



## RESTRAINTS AT THE NUCLEAR BRINK: FACTORS IN KEEPING WAR LIMITED

*The remarks below were delivered at a symposium on “Restraints at the Nuclear Brink: Factors in Keeping War Limited” hosted by the National Institute for Public Policy on May 23, 2023. The symposium explored the reasons why a state may be restrained from using nuclear weapons during a conventional conflict and why, if nuclear weapons are used, a state may choose to use them in a limited way. It highlighted the conclusions of the July 2023 Occasional Paper by National Institute Senior Analyst Matthew Costlow.*

### **David J. Trachtenberg**

*David J. Trachtenberg is Vice President of the National Institute for Public Policy and served as Deputy Under Secretary of Defense for Policy from 2017-2019.*

As I noted in the invitation to this webinar, this discussion will highlight the results of a forthcoming National Institute *Occasional Paper* by my colleague Matt Costlow that looks at the reasons why a state may be restrained from using nuclear weapons during a conventional conflict and why, if nuclear weapons are used, a state may choose to use them in a limited way.

Now, it is often assumed that any use of nuclear weapons will inevitably unleash an escalatory process that cannot be controlled; and that therefore, there can be no such thing as a “limited” nuclear war. For example, a review of the contemporary literature finds numerous assertions to this effect—many stated with a conviction approaching absolute certitude. As one analyst put it, “...the probability of being able to undertake limited nuclear attacks with no, or only limited, blowback on [one’s] own self amounts to wishful thinking when the adversary has a secure second-strike capability.”<sup>1</sup>

Other analysts have referred to the notion of a limited nuclear war as “dangerous fantasy” and argue that should Russia use tactical nuclear weapons in Ukraine, a nuclear response would be essential or else “the whole tapestry of nuclear deterrence across the world could unravel dangerously.” They contend that “A conventional response to Russian nuclear use would need to be so devastating that it would likely provoke further nuclear use.”<sup>2</sup>

As another analyst stated, “there is no such thing as a small nuclear war. Indeed, embracing the concept of limited nuclear war is folly to the highest degree, and we fool ourselves if we think using low-yield nuclear weapons will somehow help halt the escalation to all-out destruction.”<sup>3</sup>

<sup>1</sup> Manpreet Sethi, “The Idea of ‘Limited Nuclear War’: As Impractical and Dangerous Now, As It Was Then,” *Indian Foreign Affairs Journal* (Vol. 14, No. 3, July-September 2019), p. 244.

<sup>2</sup> John Gower and Andrew Weber, “Rhetoric in Ukraine has reinforced the fallacy of limited nuclear exchange,” *Bulletin of Atomic Scientists*, October 21, 2022, available at <https://thebulletin.org/2022/10/rhetoric-in-ukraine-has-reinforced-the-fallacy-of-limited-nuclear-exchange/>.

<sup>3</sup> Deverrick Holmes, “There is no such thing as a small nuclear war,” Center for Arms Control and Non-Proliferation, July 12, 2019, available at <https://armscontrolcenter.org/there-is-no-such-thing-as-a-small-nuclear-war/>.



And others have noted, “we have exactly zero experience of managing nuclear escalation against a nuclear-armed power and so we have little reason for confidence.”<sup>4</sup> And as one recent report concluded, “No one knows whether and how the use of nuclear weapons against another nuclear-armed state would be kept limited and would not escalate.”<sup>5</sup>

On the other hand, the notion of automatic nuclear escalation is not a universally held view. As some analysts have noted, “the Russian military does not believe that limited nuclear use necessarily leads to uncontrolled escalation” and that “The Russian military believes that calibrated use of conventional and nuclear capability is not only possible but may have decisive deterrent effects.”<sup>6</sup>

The debate over whether there can be a limited use of nuclear weapons dates back to the days of the Cold War. In his writings, Colin Gray discussed the possibility of imposing what he called “severe escalation discipline” on an adversary.<sup>7</sup> Other deterrence scholars have also wrestled with this issue, with many arguing against such a possibility. Yet, as Henry Kissinger wrote in 1965: “No one knows how governments or people will react to a nuclear explosion under conditions where both sides possess vast arsenals.”<sup>8</sup>

But what about the notion that a nuclear state may refrain from nuclear use even at the risk of suffering a conventional defeat? The U.S. defeat in Vietnam is sometimes cited as an example. And some may see nuclear escalation by Russia in Ukraine as unlikely, given Moscow’s apparent willingness to absorb massive conventional force setbacks in its failure to subjugate Kyiv. While the so-called “nuclear taboo” has held for nearly eight decades, there are worrisome signs of fragility. As former Russian President Dmitry Medvedev has stated, “The defeat of a nuclear power in a conventional war may trigger a nuclear war.”<sup>9</sup> Is this just bluster?

Now, while much has been written about the prospects and likelihood of nuclear escalation, relatively little has appeared detailing the possible factors that may mitigate against escalation from the conventional to the nuclear level, or the considerations that may influence decision makers to refrain from escalating a nuclear conflict. It is this important consideration—as well as examining how U.S. decision makers might influence an adversary’s deterrence calculus in order to decrease the risks of nuclear escalation—that *Matt’s Occasional Paper* seeks to address.

---

<sup>4</sup> James Acton tweet, October 7, 2022, available at

[https://twitter.com/james\\_acton32/status/1578383815881498624?s=20&t=94JqW05IAOKEhxIV\\_jBG0w](https://twitter.com/james_acton32/status/1578383815881498624?s=20&t=94JqW05IAOKEhxIV_jBG0w).

<sup>5</sup> George Perkovich and Pranay Vaddi, *Proportionate Deterrence: A Model Nuclear Posture Review*, Carnegie Endowment for International Peace, 2021, p. 5, available at [https://carnegieendowment.org/files/Perkovich\\_Vaddi\\_NPR\\_full2.pdf](https://carnegieendowment.org/files/Perkovich_Vaddi_NPR_full2.pdf).

<sup>6</sup> Michael Kofman and Anya Loukianova Fink, “Escalation Management and Nuclear Employment in Russian Military Strategy,” *War on the Rocks*, September 19, 2022, available at <https://warontherocks.com/2022/09/escalation-management-and-nuclear-employment-in-russian-military-strategy-2/>.

<sup>7</sup> Colin S. Gray, “The Case for a Theory of Victory,” *International Security* (Vol. 4, No. 1, Summer, 1979), p. 86.

<sup>8</sup> Quoted in Sidney D. Drell and Frank von Hippel, “Limited Nuclear War,” *Scientific American* (Vol. 235, No. 5, November 1976), p. 37, available at <https://sgs.princeton.edu/sites/default/files/2019-10/drell-vonhippel-1976.pdf>.

<sup>9</sup> Guy Faulconbridge and Felix Light, “Putin ally Medvedev warns NATO of nuclear war if Russia defeated in Ukraine,” *Reuters*, January 19, 2023, available at <https://www.jpost.com/breaking-news/article-729004>.

\*\*\*\*\*

**Matthew R. Costlow**

***Matthew R. Costlow is Senior Analyst at the National Institute for Public Policy and former Special Assistant in the DoD Office of Nuclear and Missile Defense Policy.***

Thank you, Dave, and thank you to this distinguished panel of participants for their willingness to contribute on such an important topic. Please be on the lookout for my report when it is published next month as an *Occasional Paper*—I hope my remarks today will provide you with an enticing preview.

I titled my paper “Restraints at the Nuclear Brink: Factors in Keeping War Limited”—and I chose the word “restraints” because I wanted to emphasize the fact that a state leader may be tempted to employ nuclear weapons for a whole host of reasons—but there may be some factors that promote restraint in the face of temptation. For the purposes of this paper, I am not interested in scenarios where a leader is not considering nuclear employment, or is simply bluffing. As Herman Kahn famously noted, we do not build our nuclear deterrent against such threats as “even a frown may deter them.”

Instead, I am interested in three scenarios specifically: First, why a nuclear-armed state may choose not to employ nuclear weapons against a non-nuclear state. Second, why two nuclear-armed states in a conventional conflict may refrain from employing nuclear weapons. And third, why nuclear-armed states in a conventional conflict may limit their nuclear strikes against one another. The theme, as you can see, is asking what factors might drive restraint and why. As I make clear throughout the paper, this analysis is not predictive. I am *not* arguing that all conflicts involving nuclear-armed states will stay limited.

The goal of the paper, instead, is to focus on those factors that may promote restraint—because if we can identify them, then we can convey them to U.S. and allied decisionmakers so that they can better tailor their deterrence threats. If they have in mind some of the factors that may promote adversary restraint, then they can ask the Intelligence Community more precise questions to, hopefully, receive more precise answers. In one of the classic works of the field, Richard Smoke’s 1978 *War: Controlling Escalation*, he concluded that often there was fairly clear information available to decisionmakers that could have prevented them from inadvertently stepping over an adversary’s “red line”—but the decisionmakers could not ask for something they did not consider.

This report is an effort to make sure decisionmakers ask the right questions, the relevant questions, so they are best-informed to make a tailored deterrence threat or de-escalate as the scenario may dictate. I should note that one of the primary reasons I wanted to write this report was my frustration with the constant media reports about how even the smallest action by Ukraine or the United States could lead to Russian nuclear employment. What was missing from all these commentaries was any sense of why Russia may choose *not* to employ nuclear weapons, even if it was severely tempted to.

Decisionmakers are constantly bombarded with fears, some probably real and some probably imagined, that if they make the wrong move, then nuclear war is the inevitable

result. And perhaps in some cases that is true. But studying all the ways we could stumble into a nuclear war, while absolutely useful, is only half the necessary information. For U.S. decisionmakers to make informed choices about vital U.S. interests, they need to know both the reasons why an adversary may employ nuclear weapons, and the reasons why he may not. Only then can they make informed decisions on U.S. courses of action, decide on their own “red lines,” etc.

I apologize for the long windup, but I think it is important to understand why looking at this topic is so vital for decisionmakers today and in the future. For the last half of my remarks, let me provide you with a sampling of some of my findings and then a provocative conclusion that I hope will prompt some discussion. To give you an idea of how I approached this topic, I will briefly go over a few of the reasons I believe a nuclear-armed state may choose *not* to employ nuclear weapons against a non-nuclear armed state during a conventional conflict.

To reiterate, I am not predicting this will always be the case, but just laying out some of the possibilities. If we know about some of these theoretical possibilities, we can make better policy in actuality.

One potential reason why a state may refrain from employing nuclear weapons against a non-nuclear opponent is that doing so might cause other opponents currently not party to the conflict to enter into it as participants. Richard Smoke, who I mentioned earlier, called this “triggering a latent national interest.” That is, by employing nuclear weapons, a state leader may be raising the stakes of the outcome of the conflict to such a degree that other states enter the conflict against the nuclear aggressor. Other states could enter the conflict for a whole host of reasons—whether it is to enforce the norm of nuclear non-use, to punish the nuclear aggressor, to make sure the aggressor does not benefit militarily from nuclear employment as a deterrent against those who in the future who might contemplate the same action, etc.

Another related reason why a state may refrain from nuclear employment is that using nuclear weapons against a non-nuclear state may damage relations with critical allies and partners. This dynamic may be evident in Russia’s decision to, so far, not employ nuclear weapons against Ukraine—because doing so may endanger (economically and politically potentially) its relationship with critical states like India, Iran, and China. Without their support, or at least relative silence, Russia could falter even more in its conventional war against Ukraine—making the prospect of employing nuclear weapons appear to be not worth the cost.

Let me mention just one more potential reason why a state may refrain from nuclear employment—and that is because nuclear employment might cause other states to impose such heavy economic sanctions (among other responses) on the aggressor that it imperils domestic stability. States like Russia and China have made implicit deals with their domestic populace that essentially say that if the people allow the dictators to have full political power, then the dictators will provide stability and economic prosperity for the citizens. Dictators may therefore have to balance the perceived benefits of nuclear employment politically and militarily versus the potential domestic costs.

I should note here that these reasons I have just mentioned are not mutually exclusive and each one, in and of itself, may not be the deciding factor in a choice of restraint—but by identifying the possibilities, decisionmakers can ask the regional experts and the Intelligence Community what factors are potentially the most relevant, and how might the United States be able to influence the impact of those factors on the adversary.

I will close with one my conclusions from the paper that I found somewhat unsettling. Throughout the course of writing down all these potential reasons for restraint, I was struck by the number of them that were both potentially important *and* somewhat out of the U.S. control. That is, those factors most relevant to an adversary choosing restraint may be the same factors that are the most difficult for the United States to influence. U.S. deterrence threats, in other words, may play a less significant role than the internal calculations and values in the adversary's mind. It is far more comforting to believe that the United States will be in the driver's seat in influencing whether the adversary escalates a given situation, but as the late great scholar Colin Gray reminds us, deterrence is a relationship that both sides must voluntarily enter into. They may be reluctant to, but there must be agreement at some level—and the United States can only offer so many incentives for restraint (or conversely, disincentives against non-restraint).

In the end, the other state's leaders will make a decision in their mind about the relative importance of factors that the United States can control and the factors unique and internal to the adversary, which the United States can perhaps, at best, only indirectly influence. This was something of a sobering conclusion for me, but I think it illustrates the importance of tailored deterrence all the more. If the United States can study its adversaries, their values, their worldviews, their capabilities and vulnerabilities, and all those factors relevant to restraint—even the slightest edge in what we know may make all the difference in a conflict over the highest of stakes. Thank you and I look forward to the other panelists' presentations and the discussion afterward.

\*\*\*\*\*

### **Bradford Clark**

***Bradford Clark is Assistant Professor at National Defense University.***

Thank you, David, for the kind introduction and to the National Institute for hosting a webinar on this important topic. Before I begin, let me say that, although currently assigned as an instructor at the Eisenhower School, I will soon return to my home organization, OSD Policy. For that reason, it is important to note that the views presented are my own and do not necessarily represent the views of the Department of Defense, OSD Policy, or the National Defense University.

I am going to focus my remarks on escalation in the context of an armed conflict between two nuclear states. Since I am presently playing the role of an academic at one of the war colleges, I will go out on a limb and try to center my remarks around a concept important to

Clausewitz, which is the centrality of the political objective,<sup>10</sup> here applied to managing escalation risks. Unlike some of the escalation dynamics discussed by the other speakers, this is one factor we can, or should, be able to control.

First, I want to step back briefly and ask why a state might escalate to nuclear employment. In simplest terms, escalation is driven by the perception that nuclear use, despite the tremendous and potentially existential risks, is nevertheless still a better option than all the other alternatives. The political objective—how it is defined, communicated, and perceived—is central to the adversary’s decision calculus on this point. By focusing on the competing political objectives, and in particular our own objective, I believe there is some hope, even an expectation, of avoiding nuclear escalation.

This belief stems from the likelihood, with one important potential exception, that the United States will be the stronger combatant and, as a *status quo* power, will be fighting for limited political objectives. Because the armed conflict need not necessitate regime change as a political objective—after all, the adversary cannot hope for this and the United States perhaps should not strive for this—any conflict would be a “limited war” as Clausewitz conceived it<sup>11</sup> and therefore might remain a “limited war” as the nuclear theorists conceived it.<sup>12</sup> If an adversary’s survival is not at stake, they may come to believe that neither initial nuclear employment nor further escalation is a better option than all the other alternatives, including defeat in the conflict.

Central to U.S. conceptions of “tailored deterrence” is the idea of “stakes.” In particular, the idea that an imbalance in stakes could lead an adversary to theories of victory based on limited nuclear escalation. Stakes and political objectives are not quite the same thing. I take stakes to mean the perceived or felt importance of the state interest at risk in the conflict. The political objective flows from this but is narrower. It is the political outcome the state wishes to achieve or to avoid in the conflict (to protect or advance its stakes). Except for China, any war between the United States and a nuclear adversary would be *a war of the strong against the weak*. Consequently, the adversary’s political objective, however limited at the outset, will be impacted by the exercise of U.S. military power. The adversary’s stakes and political objective may converge quickly at “survival.”<sup>13</sup>

Given U.S. and allied conventional dominance over most potential nuclear adversaries, two things are likely true: (1) With the possible exception of China in a Taiwan scenario, it is likely to be a war that the adversary did not seek or thought it could avoid in the course of some lesser military adventure. (2) In such a conflict, the adversary would likely see the United States as the aggressor. If the adversary perceives its territorial integrity or political survival is at stake, it is conceivable to imagine it, as the weaker state, threatening or using

---

<sup>10</sup> Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (Princeton, NJ, Princeton University Press, 1989), Book VIII, Chapter 5, p. 602.

<sup>11</sup> Clausewitz, *On War*, pp. 611-613.

<sup>12</sup> Keith B. Payne, “The Great Divide in US Deterrence Thought,” *Strategic Studies Quarterly* (Summer 2020): 23.

<sup>13</sup> Thomas G. Mahnken, “Future Scenarios of Limited Nuclear Conflict,” in *On Limited Nuclear War in the 21<sup>st</sup> Century*, edited by Jeffrey A. Larsen and Kerry M. Kartchner (Stanford, CA, Stanford University Press 2014), p. 130.

nuclear weapons to forestall a military defeat and/or to force a political settlement, much as we conceived of such use during the Cold War.<sup>14</sup>

However, unless and until the adversary escalates to nuclear weapons, two other things are likely true regarding the stakes or political objective: (1) The conflict is unlikely to involve an existential threat either to the United States or, given Russia's present weakness and absent an invasion of Taiwan, to a U.S. ally or partner. (2) The U.S. political objective, at least at the outset, is likely to be limited, either a return to the prewar *status quo*, or the cessation of some military or other malign activity, perhaps with some penalty imposed on the adversary for initiating the conflict. It is of course possible to imagine the adversary committing an act so heinous that the United States initiated a war for an unlimited political objective, but my focus is on what I see as more likely sources of conflict—mistake or miscalculation in the operation of adversary foreign policy. In a war fought for limited political objectives by the United States against a conventionally weaker adversary, there is every reason to believe the conflict could be kept below the nuclear threshold.

Of course, there is risk. Limited aims do not mean limited means. We need not self-deter. Within the boundaries of reason and law, the United States can and should use the means required to accomplish its political objectives. Any use of force risks provoking escalation, and even limited means can seem extreme where there is conventional overmatch; indeed, U.S. conventional superiority is often considered a driver of competitors' nuclear programs.<sup>15</sup> Even so, escalation need not necessarily follow conventional overmatch. Policy might be able to control passions and is intended to do so.

We have some sense of how to do this. Many of the crisis management theories and techniques developed during the Cold War are intended to control and effectively communicate the U.S. political objective. Crisis management techniques<sup>16</sup> together with the ordinary functioning of deterrence logic should enable the United States, in a war fought for limited political objectives, to positively influence the three variables identified in the Deterrence Operations Joint Operating Concept (DOJOC): an adversary's perception of benefits, perception of the costs, and perception of the consequences of restraint.<sup>17</sup> Our specific declaratory policy in the NATO and Korean contexts (any "employment . . . against NATO would fundamentally alter the nature of a conflict,"<sup>18</sup> any North Korean nuclear attack "will result in the end of that regime."<sup>19</sup>) is as much about influencing an adversary's

---

<sup>14</sup> Kerry M. Kartchner and Michael S. Gerson, "Escalation to Limited Nuclear War in the 21<sup>st</sup> Century," in *On Limited Nuclear War in the 21<sup>st</sup> Century*, edited by Jeffrey A. Larsen and Kerry M. Kartchner (Stanford, CA, Stanford University Press 2014), p. 151.

<sup>15</sup> See, e.g., Robert J. Peters, "The Red Zone: Understanding an Escalatory Pathway that the Adversaries are Exploring—and We Are Not," Air University, May 9, 2022, available at <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Article-Display/Article/3021286/the-red-zone-understanding-an-escalatory-pathway-that-the-adversaries-are-explo/>. As an aside, the extent to which this point is accurate is the extent to which efforts to reduce the role of nuclear weapons through advanced conventional capabilities may be self-defeating.

<sup>16</sup> For a summary list of crisis management measures, see Kartchner and Gerson, *supra*, at pp. 160-161.

<sup>17</sup> Department of Defense, *Deterrence Operations Joint Operating Concept*, Version 2, December 2006, p. 20.

<sup>18</sup> NATO 2022 Strategic Concept, paragraph 28.

<sup>19</sup> Department of Defense, *Nuclear Posture Review*, 2018, p. 33; 2022 Nuclear Posture Review, p. 12.

calculations on the third DOJOC variable as it is about influencing the cost-benefit analysis of the first two variables.

Nuclear escalation need not become the adversary's "least-worst" option. As my colleague Don Stoker once pointed out, "political aims don't escalate, they change."<sup>20</sup> Acknowledging the messiness of a democratic system, and the unpredictable political forces any conflict is likely to generate, it is ultimately up to us through our political leadership to change them or not.

Up to this point I outlined a hopeful outcome in part by describing relatively hopeful circumstances, a U.S. conflict with a weaker nuclear state without an existential risk (absent nuclear attack) to the United States or an ally. There are more difficult scenarios in which my argument has less force. The first is a conflict with China over Taiwan's independence, which could quickly push both sides to maximalist political aims. The Russia-Ukraine War may test whether a nuclear power is prepared to lose a war involving a vital interest without, at least, *attempting* to pull the nuclear lever. If it does not, a U.S.-China fight over Taiwan almost certainly will. China might view defeat as a threat to the territorial integrity of China (that is, the United States taking sides in a civil war with a rogue province) and to the Party's rule. Were the United States to enter the war on behalf of Taiwan, defeat would involve an existential threat to an ally, if not to the free and open international order and the U.S. system of alliances that supports it.

The second more difficult scenario is restoring deterrence. Much of my argument is focused on deterring escalation in the first instance. Once escalation occurs everything is more difficult. Our nuclear policies in NATO and Korea are explicit that adversary resort to nuclear weapons—"employment" or "attack," respectively—could change the character of the conflict, that is, the political aim. This is likely true in any scenario, regardless of specific declaratory policy.

The political objective remains central to escalation dynamics. Conflict "offramps" become more consequential as the violence spins up. Offramps should be explored and pursued. In such cases our confidence in deterring further escalation and restoring deterrence may depend as much on the mechanisms and capabilities discussed by the other presenters today than on moderating political aims. Limited options may be critical to incentivizing or compelling an adversary to take an offramp. Declaratory policy and considerations of credibility and prestige may constrain options.<sup>21</sup> However, in circumstances where escalation or the underlying stakes involved have not (or not yet) taken both sides to maximalist political objectives, our most effective means of ensuring adversary restraint may remain preventing the stakes from becoming existential from the adversary's perspective.

---

<sup>20</sup> Donald Stoker, *Why America Loses Wars: Limited War and US Strategy from the Korean War to the Present*, (Cambridge, UK, Cambridge University Press, 2022), pp. 60-61.

<sup>21</sup> "If considered rationally, prestige, too, is an elastic value to which it is pertinent to apply the conception of reasonable price." Bernard Brodie, *War & Politics* (New York, NY, MacMillan Publishing Co., Ltd., 1973), p. 161. Brodie's comment was directed to his analysis of Vietnam but applies with equal force to escalation considerations as much of our deterrence theory and strategy depend on rational cost/benefit perceptions.



The implication of this might be that, against a nuclear adversary, the American penchant for “regime change” may no longer be operative. That juice may not be worth the nuclear squeeze, although present calls for regime change in the Russia-Ukraine conflict indicate that demand signal may be difficult to quiet (and there may be instances where regime change is the only right and appropriate objective). Similarly, given the emerging “two nuclear peers” strategic context, it may be in the U.S. interest to limit its political aims in a conflict with one nuclear power—so to limit the conflict—to reduce opportunities and incentives for adventurism by a second nuclear power.

To return to Clausewitz, if we cannot limit our political objectives, and specifically to avoid maximalist political objectives where not required for an acceptable political settlement, we risk triggering the dynamic Clausewitz identified in his chapter on “Relative Strength.”<sup>22</sup> Clausewitz observes that where the weaker side cannot protect itself by restricting its goals in the conflict, it must compensate with the “inner tension and vigor” inspired by the danger. “Where the disparity of strength is so great that no limitation of objectives will provide protection . . . the tension will, or should, build up to one decisive blow. . . . At that point the greatest daring, possibly allied to a bold stratagem, will seem the greatest wisdom.”<sup>23</sup>

Threatening unacceptable damage to deter escalation may not succeed if an adversary sees defeat as an equivalently unacceptable outcome. In such circumstances, desperate escalatory gambles, such as attacks meant to de-couple allies or to “sober” but “not embitter,”<sup>24</sup> might be seen as viable alternatives. We should avoid that scenario if we can.

\*\*\*\*\*

### **Harrison Menke**

***Harrison Menke is a Special Advisor to the Director of the Defense Threat Reduction Agency and a current doctoral candidate in Missouri State University’s Defense and Strategic Studies program. The views expressed are his own and do not reflect the official policy or position of the Defense Threat Reduction Agency, Department of Defense or the U.S. Government.***

Thank you to the National Institute for Public Policy for inviting me to speak on this topic. I just want to note that the views expressed are those of the speaker and do not reflect the official policy or position of the Defense Threat Reduction Agency, Department of Defense or the U.S. Government.

Everyone put a lot of food for thought on the table, and it reflects the importance and timeliness of this topic. In reflecting on the question at hand, I thought I’d turn to Cold War history. As a shameless plug, my colleague Greg Giles and I are nearing the finish line on a

---

<sup>22</sup> Clausewitz, *On War*, pp. 282-284.

<sup>23</sup> *Ibid.*, pp. 283-284.

<sup>24</sup> Sergey Brezkun, “Russia Needs Not an Escalation but a De-escalation Ladder,” *Nezavisimoye Voyennoye Obozreniye* (online article) (November 27, 2015), cited in Brad Roberts, “On Theories of Victory Red and Blue,” *Livermore Papers on Global Security* No. 7 (Lawrence Livermore National Laboratory, Center for Global Security Research, June 2020), p. 50.

multi-year study that looks at how the United States and Soviet Union thought about and integrated nuclear and conventional forces.

Certainly, it is clear both the great powers perceived incentives not to escalate. This includes longstanding strategic issues like fear of escalation, expected damage and destruction, international pressure, and at least for the United States reputational and normative reasons.

But what really stuck out to me given the scope of our study was the tactical and operational frictions that could have or did impact decision-making. This suggested to me that restraint could be driven both top-down, or by internal leadership considerations, but also bottom-up in ways that might promote caution. This goes beyond “detering the individual trigger-pullers,” but point to more systemic issues related to organizing, training, equipping, and planning. Let me give you a few examples:

In the mid to late 1950s, the U.S. Army began to deploy large numbers of nuclear weapons to Europe—to include the Redstone missile, Nike Hercules surface-to-air missile, and Honest John rockets.<sup>25</sup> But there was a catch; significant investment in these projects came at the expense of operational readiness as the Service shifted to the Pentomic Division experiment. At the end of May 1958, the Seventh Army reported that although technically competent, most units lacked sufficient personnel and were experiencing shortages in essential electronics, spare parts, and communications equipment.<sup>26</sup> As such, only 21 of its 49 atomic artillery and missile units were considered operationally ready.<sup>27</sup> The Army education and training systems also struggled to keep up with the rising demand for nuclear specialists to the point where “our employment capability was being impaired seriously because the training program was lagging so far behind weapons availability.”<sup>28</sup> Despite nearly doubling the weapon systems available, these shortcomings raised concerns amongst Army Senior Leaders about the risk of mission failure. USAREUR commander General Hodes warned in 1958 that USAREUR had “reached a point of calculated risk” and that the accomplishment of his wartime mission was no longer a “foregone conclusion.”<sup>29</sup>

The Soviets apparently had similar challenges. Despite the coherence achieved among Soviet doctrine, strategy, and capabilities, the Soviet General Staff by the late 1970s had begun to question the utility of large-scale nuclear employment. This was, in part, a recognition of the heroic assumptions made in Soviet planning. For example, Soviet planners assumed at least a 40-50 km, and in some cases 100 km, per day rate of advance in a nuclear environment.<sup>30</sup> Soviet engineers posited that removal of debris from a roadway would take

---

<sup>25</sup> Donald A. Carter, *Forging the Shield: The U.S. Army in Europe, 1951-1962* (Washington, DC: United States Army Center of Military History, 2015), p. 331.

<sup>26</sup> *Ibid.*, p. 307.

<sup>27</sup> *Ibid.*, p. 307.

<sup>28</sup> Major DeBow Freed, USA, “Nuclear Weapons Employment Training,” *Military Review* 40, no. 1 (April 1960), p. 63.

<sup>29</sup> Carter, *op cit.*, pp. 312-313.

<sup>30</sup> Interview with Gen. M.A. Gareev, in John G. Hines, Ellis M. Mishulovich, and John F. Shull, “Soviet Intentions 1965-1985, Volume II: Soviet Post-Cold War Testimonial Evidence,” BDM Federal, Inc., September 22, 1995, p. 74.

an engineer platoon only 3.5 hours after a 300-kiloton surface detonation.<sup>31</sup> Moreover, Soviet plans assumed that, despite massive casualties, they would still secure vital objectives. New General Staff leaders questioned these assumptions and demanded greater scrutiny, which led to discomfiting results. In a command post exercise in 1974, a NATO nuclear strike resulted in 50 percent losses for some Pact units and the virtual destruction of the Soviet Third Shock Army.<sup>32</sup> Other exercises similarly witnessed 30 to 50 percent of Pact personnel and equipment lost to nuclear strikes.<sup>33</sup> The Soviet generals were less concerned by the destruction of personnel and material, but about how those losses would hinder the ability to achieve objectives rapidly—speed being the centerpiece to the Soviet theory of victory. According to analyses conducted by the General Staff in the 1970s, all significant movement would cease for several days.<sup>34</sup> These lessons, among other things, led N.V. Ogarkov to a “fundamental reassessment of the role of these weapons, and to a break in previous views on their place and importance in war, on methods of conducting engagements and operations, and even the possibility of waging war at all with the use of nuclear weapons” when he became Chief of the General Staff in 1977.<sup>35</sup>

Finally, some weapon systems lacked clear guidance that inhibited their use. For instance, it is not clear that the U.S. Navy had a realistic plan to use nuclear-armed surface-to-air missiles (SAMs). Then Director of Strategic and Theater Warfare Rear Admiral Holland explained this challenge to Congress in 1984: “When you see an incoming flight of aircraft or missiles, how do you know it is nuclear? How do you know if you should use nuclear weapons? When should you? Under what circumstances?”<sup>36</sup> Further complicating matters was that use of nuclear-armed SAMs would require presidential authority. Unless such release authority had been pre-delegated, it was highly unlikely that it could be requested and granted during a tactical engagement. When asked if the Navy had taken presidential approval for use of nuclear weapons into account in its battle plans, Holland said, “I don’t think it is realistic, but it is factored in... We have not come to grips with that part of the problem. We keep trying.”<sup>37</sup>

To be sure, the competition between the costs and benefits of restraint are highly dynamic and difficult to predict with any confidence. For the Soviets, any hesitancy might have risked failing to preempt a large-scale NATO nuclear attack—a primary fear and primary motivator. So I don’t want to oversell any of these things as so damning that they would have in and of themselves swayed either U.S. or Soviet leaders from executing nuclear

---

<sup>31</sup> Maj.-Gen. G. Ostapchuk, “The Rapid Elimination of the Aftereffects of Enemy Nuclear and Chemical Strikes,” *Military Thought*, 1974. Declassified on May 2, 2015.

<sup>32</sup> “Soviet Concepts for Employment of Nuclear Weapons in a Conflict with NATO—Evidence from Warsaw Pact Military Exercises,” Memorandum, Office of Strategic Research, Central Intelligence Agency, March 24, 1978. Declassified on July 18, 2012, p. 8.

<sup>33</sup> “Soviet Concepts,” op. cit., p.6.

<sup>34</sup> “Interview with Gareev,” op. cit., p. 74.

<sup>35</sup> N.V. Ogarkov, *Istoriya uchit bditel'nosti* (Moscow: Voenizdat, 1985), p. 51. Found in Mary FitzGerald, “Marshal Ogarkov on Modern War: 1977-1984,” *Center for Naval Analyses*, November 1986, p. 20.

<sup>36</sup> Walter Pincus, “Nuclear Missile Has Navy in a Quandary,” *Washington Post*, January 14, 1984.

<sup>37</sup> Ibid.

operations. When compared to concerns like destruction of the state, the items I discussed almost seem trivial.

But what these examples might suggest are potential sources that, when coupled with the other high-level factors such as those discussed, could help tip an adversary's calculus toward restraint. Following repeated demonstrations of Russian technical failure and operator/command incompetence in the Ukraine War, particularly in long-range strike, the Kremlin might be less confident in these systems effectiveness for a limited nuclear operation, complicating the cost-benefit calculation.

Or, similar to the cases of the U.S. Army and Navy during the Cold War, uncertainties regarding readiness or proficiency might limit the types of options perceived to be available or viable, even if they may not prevent a decision-maker from deciding a nuclear response was necessary. And, as we look out at other potential adversaries rapidly putting into service new weapons at a break-neck speed, there is the potential for capabilities to outpace doctrine and training, possibly adding other levers of restraint. This may include command and control—as potential adversaries look to improve resilience and speed they may unwittingly exacerbate vulnerabilities.

While these bottom-up factors may be difficult to ascertain and affect, if discovered they could offer a slight, but potentially useful means to influence decision-making in a future conflict. I think by looking for those things perhaps beginning by questioning some of our own assumptions, we can better understand the holistic picture of what might or might not affect an adversary's unique decision calculus regarding nuclear employment.

With that, and I'm probably over my time limit, I will turn it back over to the moderator. Thank you and I look forward to any questions you may have.