up to Q&A for the rest of you. If you are here in the room and you would like to submit a question, please use the QR code behind me. If you are joining us online, then please use the link that will be available to you on the webpage to submit your questions. And so with that, Dr. Narang, thank you so much for doing this. And I will turn the microphone over to you. Please. (Applause.)

Vipin Narang: So the mic will be – I don't need this mic, right? Fine. OK. All right.

Thank you, Dr Williams. Thank you very much for that introduction and for inviting me to join you at CSIS today. I'm really delighted to be here. I'm going to apologize in advance for the length of my remarks, but this is my tune up for a return to lecturing. (Laughter.) I can't clear my throat in under 30 minutes. I have been honored to serve as the Principal Deputy Assistant Secretary of Defense and then Acting Assistant Secretary of Defense for Space Policy for the past two and a half years. These have been some of the most challenging years for U.S. nuclear policy this century, and some of my most professionally fulfilling. The key message I'd like to leave you with today is sobering, but necessary.

While the administration has long sought to strike a balance between deterrence and arms control, we now find ourselves in nothing short of a new nuclear age, an unprecedented mix of multiple revisionist nuclear challengers who are uninterested in arms control or risk reduction efforts, each rapidly modernizing and expanding their nuclear arsenals and openly threatening to employ nuclear weapons to achieve their aims. These challengers' actions have forced us to shift to a more competitive approach. This more competitive approach is founded on three pillars.

First, we must continue to field a modern nuclear deterrent with the numbers and the attributes necessary to deter strategic attack, assure our allies and partners, and meet our objectives if deterrence fails. Our current nuclear force posture and plan modernization program is necessary but may well be insufficient in the coming years to support this need.

Second, we must continue to strengthen our network of allies and partners and our extended deterrence efforts in NATO and the Indo-Pacific, because these are our asymmetric advantage over our adversaries.

And third, we must invest in building the next generation of talent, the next generation of leaders to guide our strategic thinking and shape our future infrastructure and capabilities in this era of competition. Let me be clear, competition is not a foregone conclusion. If our adversaries make different choices, so will we. But so far, they have not, and show no interest in doing so. So if our adversaries continue down their current paths, the United States, alongside our allies and partners, is ready, willing, and able to confront the challenges of a new nuclear age.

When I first came into this position in March 2022, the Nuclear Posture Review had just been completed. It arrived at a unique moment. The administration recognized that the world had become more dangerous and sought to restore diplomacy's proper place in national security, rebuilding and strengthening U.S. standing in the world, and reinvigorating long-standing alliances and partnerships. We immediately extended the New START Treaty and put processes in place to develop a follow-on agreement. We hoped that the People's Republic of China would engage responsibly, both bilaterally and in international fora, on nuclear issues – including transparency and risk reduction. And we repeatedly raise these issues in our engagements with Beijing.

We were encouraged when the five declared nuclear weapons states,

including Russia and China, affirmed that a nuclear war cannot be won and must never be fought. Advancing these efforts was critical to demonstrating President Biden's commitment to reducing the salience of nuclear weapons globally. But in February of 2022, Russia invaded Ukraine – illegally and without provocation. Almost immediately, Russia began making irresponsible nuclear threats designed to deter and dissuade support for Ukraine. Russia recklessly brandished its nuclear weapons, particularly its growing stockpile of lower-yield treaty-unrestricted nuclear weapons. Russia continued rattling the nuclear saber while it brutalized Ukraine's population and attacked its cities.

These provocations took place under a thick cloud of misinformation and outright lies. Even while Russian diplomats in Geneva were speaking solemnly about the need to avoid nuclear threats and nuclear war, Moscow was courting nuclear risk and threatening escalation. Meanwhile, we learned that Russia is developing a new satellite designed to carry a nuclear weapon on orbit, an anti-satellite capability which, if detonated, could potentially wipe out an entire orbit of assets crucial not just to the United States, but the entire world. All of us should be concerned with the prospect of Russia putting a nuclear weapon in space, posing a threat to satellites operated by countries and companies around the globe as well as to the vital communications, scientific, meteorological, agricultural, commercial, and national security services upon which we all depend. Make no mistake: even if detonating a nuclear weapon in space does not directly kill people, the indirect impact could be catastrophic to the entire world.

Russia's dangerous invasion of Ukraine came after a year of intense discussion about the trajectory of another nuclear power, the People's Republic of China. In 2021, nongovernmental researchers announced their discovery of hundreds of new ICBM silos under construction in western China. Later that year the intelligence community revealed that the PRC had accelerated its nuclear expansion, finding that the PRC would likely field over one thousand operational warheads by 2030. Today, we assess that the PRC has likely completed silo construction and has begun loading them with missiles. This expansion is being fueled literally by Russia, as Moscow supplies China with highly enriched uranium reactor fuel which supports the production of weapons-grade plutonium. The growth in and diversification of the Chinese nuclear force, something we neither anticipated nor accounted for when we crafted the Nuclear Modernization Program over a decade ago, will be a defining feature of this new nuclear age.

And we can't sleep on North Korea, which also continues to expand, diversify, and improve its nuclear, ballistic missile, and non-nuclear capabilities. While not a major-power rival like the PRC and Russia,

North Korea's continued improvement and diversification of its nuclear and ballistic missile capabilities present deterrence dilemmas for the United States and regional allies. Conflict on the Korean Peninsula risks escalation and the involvement of multiple regional nuclear-armed actors. What's more, the growing DPRK-Russia strategic partnership – which violates several U.N. Security Council resolutions – is concerning, and illustrates the real possibility of collaboration and even collusion between our nuclear-armed adversaries. These developments occur even though the Biden Administration has consistently reached out to the DPRK to offer talks – offer talks with no preconditions in an effort to seek a diplomatic resolution to Pyongyang's advancing nuclear arsenal. Those calls have gone unanswered.

This emerging security environment is unprecedented. The now-common phrase "two-peer nuclear problem" understates the complexity of the challenge we face. I prefer to characterize the environment as a multiple nuclear challenger problem because each adversary presents different challenges for U.S. strategists.

For example, although Russia is a nuclear peer, it is not a peer in any other sense – in any other domain or sense of the word. However, as a conventionally weaker power with revisionist regional ambitions, Russia poses an acute threat of nuclear employment and a brazen willingness to flout international norms for its own benefit.

Meanwhile, the PRC is not yet a nuclear peer, but the growth in its nuclear arsenal's size and diversity, accompanied by posture changes such as regional employment to launch on warning, places it on a trajectory to soon become one.

Unlike Russia, China will be a peer to the United States in virtually every relevant military and economic domain. The DPRK is not a peer in any domain, but it brandishes its nuclear capabilities against two close U.S. allies, South Korea and Japan – and, increasingly, the United States.

Any one of these nuclear challenges would be daunting by itself, but the simultaneity and growing collaboration and evidence of collusion between them is unprecedented, forcing us to think in new and careful ways about challenges such as deterrence, escalation dynamics, and deterring opportunistic aggression in this new nuclear age.

All of this is to say that the United States did not choose to create additional nuclear risks – additional risks in the nuclear domain. It is our adversaries' choices that have made the world more dangerous. Recall that Russia was a partner to NATO only a decade ago. With Putin's invasions of Ukraine, Russia is again an adversary. We wanted to

stay in the INF Treaty; Russia violated it. We wanted to keep the Conventional Armed Forces in Europe Treaty; Russia withdrew. We wanted not only – to not only adhere to the New START Treaty but to negotiate a follow-on treaty to maintain agreed-upon limits on strategic nuclear weapons; instead, Russia illegally and illegitimately suspended its participation in New START and shows no interest in a follow-on treaty. We have made it clear to the PRC that we're willing to have substantive risk-reduction talks; the PRC has said no. We offer dialogue on denuclearization without preconditions to North Korea; the DPRK has shown no interest. We have made sincere and good-faith efforts to develop very different nuclear relationships with all our nuclear-armed adversaries, but they chose a more dangerous path. And it would be irresponsible for the United States government to not confront and address this new reality – a reality foisted on us despite our best efforts to establish a different one.

I want to be clear. Our initial efforts at the start of this administration were not in vain. We have demonstrated to the international community that the United States is not and will not be the impediment to progress in risk reduction and arms control. We have also demonstrated to the American people that we are committed to using all tools of national power for our defense. We will continue to seek opportunities for dialogue, transparency, arms control, and risk reduction. The strategic deterrence community's interests in arms control are perhaps best captured by the commander of U.S. Strategic Command, General Tony Cotton, who views arms control – quote, "arms control as a complementary effort seeking the same objective as deterrence by reducing the number of threats and enabling strategic-stability dialogues with potential adversaries." End quote.

But arms control requires willing partners that are committed to reducing risks rather than increasing them. So instead we find ourselves today in a more fraught and dangerous environment, one that the NPR foresaw as a possibility but which is now a reality. As a result, we have been prudently preparing for today's realities and the world we anticipate tomorrow.

Since 2021, the administration has prioritized upgrading the hardware of nuclear deterrence – capabilities, posture, and operations – as well as the software, our strategic concepts, plans, and the engagements with allies on extended deterrence that make our deterrent more credible and robust.

With respect to hardware, for over a year my team and I have led a strategy-driven review on the implications of the new security environment for strategic deterrence and U.S. nuclear posture. This

process is overseen at very senior levels of the government and includes interagency stakeholders.

We began with the principal question, what capabilities and posture do we need to credibly deter attack on the U.S. homeland, as well as our allies and vital regional interests, not just today but tomorrow? If adjustments to our hardware and software are necessary, how do we prioritize them? How do we avoid additional risks to our existing plans in the nuclear-production complex?

As part of this review, we're taking a fresh look at the U.S. nuclear modernization, including examining the underlying assumptions of the modernization program, which was conceived at a time when we assumed we would only have to deter a New START-compliant Russia.

Some things became clear to us early on; first, as others, including the independent and bipartisan Congressional Strategic Posture Commission concurred, the program of record described in the 2022 NPR is necessary, but may well be insufficient to meet the deterrence challenge of the future and to mitigate risks that could arise during the transition to a modernized nuclear triad.

Second, given the complexity and the long lead times required to adjust our forces and posture, we must lay the groundwork now so national leaders have options to quickly and responsibly adjust the future nuclear force if needed. Let there be no doubt, we are confident in our current forces and posture today. We will also abide by the central limits of New START for the duration of the treaty as long as we assess that Russia continues to do so. But in an uncertain world, preserving the option to change course tomorrow requires that we make necessary decisions and investments today.

Third, while we plan for the future, there are steps we have already taken to reduce the risk to the modernization program and enhance deterrence. For example, last year we announced that we were pursuing a modern variant of the B61 gravity bomb, the B61-13. The B61-13 takes advantage of an existing qualified production line for the B61-12. It will strengthen deterrence and assurance by providing the president with additional options against certain harder and large-area military targets while not increasing the overall number of weapons in the U.S. stockpile or stressing other weapon-modernization efforts. It also demonstrates that we can use our existing production capabilities flexibly and creatively.

We are also taking steps to extend the availability of current-generation Ohio-class SSBNs so they can operate longer if necessary during the

transition to modern systems. We are complying with congressional direction to develop and field a nuclear-armed sea-launch cruise missile.

The 2022 NPR canceled the program because at the time the administration assessed it was unnecessary and could distract from other priorities. Today the world is different. Put clearly, the department is proceeding with a SLCM-N and we're working closely with Congress to ensure we are meeting our shared goals of getting the most deterrence value for the least risk to the modernization program, the nuclear-weapons complex, and the joint force.

We are also reviewing and prioritizing other ways we might adjust U.S. posture. We have begun exploring options to increase future launcher capacity or additional deployed warheads on the land, sea, and air legs that could offer national leadership increased flexibility if desired and executed.

As this audience knows, the land leg is undergoing a large and complex modernization effort through the Sentinel program, which will upgrade and replace the long-serving Minuteman III. In July, following a comprehensive review of the cost of the program, the department certified to Congress that a modified Sentinel ICBM program remains essential to national security and that there are no alternatives to the program that would provide acceptable capability at less cost.

We undertook a rigorous review of a range of alternatives, from sustaining Minuteman III to road-mobile missiles to fielding Trident missiles on land. None of these alternatives provided the capability we need at less cost than a modified Sentinel program. And each introduced risks that eroded the credibility and efficacy of the land leg and of the triad as a whole. While Sentinel is in development, we'll continue to sustain the Minuteman III as long as necessary.

Importantly, the Sentinel program review revalidated our established policy of maintaining a nuclear triad because the national-security requirement for a robust land leg is more important than ever in the evolving security environment. Multiple administrations have concluded that all legs of the triad have mutually supporting attributes which, taken together, best maintain strategic stability.

The way the United States has conceived of and implemented ground-based ICBMs complicates adversary decision-making by placing a prompt and responsive strategic capability to the United States. In so doing, the land leg makes the other legs of the triad more effective. The U.S. nuclear triad is greater than the sum of its parts. So we concluded

that the modernized Sentinel system, more capable than Minuteman III, is essential to national security.

We also continue to seek ways to integrate non-nuclear capabilities to enable and augment strategic deterrence. But make no mistake, for the foreseeable future nuclear weapons will provide unique deterrent effects that no other element of U.S. military power can replace. They remain the ultimate backstop to deter strategic attacks against the United States, our allies and partners.

Beyond the triad, the department is focused – is also focused on modernizing nuclear command, control and communications, or NC3, so that the president of the United States can continue to command and control U.S. nuclear forces under all circumstances, including during and following nuclear or non-nuclear strategic attack. We are modernizing legacy NC3 systems through programs that retain survivability, resilience, and redundancy. We are focused on all relevant NC3 components – satellites, aircraft, and communications technology – to allow crisis communication and continuity-of-government operations, should circumstances require.

Sustained support for these initiatives as critical, given the deteriorating security landscape, the irresponsible behavior of U.S. competitors, and the need to maintain a safe, secure, and effective nuclear deterrent, as well as credible extended deterrence to allies and partners.

As National Security Adviser Jake Sullivan said last year at the Arms Control Association, we do not need to numerically pace our competitors warhead for warhead or outnumber their combined total forces to deter them; in fact, just the opposite. We are committed to fielding only what is required to credibly deter adversaries and protect the American people and our allies and partners.

But as NSC Senior Director Pranay Vaddi noted earlier this year, this idea cuts both ways. Absent a change in the nuclear trajectories of the PRC, Russia, and North Korea, we may reach a point where a change in the size or posture of our current deployed forces is necessary. There is no need to grow the stockpile yet, but adjustments to the number of deployed capabilities may be necessary if our adversaries continue down their current paths.

Only the president can make that decision. But if that point comes, it will be because he or she has concluded that such changes are needed to deter adversaries, defend the United States, and meet our commitments to our allies and partners. We seek a smart and flexible posture, not an unlimited one. But achieving it may require deploying

more and/or different capabilities than we feel today.

Part of a smart and flexible posture is making sure we have the deterrent software to make the most of our hardware. Over the past several years, we have refined the strategic concepts and plans that we will need to make deterrence credible in this new nuclear age. The president recently issued updated nuclear-weapons employment guidance to account for multiple nuclear-armed adversaries, and in particular the significant increase in the size and diversity of the PRC's nuclear arsenal. My office has begun to provide the department and the Joint Force updated implementation guidance on how to plan and posture our forces in this new environment.

Thankfully, the United States does not face this new reality alone. Our network of allies and partners in the Euro-Atlantic and the Indo-Pacific is an asymmetric strategic advantage that our adversaries can never hope to match. We have made tremendous advances in the last three years to strengthen allied assurance and update our extended-deterrent software. I have been privileged to lead U.S. bilateral and multilateral efforts with all the allies to whom we formally extend nuclear deterrence.

Over the past three years, we have convened dozens of meetings on four continents. These efforts enhance deterrence by presenting U.S. adversaries with a unified front, and they assure allies by demonstrating our resolve to defend them with the full range of U.S. capabilities, including nuclear.

In Europe, the United States and our NATO allies have stood united against Russia's brutal war of aggression in Ukraine and its reckless nuclear rhetoric. NATO has renewed its commitment to nuclear deterrence, reaffirming clearly that so long as nuclear weapons exist, NATO will remain a nuclear alliance.

In my time at the Pentagon, we have made significant strides to make NATO nuclear deterrence not just fit for purpose, but fitter for purpose. We brought in allied participation and support for the nuclear mission. We're completing the modernization of NATO nuclear capabilities through the transition to the fifth-generation F-35 and the B61-12, which are bolstering the military effectiveness and the credibility of the deterrent.

This year we completed the operational certification of Dutch F-35 Alphas for the dual-capable aircraft mission, making them the second NATO ally after the United States to do so. In 2022, Germany joined the F-35 Alpha program, explicitly citing the need to continue their support

for NATO's nuclear burden-sharing arrangements.

Because of Russia's behavior, we welcomed Finland and Sweden to the alliance, a major strategic gain, both of whom publicly committed to supporting NATO nuclear deterrence through their conventional forces and participating enthusiastically in consultative bodies.

NATO has also made historic progress in adapting its operational planning processes to meet the Russian threat. As we announced in the Washington Summit Declaration in July, NATO has a new generation of multidomain defense plans to allow NATO to credibly defend allied territory with nonnuclear means. NATO has also stood up a parallel effort for nuclear planning to improve our readiness for a range of potential contingencies.

The nuclear forces of the United States are the supreme guarantor of NATO security, supported by those of the United Kingdom, which are explicitly contributed to the defense of NATO, and France's, whose nuclear forces are independent, but which have always had a European dimension. With respect to France, independent doesn't mean uncoordinated. And the P-3 have improved our coordination on strategic activities, deterrence messaging, and shared threat assessments, all while strengthening our commitment to burden sharing. So even with our closest nuclear armed allies, the United Kingdom and France, consultations are deepening, both bilaterally and trilaterally, as we work together to strengthen deterrence against potential opportunistic aggression from multiple nuclear challengers.

I've been encouraged by the rapidly growing interest and engagement in nuclear issues from my counterparts in allied capitals, as evidenced by the intense and productive discussions we have had in the NATO High Level Group, which I have the privilege of chairing. Discussions on nuclear issues in the alliance have grown more frequent and much more sophisticated over time. These developments represent a major strategic shift in NATO, and we continue to assess the opportunities to further enhance the credibility and efficacy of the deterrent mission, given the new geometry of the alliance.

While we have accomplished a great deal, there is much more work to do. NATO must continue planning efforts for both conventional and nuclear crises and conflicts. These efforts must be integrated and coherent. We must work to sustain support in the alliance and in allied capitals for nuclear modernization. The likelihood of a persistent nuclear threat from Russia demands a whole-of-NATO strategic approach. All of this rests on vigorous American leadership. If we continue to lead, I am confident that NATO will continue to take the

steps necessary to sustain and enhance nuclear deterrence.

In the Indo-Pacific, we committed to working with our allies toward an effective mix of capabilities, concepts, deployments, exercises, and tailored options to deter and, if necessary, respond to coercion and aggression. This commitment called for stronger extended deterrence consultations and vehicles, with a more cooperative approach to decision making related to nuclear deterrence policy, strategic messaging, and activities to reinforce collective security. We have delivered on this commitment. Our Indo-Pacific allies are partners in extended deterrence, and not just passive beneficiaries. Our tailored dialogs with Republic of Korea, Japan, and Australia have become deeper and broader, including work on conventional nuclear integration, crisis consultation, and efforts to strengthen allied understanding of U.S. nuclear deterrence posture and capabilities.

We have also elevated the level of senior level – senior leader engagement across all the dialogs, adding new working groups with Japan, expanding defense discussions with Australia, and, perhaps most visibly, establishing the Nuclear Consultative Group, or NCG, with the ROK at the assistant secretary of defense level. The NCG has delivered on President Biden and President Yoon's vision in the April 23 Washington Declaration to strengthen the U.S.-ROK extended nuclear deterrence relationship. Their vision has become reality. We have signed a guidelines document charting a path ahead, begun work to facilitate integration across the alliance, and now stand as equal partners strengthening deterrence against nuclear and other forms of strategic attack from North Korea.

The United States also recognizes that trilateral and multilateral cooperation will only strengthen our efforts to respond to regional challenges in the Indo-Pacific. Trilateral partnership between the United States, the ROK, and Japan is stronger than ever, following last year's Camp David summit. We activated a data sharing mechanism to exchange real-time missile warning information to detect and assess ballistic missile launches by North Korea. This June, we hosted the first iteration of Freedom Edge, a new multidomain, trilateral exercise that allowed our countries to train in new and novel ways. We will continue to build on these efforts for trilateral and multilateral approaches to meet emerging challenges together.

Across all our regional partnerships, more frequent and more wide-ranging senior-level discussions will allow us to coordinate our deterrence policies, strategic messaging, and activities that reinforce regional security, including promoting better synchronization and interoperability. Together, we will continue to tailor responsive

extended deterrence and assurance policies that leverage all tools of national power. Credible deterrence, hardware, and software, presents a unified front to adversaries and continues to assure our allies that relying on the U.S. for nuclear deterrence is the best approach for their security, and ours.

At the beginning of this administration, we laid out a comprehensive and balanced approach to defending our vital national security interests while reducing nuclear risks. This continues to be our approach, but the context has changed. We were hopeful that our adversaries would join us in an effort to reduce nuclear dangers. We were and are prepared to meet this new reality while adhering to our principles as a responsible nuclear power. We remain committed to arms control and risk reduction measures with our nuclear-armed competitors, should circumstances permit and responsible partners emerge. We are dedicated to preserving and strengthening the nuclear nonproliferation regime and reaffirm our commitment to the Nuclear Non-Proliferation Treaty. We will uphold the global norm against nuclear explosive testing and support the entry into force of the Comprehensive Test-Ban Treaty.

But make no mistake, unilateral cuts by the United States are not an effective approach to reducing nuclear risks. We should continue to try to persuade our adversaries that managing rivalry through arms control is preferable to unrestrained nuclear competition. But our nuclear competitors have repeatedly chosen competition, and sometimes outright conflict, over cooperation. We are now entering a new and dangerous era that demands we adapt. Maintaining balance requires that we shift our footing to a more competitive approach. It is our responsibility to see the world as it is, not as we hoped or wished it would be. It is possible that we will one day look back and see the quarter century after the Cold War as nuclear intermission.

The first act was the Cold War competition between the Soviet Union and the United States. Though intense, that competition was not bereft of cooperation in arms control, even at its most fraught moments. Today's unfolding second act is one in which Russia sees nuclear saber rattling as a way to reshape the international order, in which Russia modernizes and expands its arsenal unfettered by arms control, and in which Russia continues to design and deploy destabilizing novel systems. This is also a world in which the PRC is wary of substantive cooperation and continues to expand and diversify its arsenal without transparency on its doctrine and intentions. And this is a world in which North Korea continues to threaten its neighbors while providing the ammunition for Russia's war in Ukraine.

Intermission is over, and we are clearly in the next act. We have an

obligation to continually assess our policies and capabilities and consider whether we are doing enough to protect the United States and our allies and partners. We must prepare for a world where constraints on nuclear weapons arsenals disappear entirely. Modernizing U.S. nuclear capabilities today and preparing for future posture adjustments may help incentivize our adversaries to engage in strategic arms control discussions. However, if our adversaries continue to make choices that make them and the world less safe, the United States is prepared to do what is necessary to successfully compete, to deter aggression, and assure our allies in this new nuclear age.

As we confront these generational challenges, programs like PONI will be essential to mentoring the next generations of policy, technical, and operational nuclear experts. The diverse talent pool PONI has and will continue to build will serve the United States well. It is a premier example of the reinvestment we must make in our talent across the board to build a flexible and responsive nuclear infrastructure and talent pool to tackle the unprecedented strategic and policy challenges we're likely to confront in the coming decades.

I want to close by thanking the professionals across the Department of Defense and the interagency, my colleagues on the Joint Staff, the Office of Nuclear Matters and ANS, STRATCOM, the services, the NSC, NNSA, and the State Department that have supported our collective efforts to adapt to a novel and more dangerous security environment. I want to give special thanks to my OSD policy team, from the top to the bottom, but especially incredibly smart and dedicated action officers who toil in the cubicles and work tirelessly to get – to actually get this work done. It has been an honor to serve in this role for this president and this administration.

As I depart from government soon in the coming weeks and head back to MIT, I look forward to continuing the work from the outside to the extent I can, to help make U.S. nuclear policy and posture fitter for purpose in this new competitive nuclear age. Thank you very much. (Applause.)

Dr. Williams: Good. Great. Vipin, thank you so much for really rich remarks. There's a lot that we can unpack here. To get the conversation started, I think I'd like to go straight to what will probably be the most newsworthy piece that I and the other think tankers around town will be quoting at length, which is about your review of the current nuclear posture and, essentially, your agreement with the Strategic Posture Commission's findings that if our adversaries do not change course and follow our lead, the current program of record may be necessary but not sufficient, and the U.S. will have to change – consider changes in force posture.

And I think this reinforces what we heard NSC Senior Director Pranay Vaddi say a few months ago. But I hear you going a little bit further in terms of outlining some specific capabilities that came up in your review – such as proceeding with SLCM-N and potentially increasing launcher capacity. So I wanted to draw you out on this point just a little bit more, if you could. We know that adversaries are focusing their kind of nuclear threat manipulation at the regional level. These aren't necessarily threats to the U.S. homeland, but they are definitely threats – concerns for our allies and partners. And so with that in mind, can you say a bit about how you came to this conclusion as part of the review? You know, why SLCM-N and why some of the other options that you've talked about?

And then just a quick follow-on if I can try to get you to answer this one: Should we see this as just the beginning? If the adversaries don't change course, what are some additional supplemental capabilities that might – that we might want to look out for as being potential additions to the force posture?

Dr. Narang: Thanks, Heather. So I think this conclusion is in line with Pranay's and the secretary's remarks.

Recall that the modernization program was conceived at a time – in the early 2010s – when Russia was a partner to NATO, China had not yet embarked on its nuclear expansion and diversification, and North Korea had not begun its sprint. And the – just take the growth in the Chinese forces alone. It is sort of first principles – as John Plumb, my former boss, said – that, you know, the growth in the number of Chinese strategic targets alone I think leads one to the conclusion that a modernization program sized for a completely different security environment may need to be reassessed in sort of the multiple nuclear challenger world.

And already we have made some adjustments from the program of record. So B61-13 was not part of the program of record, and we took advantage of a qualified production line to flexibly develop that capability. SLCM-N was not part of the program of record, and the NDAA mandates that the department proceed with the SLCM-N, and we're proceeding with the SLCM-N. I think those are regional capabilities, you know, primarily for regional contingencies. But I think it is also important that we potentially examine and lay the groundwork that if, upon the New – the extension of – the expiration of New START, if there's no follow-on treaty and our adversaries continue down this pathway, are we prepared – if necessary, and if the president decides to do so, do we – are we able to potentially, if required, increase the

number of deployed strategic capabilities as well?

And I think the review looks at, you know, sort of how do we get our best deterrence bang for buck without breaking the nuclear enterprise, without growing the stockpile. But potentially if Russia, without an extension of New START, if Russia violates central limits, or if the growth in the Chinese arsenal continues, there may come a day when we have to potentially increase the number of deployed weapons. And there, you know, we're looking at the possibilities, and it doesn't take – there are three legs of the triad. So how do you recover capacity in each of the legs while also addressing modernization risks, right? So the transition to modern systems, we're already, you know, sort of anticipating a delay in the Sentinel. We're transitioning to Columbia. And so how do you simultaneously account for multiple nuclear challengers at the very same time that we're undergoing transition risk?

And so we have a very clear-eyed, collaborative interagency approach to assessing what those possibilities are. It's ongoing. But we've already, I think, with the – with the development of B61-13 and SLCM and the pursuit of SLCM-N, you know, the program of record has already been modified to some extent. So I think that's where the conclusion that the program of record is necessary but may well be insufficient sort of comes from, and I think is a shared conclusion across the interagency.

Dr. Williams: On the topic of modernization, I wanted to follow up on some of your remarks about NC3 modernization, which I think is a crucial part of modernization, the fourth leg of the triad that doesn't enough attention sometimes. But I also want to connect that to your reference to the prospect of Russia putting a nuclear weapon in space, which could put at risk NC3 systems along with communication and other services. And as you know, my colleague here at CSIS Kari Bingen and I wrote a piece on this really trying to draw attention to this, and not being too overly alarmist but really calling out the seriousness of the risk.

This administration has tried to address that risk through U.N. Security Council resolutions to uphold the Outer Space Treaty, through building some international pressure and support on Russia, but to somewhat limited success I would say. So what more do you think can be done to try to prevent Russia from deploying a nuclear weapon in space? But also, what can be done as part of NC3 modernization to try to mitigate the effects of that risk if it does come to fruition?

Dr. Narang: Yeah. So I would say that the best path forward is to convince Russia not to deploy this capability. And so we rely on, I think, our allies; but also, given what the potential effects of a nuclear detonation in outer space would be, it's not just the United States that would be affected. All

spacefaring nations, including and especially China, would be affected if this – if this capability were ever deployed and employed. And so I think there is space for common cause with China to pressure Russia not – or, convince Russia that it is not in their best interest to deploy this capability.

And you know, sort of command and control on terrestrial earth is complicated enough. And you know, this capability deployed in space would be unprecedented. Command and controlling it may be difficult. And so I think the key path forward is convincing Russia it is irresponsible, it is dangerous, not just – I mean, their own assets would also be wiped out. So I think that the most effective path forward is convincing Russia not to do this.

In general, as we approach NC3 or other space capabilities, resilience is a key part of that, right? So how do you build resilience through a variety of means, including redundancy, so that your operations can sustain, you know, sort of limited degradation or disruption? But the Russian program, I think, would – it's hard to resilience your way out of that in, you know, in – fully. And so that's why I think in this case it is so dangerous and so irresponsible.

Dr. Williams: Great. I've got a couple questions from online and the audience that I want to turn to now. First one comes from Shashank Joshi at The Economist. Shashank's question: What do you think of Macron's efforts to encourage a strategic dialogue among Europeans on the European dimension of French deterrence, this idea that a greater European involvement in French planning or operations, does the U.S. welcome this? And does this contribute to NATO, or could it distract from NPG efforts?

Dr. Narang: I mean, I think they're a – they're a complementary effort. So France sits outside the NATO nuclear bodies. It's not part of the HLG. It's not part of the Nuclear Planning Group. French forces are independent. But as I noted, they're not uncoordinated, and I think a level of coordination between the United Kingdom and the United States – who directly contribute our forces to the defense of NATO, and the U.S. forward deploys weapons in the – in the defense of NATO – with France is important for NATO security. And it complicates Russian decision-making to have multiple nuclear power – nuclear powers have decision-making centers.

But I want to be clear: The United States remains committed to the defense of NATO through its nuclear forces, which are the supreme guarantor of NATO security. And I think it's important to promote burden sharing among our NATO partners, and we want to continue

having discussions about how to better coordinate our policies. And particularly in the multiple nuclear challenger world, you know, what our European partners can do to help contribute to help deterring opportunistic aggression if we were in crises or conflicts in simultaneous theaters. And so those conversations are really important, and you know, I don't think they're sort of aimed at substituting for U.S. nuclear capabilities for NATO, which remain sort of the backstop of NATO security.

Dr. Williams: Great. Next question I've got is from Decker. I have a – sorry, give me one second; this is still loading. What specific challenges will the eventual deployment of Skyfall generate for the U.S.?

Dr. Narang: Look, I think there are – Russia's pursuit of novel nuclear systems, you know, is – I don't think fundamentally changes the deterrence challenges we face. Any individual system, you know, that's designed primarily to defeat missile defense systems with unlimited range, cruise missile profile, but it doesn't fundamentally change the regional deterrence challenge we face with Russia or how we can deter it, how we can restore deterrence if deterrence fails. And so I think, you know, the feature about Russia that has changed is Putin's revisionist intentions. Russian nuclear forces are capabilities we've had to confront for, you know, the – since the beginning of the nuclear age. But it is the increased willingness to brandish those weapons in pursuit of their revisionist aims that is different from 10 years ago. And so it's a deterrence challenge not any – in any sort of hardware sense of the word, but here it's sort of convincing Putin not to undertake aggression, convincing Russia that our deterrence posture in NATO remains credible and strong. And it's not any individual capability that I think changes that.

Dr. Williams: OK. Sticking with NATO for just another question or so, we have a question from Hans Kristensen of Federation of American Scientists. Hans's question is: Concerning your statement that the new NATO plans are paralleled by effort for nuclear forces, does that mean there are now standing nuclear plans in Europe? Or are they at a lower level of readiness?

Dr. Narang: I don't want to get into the details of the planning efforts in NATO, but I think it is – the ministers and the NPG, you know, have tasked NATO to think again about nuclear planning. And I think those efforts over the last couple of years have made a lot of progress. And, you know, to the point about coherence, they need to speak to the conventional plans as well. I mean, the most likely – the most likely employment of Russian nuclear weapons, in my view, would be, you know, sort of in a – either an intense conventional conflict, short or sharp, or in a long-duration

conventional conflict, where the risk of employment, as we've seen in Ukraine, sort of ebbs and flows, or spikes and falls.

And so the conventional plans have to speak to sort of how your nuclear deterrence plans, and how you might restore deterrence if deterrence were – if there was Russian nuclear employment. Because you have to continue waging the conventional conflict while you're attempting to restore deterrence and deter future or further Russian nuclear employment. And so a lot of effort has been made there, but there's a lot of work to do.

Dr. Williams: Hmm. A couple questions. We are getting more questions about SLCM-N, so I'm going to try again on this one. This question – I'm going to go to Federation of American Scientists again for this, with Eliana Johns, who asked you to expand a bit more on SLCM-N. What delivery system will it be launched from? How will it assure allies? And if you want to say anything on what types of targets it might hold at risk, and are we targeting those right now? I'm going to guess you're not going to take that one.

Dr. Narang: No, I think I can't. (Laughter.) Look, I think there is – we are working with Congress, as I said, to deliver a SLCM-N to meet our shared goals. And I'll say this about SLCM-N, there the administrative – the NPR canceled it. But, as my former boss ASD John Plumb said, reasonable people can disagree about the deterrence value of SLCM-N. What – the security environment – it does come at a cost to the conventional Navy. But the security environment has continued to deteriorate in ways, and probably more rapidly – particularly Indo-Pacific – in ways that we anticipated in the NPR, but we did not think would, I think, emerge as quickly.

And, you know, the argument and the requirement that STRATCOM and the Joint Staff have for a non-visibly generated, non-ballistic, lower-yield capability, I think arises from, you know, sort of the multiple peer challenger problem, where you have the growth in strategic targets and, you know, you don't want to have to rely on your strategic forces or your triad for regional deterrence because it leaves strategic targets potentially uncovered.

So in Europe, we have forward-deployed B61-12s. And the geography of NATO allows that to sort of be on land. But the Indo-Pacific is a maritime environment. And so one can think of, as the security environment continues to deteriorate in the Indo-Pacific, how do you have a persistent, low, you know, non-visibly generated, non-ballistic capability? The analog, right, is essentially a SLCM-N. It has to be – in the maritime environment, you can't have forward land presence in the

way that we have in Europe.

And so there is – there is an argument, I think, that, you know, the – what we concluded was unnecessary several years ago. And one can still conclude it's unnecessary. And I think the administration still, you know, hasn't changed that assessment. As the security environment continues to deteriorate, and you have multiple – the multiple challenger problem, you don't want to have to rely on triad or strategic forces to deter in the Indo-Pacific, especially with the growth in Chinese forces. Which would leave strategic targets uncovered, but also increases the risk of miscalculation if you're using a strategic platform for regional deterrence against sort of limited, say, PRC employment or DPRK employment.

And so the NDAA mandates the department will proceed with the SLCM-N. And we'll comply with it in a way, I think, that does so at – in the quickest and most effective way, without threatening the nuclear modernization program or the nuclear enterprise.

Dr. Williams: So, continuing on this thread of allies in the Indo-Pacific, as I think we all know South Korean public opinion polling suggests the South Koreans are very interested in potentially developing an independent nuclear weapon, although a study by my colleague, Dr. Victor Cha, suggests that elites have very different views on an independent South Korean nuclear weapon.

So this question comes from Sangmin Lee at Radio Free Asia. Do you think that the Nuclear Consultative Group is enough to assure South Koreans so that South Korea won't need its own nuclear weapons?

Dr. Narang: I hope so. I think, it is in South Korea's interest to be an equal partner in our extended deterrence relationship, rather than pursue its own nuclear weapons – which would be costly, take time, and also, you know, make South Korea potentially vulnerable as it's pursuing nuclear weapons. But I think the NCG is a real upgrade in our extended deterrence relationship with South Korea. You know, we've just recently signed the guidelines document when President Yoon was here for the NATO summit. And that institutionalizes the NCG in a way that I think allows South Korea to have equal inputs into the consultative process, right?

So we're trying to achieve conventional nuclear – concepts on conventional nuclear integration. We've committed that we will have – we will make available – our nuclear forces always be available for the defense of South Korea against strategic attack from North Korea. And so, you know, we're providing, I think, greater insight in how do we

think – how we think about operations and planning. South Korea's providing insights into what conventional capabilities it can provide. And together, I think we've really elevated this dialogue to enhance the security of both South Korea and the United States and provide a credible deterrent against North Korea. So I believe, and I think the U.S. government position is, that the NCG is both South Korea's and our best solution to the security predicament that South Korea finds – or security challenges South Korea faces on the peninsula.

Dr. Williams: Great. We should talk about arms control. And we had a question from Austin Scheck, who's one of our Nuclear Scholars from this recent class. And he asked a question specifically about getting China involved in arms control. And, you know, if New START were extended, which we've already done but that's a bilateral agreement, and so at what point can we realistically expect China to be interested in arms control and start getting involved? Is it when they reach numerical parity? Or what are some potential incentives that you and others in the administration, perhaps, have been thinking about for how we might get them to the table?

Dr. Narang: So that's up to Beijing. I mean, I think it's been clear that we have made good-faith efforts to have risk reduction talks with China, and have been rebuffed. And so we remain open – even during the Cold War, the most intense periods of the Cold War, we were able to have substantive arms control, which was in the interest of Soviet Union and the United States. It was in the mutual interest of both countries. And, you know, it is – we are now entering a world for the first time in almost half a century where Russia may decide that strategic arms control is not in its interest, and China refuses to engage in risk reduction talks simultaneously. And that is a world that we haven't necessarily, you know, faced for, you know, over a quarter-century – or, over half a century.

And it's up to Beijing when, you know, it decides that it is in its interest to engage in risk reduction talks, which we believe it's in its interests to do now. You can compete and have substantive and meaningful risk reduction talks at the same time, right? We're on a highway. It's nice to have exit ramps so that if we're in a crisis or conflict there are direct communications lines, so you don't have misperception or miscalculation. And responsible nuclear powers engage in risk reduction arms control talks all the time. The Soviet Union did it. So, you know, I think we are always ready to have substantive talks with willing partners.

Dr. Williams: Yeah, actually, I think I just saw a news story this morning saying that China is, again – or it was maybe last week, actually – that China is

saying: we will not return to arms control agreements or arms control dialogues. And for some of us in the field, we were texting each other and saying, return? Like what was there really to return to? When did this really get started? And then I think it was Russia today that said that they aren't interested in returning to strategic stability talks. So with that in mind, what do you think the United States can do, if anything, to leverage its partnerships with non-nuclear weapons countries to try to increase some of that pressure on Russia and China to demonstrate more responsible nuclear behaviors, as you say?

Dr. Narang: I mean, I think the more international pressure, the better. I think – though in some cases, Russia in particular enjoys flouting international pressure and norms, and sort of takes pride in defiance. And so I think Russia will return to arms control talks akin to whatever following New START will be when it realizes that an unrestrained, you know, sort of nuclear competition is not in its interest. And I firmly believe it's not in their interest. But if Russia chooses not to do that, if China continues not to, then, you know, back to sort of, you know, my remarks. We have no choice but to do two things: one, make sure our posture is prepared for that world, and to make decisions now that give a president – a future president flexible options if he or she decides to, you know, sort of go forward with them. But also, to continue to augment our network of allies and partners, which is our asymmetric advantage over our adversaries.

That unified front, you know, I think that is a pressure – that is potential, you know, sort of incentive for them to return to arms control as well. So, you know, we're prepared for both worlds. I think we wanted one world. And I think we worked with China and Russia for a world that did reduce the – we wanted to reduce the salience of nuclear weapons. But they chose to go in a different direction. And it is – I think we're obligated to prepare for whatever, you know, sort of state of the world. The adversaries have choices, but so do we. And so we need to prepare for a world in which there is sort of unrestrained nuclear competition. But we also remain ready to have substantive risk reduction arms control talks, if we have willing and – you know, credibly willing partners.

Dr. Williams: All right, just two last questions, because I know we're at time but you said you can stay a little – just a few minutes over, which I appreciate.

Dr. Narang: Sure.

Dr. Williams: But on that last question, I'm sure you have heard, and we can anticipate, the pushback on that. Which would be a criticism saying, well, you're just turning this into a self-fulfilling prophecy, that any

changes in U.S. force posture, you're – that we would be somehow instigating or exacerbating an arms race and just kind of incentivizing Russia and China to continue down the current path. How would you respond to that criticism?

Dr. Narang: I mean, I reject that criticism because, you know, I think we continue to signal that that's not the world we want, and that we remain ready to have substantive risk-reduction arms control talks. But you know, we can't be blind to the reality, so we must be prepared for a world in which those overtures and outreach is rejected, as it has continually been by Russia, China, and North Korea. And so, you know, I would argue that we've actually come to the conclusion about the modernization program being necessary but may well be insufficient reluctantly.

Like, the – we wanted and signaled at the NPR in – from the very beginning of this administration this president wanted to reduce the role of nuclear weapons, and we took that very seriously. And it wasn't in vain. But we made every effort possible, and when it continually gets not just spurned but thrown in our face then I think our allies and partners and the United States, you know, have to be prepared for a reality where our adversaries choose not only to not reduce the role of nuclear weapons, but to increase it. And you know, so I think we reluctantly arrived at this conclusion, but that's – this is the world we confront and it's our obligation to be prepared for it.

Dr. Williams: And I think that really resonates with what we heard from NSC Senior Director Pranay Vaddi's speech, which he opened with it was clearly a torturous position for this president in particular to be in as somebody, you know, known as non-pro-Joe – some people like to say – (laughs) – and who wanted to really reduce reliance, wanted to champion arms control, and being put in this position of a really challenging security environment.

Dr. Narang: I do – I do want to say that, you know, what we seek is not – as I noted, is not – we don't need to outpace our adversaries or even the combined number of the adversaries. We do seek a smart, flexible posture that deters, you know, at a strategic level, and assures our allies and partners. And it is – it is – it is not an unrestrained – it's not an unlimited posture. It's not an unrestrained posture. But I think we are now in the middle of thinking about what a smart posture looks like in a multiple nuclear challenger world where your adversaries have revisionist objectives, they're modernizing and expanding their arsenals, and you may face them in a collaborative or collusive manner, and you know, what sort of stress that puts on the force.

And so, you know, I want to be clear that this is not an – we're not talking about an unrestrained posture. We are thinking – we are thinking carefully about what it takes to deter, and it is not an unlimited posture.

Dr. Williams: So last question is about what comes next for you, actually, because you are –

Dr. Narang: A nap? (Laughter.)

Dr. Williams: Yeah. You're in your final weeks in the role. So when you return to Boston, you have a nap. (Laughter). You spend some time with your family, you move back into your office at MIT, you catch your breath, what would be the one thing that you would most want to write about after this time in government?

Dr. Narang: Nothing. I want to keep my security clearance. (Laughter.)

Dr. Williams: Yeah. With or without those constraints in mind, if you were king and could write about anything you wanted –

Dr. Narang: Honestly – well, let me say a couple of things. This job has been the opportunity of a lifetime for me. I'm very grateful to Dr. Colin Kahl, who brought me in, the president, the secretary, the deputy secretary, my undersecretaries, for giving me the opportunity.

But I'm most grateful, actually, for my team, many of which are here. I'm going to miss them tremendously. You know, as academics, we don't have a team. And the support and the drive I've gotten from the team has been incredible. These are the professionals that are the bedrock of our national security. And it's been an honor and privilege to work with them, to hopefully – hopefully, they'll miss me a little bit. We've driven hard, but I think we've achieved a lot.

And I haven't had time to think about and reflect on what I'll write about. I think bureaucratic politics might be at the top of the list. (Laughter). But I do look forward, I think, to, you know, catching my breath, helping train the next generation.

I think – I do want to say a word about when you talk – did spend a lot of time on the speech about the third pillar, which is investing in the next generation. We do it in various ways, right? I think, in government, we want to bring fresh talent in. But they – I think we need to recover our training on nuclear policy and deterrence. And PONI is one example. There are other programs.

And I think in academia, you know, my hope is to be able to do what I can to continue to train undergraduates and graduate students to help get – it's all hands on deck. I mean, this is an unprecedented security environment. We haven't faced quite the, you know, explosive cocktail, no pun intended, of multiple adversaries, revisionism, expanding arsenals, risk of regional employment, before. And so we need all of the talent we can get in this field, you know, for the generations to come.

Dr. Williams: With that in mind, thank you so much for giving the speech at CSIS. And with PONI, we're just so grateful for your time and for your remarks. And thank you as well to Dr. Narang's entire team, which was fantastic to work with.

Thank you all online and in this room for attending. And I also do want to thank the PONI team – in particular, Bailey Schiff, Lachlan MacKenzie, and Libby Kos – for helping bring us all together and get everybody here.

As I said, if you are interested in getting involved in PONI, you can go to our website. There are some great opportunities there.

But just to wrap this up, please do join me in a really warm thank-you to Dr. Vipin Narang. (Applause.)

(END.)