



Tempting Armageddon: The Likelihood of Russian Nuclear Use is Misconstrued in Western Policy

*The probability of Russian nuclear use related to the Ukraine war is rising - but why?
Neither Washington nor Brussels fully apprehend the risk.*

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Introduction

Beginning with its invasion of Ukraine, Moscow has warned of the possibility of nuclear conflict and world war should US-NATO become directly involved in the fight. Moscow's threats have waxed and waned over time as the war has progressed; Presently - early 2023 - they are insistent.[1] While US-NATO leaders have said that these threats must, as a matter-of-course, be taken seriously, Washington and Brussels have as a *matter-of-policy* treated the prospect of Russian nuclear use as very unlikely and easily contained. On balance, Western analysts and opinion leaders have treated Moscow's talk of nuclear use more as a scare tactic than a practicable option.[2] *This is a serious mistake - and one likely to increase the risk of the outcome it minimizes.*

This article tracks and assesses the evolution of Russian nuclear threats in the Ukraine crisis, the related interplay between Moscow and Washington, the factors driving Russian thinking on nuclear use, the nuclear options available to Russia, and why US-NATO leaders and hawkish observers dismiss these options as impracticable. We conclude that the probability of Russian nuclear use, although conditionally modest, is rising as Ukraine's armed forces push forward toward Crimea and the Russian border while also increasing their retaliatory attacks on recognized Russian territory. On its present trajectory, the crisis may soon run a risk of nuclear conflict greater than that experienced during the 1962 Cuban Missile Crisis.[3]

Official US and NATO estimates of the likelihood of Russian nuclear use underestimate the risk for several reasons:

- First, official assessments evince a poor understanding of Russian thinking on extended nuclear deterrence, and they fail to see how and why it is evolving.

- Second, they lack the "strategic empathy" essential to weighing Russian motivations. They discount Moscow's view of the present contingency as an instance of big power contention and how it took a decisive turn beginning in 2014. They depreciate Moscow's long-felt conviction that NATO's approach to Russia's border threatens the stability and security of the Russian state.[4] And they offhandedly dismiss Moscow's view that Kyiv's ongoing success in the war is due substantially to Western support, making the war a proxy Russia-NATO conflict.

None of these Russian perceptions or assessments need be accurate to be sincere and influential, if not determinant, as Moscow contemplates its nuclear options.

- Finally, official US and NATO assessments of nuclear risk may be distorted by "motivational bias," which understates risk in light of desired gains. In the present contingency, ongoing brinkmanship - "staying the course" - could possibly result in the enfeeblement of Russia. And this would constitute a world historic victory in what recent US national security and defense strategies frame as America's global strategic "big power" competition with Russia.[5]

During the past 75 years, we have only once or twice before veered this close to general war between the top nuclear powers. We should not be cavalier as the dice are being rolled once again. In what follows we review the putative thresholds for nuclear use set out by Moscow, and how they have evolved over the past year.

Crisis Instability: The Certain Danger

The likelihood of nuclear use hinges on the seriousness and immediacy of the threat that the prospective user aims to deter. Perceived existential threats are especially provocative. And possession of a large nuclear arsenal (with the vast majority of weapons held in reserve) can lead potential users to calculate that retaliation for a limited strike would be similarly limited - and soon followed by cease-fire efforts. In other words, *nuclear-weapon superpowers feeling an urgency to act might be inclined to believe that intra-war deterrence would work to their advantage.*

Still, as the Russia-Ukraine conflict stands today, the probability of Moscow ordering a nuclear *strike*, as such, *on Ukraine* remains low - even should the Russian army continue to suffer setbacks on Ukrainian soil. For a time, Moscow will continue to have the option of significant counter-value attacks using conventional means. However, the qualifier noted above is critical: *the inhibitions on nuclear use mostly apply to intentional use of nuclear weapons on Ukrainian soil. There are effective nuclear options that need not involve attacking Ukraine or incurring casualties*, for instance: a demonstration blast in remote areas of Russia. Such an action would be intended and likely to have a powerful psychological effect not easily mollified by official US reassurances to NATO allies and other countries. But such a gambit would also involve and/or provoke abruptly heightened levels of strategic force readiness on both sides of today's strategic divide, and this would be uniquely dangerous.

Realistically, *it's crisis instability that poses the greatest danger of nuclear cataclysm*. Any situation that prompts a bi- or multi-lateral resort to peak levels of nuclear readiness - a hair-trigger standoff - greatly increases the likelihood of accidental or mistaken nuclear use. Such was the case during the Cuban crisis when the commander of submarine C-19 had to be dissuaded from firing a nuclear torpedo when possibly under attack. (Out of touch with Moscow and being signaled to surface by US depth charges, the captain reportedly believed that nuclear war might have already commenced. Luckily, the fleet commander was on-board to weigh against that option.)[6] And this was only one of three nuclear "close calls" during the crisis (as reviewed below).

Russian Guidance on Nuclear Use

The 2020 statement of official Russian doctrine on nuclear weapons, *Foundations of State Policy of the Russian Federation in the Area of Nuclear Deterrence*,[7] defines several situations in which these instruments might be brought into play. Not surprisingly, the situations include response to an adversary's use of "nuclear weapons or other Weapons of Mass Destruction (WMDs) on the territories of the Russian Federation and (or) its allies." This is a fairly standard statement of nuclear deterrence, although extended - as in the US case [8] - to cover other WMDs and the nation's allies. Also similar to US policy is the allowance to use nuclear forces to deter various forms of non-nuclear non-WMD attack on "critically important state or military objects... the disablement of which could lead to the disruption of retaliatory actions by nuclear forces."

Finally, Russian doctrine sees using nuclear weapons to blunt "aggression against the Russian Federation with the use of conventional weapons when the very existence of state is in jeopardy." A comparable provision in US nuclear policy is the use of nuclear weapons to deter non-nuclear, non-WMD attacks "that have a strategic effect against that United States or its allies and partners." [9] Notably, the cohort of "allies and partners" under the US umbrella is rather numerous, including more than 48 nations.[10] However, the scope of possible US nuclear weapon employment is supposedly constrained by the proviso that the USA "will not use or threaten to use nuclear weapons against non-nuclear weapon states that are NPT compliant." (NPT = Non-Proliferation Treaty.) For practical purposes, this narrows potential targets to China, Russia, Iran, and North Korea - although Pakistan and India also formally meet the criteria.

Since the onset of the Russia-Ukraine war, a number of Kremlin statements seem to have moved beyond the limits defined in the 2020 guidance document. Putin, in his February 24, 2022 address announcing the start of Moscow's attack on Ukraine, warns off any nation that "tries to hinder us, or threaten our country or our people," promising an immediate response involving "consequences that you have never faced in your history." [11] This he puts into the context of "fundamental threats against our country that year after year, step by step, are offensively and unceremoniously created by irresponsible politicians in the West," principally meaning the expansion of NATO, but also referencing Western support for the 2014 ouster of Ukraine President Viktor Yanukovich and the collapse of the

Minsk agreement affecting Ukraine's eastern rebel areas. Putin's address underscores that Moscow's interest in Ukraine relates in fair part to its big power contest with the United States.

Although it's hard not to hear a nuclear threat in Putin's February address, the implied consequence for the United States might be any type of attack on the US mainland or even the defeat of any threatening Western forces by conventional means. Putin might also simply be conveying a willingness to go to war with NATO over Ukraine, despite the likelihood it would escalate to the nuclear level.

The Moscow-Washington Dialogue of Threat

Following the West's strong condemnation of Russia's invasion and the imposition of sanctions, Putin ordered (Feb 27) Russian nuclear forces to a so-called "special regime of combat duty." Although US intelligence agencies reported no evident increase in alert level, Russian Defense Minister Sergei Shoigu said the move involved increasing the personnel readiness of strategic force units; Other expert observers thought the move may also have involved increasing the readiness of command and control systems.[12] The announcement - which clearly stirred concern in the West - served principally to reinforce Putin's earlier warning against Western intervention. Soon after this, Russian Foreign Minister Sergey Lavrov worried (Mar 2) about the advent of a world war saying that if it "were to occur, it would involve nuclear weapons and be destructive." [13] President Biden on March 11 sought to allay concerns, especially among apprehensive allies, about the possibility of world war, asserting: "We will not fight a war against Russia in Ukraine. Direct conflict between NATO and Russia is World War III, something we must strive to prevent." [14]

US funding and material support for Ukraine surged in March 2022 as Russia's military effort continued to falter. On March 26, Pres. Biden made his controversial remarks in Poland, calling Putin a butcher and advancing the need for regime change, asserting "For God's sake, this man cannot remain in power." [15] Although not diplomatic, Biden's words - which he pointedly refused to amend [16] - probably spoke louder than diplomacy in both Russia and Ukraine. Moscow predictably expressed alarm over Biden's statement.

Coinciding with Biden's remarks, former-president Dmitry Medvedev (currently deputy chairman of the RU Security Council of Russia) reasserted on March 26 a right to use nuclear weapons in some circumstances of conventional conflict - specifically, "when an act of aggression is committed against Russia and its allies, which jeopardized the existence of the country itself, even without the use of nuclear weapons, that is, with the use of conventional weapons." [17]

On March 28 Putin spokesman Dmitry Peskov also linked the use of nuclear weapons to an existential threat to Russia by any means. However, he further specified that, with regard to Ukraine, "No one is thinking about using a nuclear weapon." [18] Foreign Minister Sergey Lavrov reinforced this point on April 19, asserting that Russian forces would use "conventional weapons only." [19]

Moscow's rhetoric soon hardened again as US Secretary of State Blinken and Defense Secretary Austin visited Ukraine and Poland in late April, announced a large new tranche of military aid and expressed US objectives exceeding simple support for Ukraine's war effort.[20] US Defense Secretary Lloyd Austin said that, apart from assisting Ukraine's defense, America sought to see "Russia weakened to the degree that it can't do the kinds of things that it has done in invading Ukraine." [21] This goal suggests a deep and lasting decrement in Russian conventional military capability. And it conveys a sturdy US commitment to supporting a protracted high-intensity war should Russia not surrender its position in Ukraine.

On April 25, Russian Foreign Minister Lavrov returned to warning about the dangers of a World War III, saying "the danger is serious, real" and it should not be underestimated. Asserting that the Western supply of weapons to Ukraine "adds fuel to the fire," he averred that "NATO, in essence, is engaged in a war with Russia through a proxy and is arming that proxy." [22] He concluded by saying "war means war." Putin also returned to promising a "lightning fast" response "If anyone sets out to intervene in the current events from the outside and creates unacceptable threats for us that are strategic in nature." [23]

A Russia-NATO Proxy War?

The view that the Ukraine conflict had become a proxy war has shaped Russia's thinking and talk about nuclear use almost from the beginning of the conflict.[24] However, there is no expert consensus on what defines a "proxy war"; Thus, there's no agreement on whether the Russia-Ukraine conflict qualifies as one.[25] While Russian leaders insist "yes," most Western leaders say "no". [26] (Former US Defense Secretary and CIA Director Leon Panetta is an interesting exception.) [27] Non-governmental expert opinion varies although most outside observers seem to accept the "proxy" nature of the conflict - some casting it in a positive light, others negative.[28] (Positive acceptance of the "proxy war" label is based on seeing the conflict as a necessary instance or preamble to a decisive Russia-NATO reckoning.) However, for our purpose, which is *discerning Russian thinking on nuclear use related to this conflict*, neither the definition of "proxy war," nor its applicability to this case matter. *What matters are the criteria guiding Russia thinking and action.*

It should be clear that Ukraine's leaders and armed forces need no external motivation to oppose a foreign invasion. And Kyiv is not simply doing Washington's bidding. So the conflict does not conform to one particularly narrow definition of "proxy war." At the same time, Kyiv's surprising success depends on the exceptional support it has received from the United States, non-US NATO countries, and non-NATO EU countries.[29] And, as noted above, some of Ukraine's patrons have clearly articulated objectives that exceed those of Kyiv. *What is key to Moscow's behavior is the perception that third party involvement has fundamentally altered the goals, stakes, and dynamics of the conflict*, rendering it a strategic showdown between Russia and US-NATO with global implications.

To review some elements of the outside support afforded Ukraine:

- Global financial and material support for Ukraine during 2022 (up until 20 November) totaled more than \$120 billion of which \$45 billion was for military ends.[30]
- Representative of arms transfers through mid-December, Ukraine had received more than 500 tanks, more than 90 multiple launch rocket systems (of which 20 are HIMARS and 10 are the tracked M270 MLRS), approximately 900 howitzers (of which about 400 are self-propelled), and ~60,000 anti-armor systems. [31]
- Additionally conveyed have been air defense assets, tactical vehicles, helicopters, fighter-attack jets, small arms and tactical gear, and many tens of millions of rounds of bullets and shells.
- Equally important in sustaining and upgrading Ukraine's fighting forces has been training support, underway for six years, and guidance in force restructuring and the adoption of new tactical concepts.[32]
- Most important has been ongoing support in operational planning, communications, intelligence, surveillance, reconnaissance, and target identification.[33]

Also relevant to Russian thinking, the war is embedded in decades-long Russia-West contention over Ukraine's development and orientation. The war itself began in 2014, not early 2022, and it flowed directly from the deposition of pro-Russia President Yanukovich by the Maidan revolution, which had been ostentatiously supported by the United States. The uprising was not a "coup," however, as some contend; It had clear popular support in Ukraine's west and north. Moreover, Moscow *also* had its hands in Ukraine's internal affairs. Of course, this hardly subtracts from the view of Ukraine as a long-standing site of east-west contention. And it should not be hard to appreciate why Moscow might see itself virtually at war with US-NATO in Ukraine now - whether or not one concludes that the conflict is formally a "proxy war." From here, there are only a few steps to activation of Russian nuclear doctrine, which is our principal concern:

First, in Moscow's view, the war centrally involves a critical Russian security concern: the eastward expansion of NATO, an adversarial military alliance. Indeed, the prospect that NATO will soon roll up to a long Russian border represents the apogee of concern about expansion.

Second, NATO's conventional military power and potential greatly exceeds Russia's; Nuclear weapons alone serve as levelers. Although Ukraine has no indigenous capability remotely comparable to NATO's, the alliance has acted to greatly bolster Ukrainian forces.

Finally, Washington has made clear that America's objective in the conflict goes beyond the restoration of the *status quo ante bellum*, raising concerns about challenges to the integrity of the state.[34]

Western commentators may dismiss as a gaffe Biden's advocacy of regime change in Russia, but Russian state managers would not. Also consequential was Defense Secretary Austin's expressed intent to see Russian conventional military power decimated. In July, National Security Advisor Jake Sullivan confirmed the goal of an enduring reduction in Russian national wherewithal:

Our strategic objective is to ensure that Russia's invasion of Ukraine is not a strategic success for Putin, that it is a strategic failure for Putin. And that means both that he be denied his objectives in Ukraine, and that *Russia pay a longer term price in terms of the elements of its national power*.[35]

The eventuality of a weakened Russia having to face an emboldened NATO on its border is treated by Moscow as an emergent existential challenge - in chess terms, "check" if not "checkmate." Considering the incomparable aid the West has provided Ukraine, Moscow may already see the current war as a pivotal showdown with the West - or so its rhetoric implies. This possibility and what it might portend was addressed by the US Director of National Intelligence Avril Haines in her May 10 testimony to the Senate Armed Services Committee. She said that the US intelligence community sees Russian nuclear use as unlikely "unless there is effectively an existential threat to [Putin's] regime and to Russia, from his perspective." [36] However:

"We do think that could be the case in the event that he perceives that he is losing the war in Ukraine and that NATO, *in effect*, is *sort of* either intervening or about to intervene in that context, which would obviously contribute to a perception that he is about to lose the war in Ukraine."
[Emphasis added]

Along similar lines, Heather Williams, director of the Project on Nuclear Issues at the Center for Strategic and International Studies, avers: Putin has "been trying to deter NATO from getting involved conventionally." [37] And, "That's why he's been making these nuclear threats all along..."

Washington and Brussels agree that putting NATO troops on the ground in Ukraine or involving NATO combat aircraft in the fight would run a serious risk of catastrophic response. But what about real-time intelligence and reconnaissance support that substantially multiplies the defensive and offensive power of Ukrainian forces? What about pivotal (if not decisive) material support? What about stated objectives that exceed the restoration Ukrainian sovereignty?

Moscow's insistent focus on NATO involvement reflects the fact of broader, longer-term Russia-NATO strategic contention and the magnitude of power that NATO brings to any fight. But the role of NATO becomes especially significant if and when Moscow views the security or stability of the Russian state at

stake. An unequivocal front-line statement of this logic is provided by Alexander Khodakovsky, a former commander in Ukraine's Security Service who presently leads a pro-Russia Donbas forces:

"We're a country that is now fighting the entire Western world, and we don't have the resources to defeat the NATO bloc with conventional means. But we have nuclear weapons for that. We built them specially for such situations." [38]

Khodakovsky specifies that nuclear weapons might be used if "NATO countries cross certain thresholds," although he fails to specify those thresholds.

Russian Threat Messages & Meaning

Russian rhetoric about world war and nuclear dangers receded somewhat after May 1 and throughout most of the summer as Russian forces made slow progress in the east and south of Ukraine. [39] Up to this point, Moscow's regular references to the potential for world war and its allusions to its nuclear capabilities were efforts to constrain Western support for Kyiv. As Moscow's operational situation seemed to improve, it relaxed the warnings - thus signaling that its resort to nuclear brinkmanship was limited and conditional.

In mid-August, Russian Defense Minister Sergey Shoigu called speculation about the use of nuclear weapons "a lie," asserting that "From a military point of view, there is no need to use nuclear weapons in Ukraine to achieve the goals set." [40] However, he also pointed to Russian doctrine on nuclear use, which allows for a nuclear response to conventional threats in extraordinary circumstances. And, reinforcing the sense of a "proxy war," he drew critical attention to the West's increasing supply of munitions and equipment, transfer of "huge financial resources," and assistance in training, intelligence, and planning. As Shoigu frames the challenge, "In Ukraine, Russian servicemen are confronted by the combined forces of the West..."

A week later (Aug 22) Russian Deputy Foreign Minister Sergey Ryabkov affirmed that nuclear weapons would be used only in response to an attack - principally a nuclear attack, but possibly also to stem a conventional attack "when the very existence of the state is threatened." That seems a high bar, but Ryabkov also asserted that the growing degree of Western aid and involvement in Ukraine was "pushing it" - that is, increasing the danger of a major Russia-NATO clash. [41]

Clearly, Moscow adjusts its nuclear pronouncements in accord with its reading of the challenge it faces at any particular moment. Of course, the immediate source of the challenge is the Ukrainian military. But Moscow ascribes the relative success of the AFU/ZSU to Western support, and this matters only when it matters on the battlefield. Importantly, Moscow is not threatening *nuclear* responses to *specific* Ukrainian actions, only warning that Western support may enable Ukrainian advances that earn such responses. [42] The criteria would involve not only the nature of the targets hit by Ukraine, but the

strategic import of any Ukrainian advance and the fact that Western support enabled it. Also, as became evident later in 2022, there is no simple “trip wire” whereby a toe over a line prompts a nuclear response.

Ukrainian Offensive Prompts Renewed Nuclear Threats

Moscow’s talk of a possible resort to nuclear weapons revived in earnest with the surprising success of the Ukrainian counter-offensives that began in early September.[43] Putin’s September 21 speech announcing the partial mobilization of veterans, also emphasized the role of the West in enabling Ukraine’s battlefield successes. He pointed to Western reconnaissance support, Ukrainian attacks employing Western weapons against “the Belgorod and Kursk regions” of Russia, and the possible delivery of longer-range US weapons (presumably ATACM missile and Patriot missiles). He concluded by asserting that “In the event of a threat to the *territorial integrity* of our country and to defend Russia and our people, we will certainly make use of all weapon systems available to us. This is not a bluff.” [44]

More explicit in specifying nuclear threats was former-president Dmitry Medvedev, now deputy chairman of the Security Council of Russia. On September 27 he asserted that “Russia has the right to use nuclear weapons if necessary” should Ukraine commit “a large-scale act of aggression that is dangerous for the very existence of our state.”[45] More permissive was his September 22 statement extending Russia’s nuclear umbrella over the four Ukrainian regions claimed by Moscow as part of Russia. He vowed that as parts of Russia these regions could be defended using “strategic nuclear weapons and weapons based on new principles.”[46] Along similar lines, at the September 30 event annexing four (only partially-occupied) regions of Ukraine, Putin vowed to defend Russia “with all the forces and resources we have.”[47]

In these September statements there is a seeming shift in Moscow’s avowed guidance regarding nuclear use. While Medvedev reiterates the option of using nuclear weapons to stem conventional attacks that jeopardize “the very existence of state,” both he and Putin also suggest a seemingly lower threshold: a threat to the *territorial integrity* of Russia. Actually, the latter simply specifies the boundary across which Moscow *might* perceive an imminent threat to the stability of the state - something more than a cross-border missile strike, but something less than a march on Moscow. The 2020 Russian nuclear doctrine document specifies that nuclear forces are meant, among other roles, to protect “*the sovereignty and territorial integrity of the state.*”[see FT #7] This is not an addition or deviation from pre-existing policy.

These September pronouncements were more than nebulous threats. They posited a clear boundary marker distinguishing where threats of strategic significance might begin - ie. the newly annexed territories. Importantly, this reflected Moscow’s sense that its position in the war had grown very precarious with the line of contact receding eastward. Yet, clearly, there is no “trip wire” encompassing all four of the Ukrainian regions that Moscow now claims as its own; This, because portions of these

areas were recovered by Ukraine shortly after Putin declared annexation. But not all occupied areas should be judged equal. A serious challenge to Moscow's control of Crimea, for one, would stand apart.

Some US officials feel that a determined Ukrainian effort to retake Crimea, while practicable, might spark a nuclear response.[48] Crimea has been held by Russia for nearly nine years, it has a large ethnic Russian majority, and its population had voted strongly for the former Russia-friendly Ukrainian president deposed in the 2014 Maidan revolution, which prompted the Russian seizure. All these factors contribute to the tenacity of Moscow's grip. Should Kyiv recapture all of Kherson oblast and destroy the Kerch Bridge connecting Crimea to Russia, the Russian position would become exceedingly precarious, increasing the likelihood that Moscow would take desperate measures.

What about successful challenges to Moscow's position in the Donbas? Especially sensitive would be the loss of territory that Moscow has controlled since 2014. Such loss might incur a prohibitive domestic political cost for Putin. Equally significant would be any major Ukrainian counter-offensive sweeping through the Donbas toward the Russian border; This might be viewed as a pending large-scale violation of that border. Also, Putin knows full well that his government is facing the prospect of severe, permanent sanctions. At minimum, he will want to retain some Ukrainian territory in addition to Crimea to use as a bargaining chip for sanctions relief. As Russian conventional power is progressively proved to fall short in guaranteeing these goals when challenged by NATO-supported Ukrainian forces, an assertion of strategic power grows in importance.

Crossed Swords: US Promises Catastrophic Consequences

US leaders initially responded to Moscow's new Sept-Oct round of nuclear threat and innuendo with public vows of decisive response and threats of catastrophic consequences - although there was no suggestion that America would respond in-kind to a nuclear strike in Ukraine.[49] President Biden on October 25 simply stated that it would be "an incredibly serious mistake" for Russia attack Ukraine with a nuclear weapon.[50] Retired US Army General and former CIA Director David Petraeus suggested that, depending on the scale of any Russian attack, a likely response might be destruction of all Russian forces in Ukraine - by conventional means.[51] EU foreign policy chief Josep Borrell has likewise asserted that should Moscow resort to nuclear weapons, the West would annihilate its army.[52] Former defense secretary and CIA director Leo Panetta concurs. [53] (An exception was former Joint Chiefs chairman Adm Mike Mullen, who served 2007-2011. Comparing Putin to "a cornered animal," Mullen proposed that US-NATO leaders "do everything we possibly can to try to get to the table to resolve this thing.")[54]

On balance, Western responses threatened to do to the Russian army in a relatively rapid wholesale way what Moscow sees already underway in a persisting incremental fashion due to Western support. This is problematic. If the latter incremental approach to a critical challenge would elicit a Russian nuclear response, so should the former wholesale approach - and more so. In other words, should

Moscow exercise a nuclear option in a limited way and Washington threatens to respond massively with conventional force then, if "extended deterrence" holds, Russia would step up its nuclear response. Are these credible counter-threats? Whether yes or no, this big power dialog illustrates the unstable ground on which this conflict proceeds.

Where is the weak link in this putative sequence of exchanges? Examining each decision point in the sequence, we might ask: What is immediately lost by the actor who is "up at bat" should that actor choose *not* to strike? The critical weak link will be the first actor not facing an assumed existential or near-existential loss by failing to launch, but sure to risk massive retaliation should they launch. That is where most players would (or should) assume the putative sequence will halt.

Oct-Nov 2022: A Diplomatic Opening?

What most shaped the interplay between US and Russian policy pronouncements during October and November was SIGINT - signal intelligence - on Russian military leaders actually discussing the prospects and options for using nuclear weapons in Ukraine.[55] This gave greater urgency to US-Russia talks on "risk reduction" involving Biden's national-security adviser Jake Sullivan and, on the Russian side, Putin's foreign policy adviser Yuri Ushakov and Nikolai Patrushev, secretary of the Russian Security Council.[56] Also, on October 21, US Defense Secretary Lloyd Austin spoke with Russian Defense Minister Sergei Shoigu for the first time in five months.[57] What followed was a distinct, albeit brief, change in Russian rhetoric and US handling of the crisis overall.

On October 26, Putin proclaimed "no need" for using nuclear weapons in Ukraine; He said, "There is no point in that, neither political, nor military." [58] This was not a complete disavowal of earlier statements or Russian doctrine generally, however; "Need" is conditional. The lack of it today says nothing about the future. In part, Putin's statement served as a rejoinder to US threats of "catastrophic consequences." By disavowing intent Moscow sought to avoid the appearance of yielding to Washington's demands should it decide not to exercise a nuclear option. Still, Putin's statement helped de-escalate the Sept-Oct standoff. Subsequently,

On Nov 5, the United States urged Ukraine to show it was open to negotiations with Russia;[59]

On Nov 8, the US State Department announced that the USA and Russia would soon meet to discuss resuming inspections under the New START nuclear arms reduction treaty;[60]

On Nov 9, after Russia announced its intention to withdraw from Kherson [61], Gen. Mark Milley, Chairman of the US Joint Chiefs, spoke of a possible opportunity to negotiate an end to the war should battle lines stabilize during winter.[62]

On November 14, US and Russian top intelligence officials held a secret meeting in Turkey to discuss Ukraine.[63]

Speaking before the Economics Club of New York, Milley had advised that "when there's an opportunity to negotiate, when peace can be achieved, seize it." [64] Recalling the grinding three-year slaughter along the frozen Western front during World War I, he advised the combatants to "seize the moment" for negotiations, should it arise. In his view, this moment would be tied to a recognition that "military victory is probably in the true sense of the word may be not achievable through military means, and therefore you need to turn to other means."

Although controversial, Milley's assessment revealed greater attention in US councils to the costs of war, both real and potential. Pres. Biden echoed Milley's view in part, although seeming to defer the decision on negotiations to Ukraine, saying that over the winter "they're going to both lick their wounds [and] decide whether or not they're going to compromise... It remains to be seen whether or not there'll be a judgment made as to whether or not Ukraine is prepared to compromise with Russia." [65]

Washington's increased emphasis on diplomatic options also (and perhaps mostly) reflected concern about the resolve of key allies. At issue was not only their attention to increased nuclear risks, but also to the deleterious effect of energy sanctions as the war entered the cold months. (Based on historical data, *The Economist's* research unit estimated that Europe would suffer 147,000 excess deaths this year - assuming an average winter - due to the war's impact on energy prices.) [66]

Managing NATO Public Opinion

Surveys of European citizen opinion during the third quarter of 2022 found substantial concern about the possibility of war escalation and resort to nuclear weapons. [67] The exchange of war threats during late-Summer and early-Fall certainly exacerbated these concerns. So did overlapping US and NATO nuclear force exercises in October, which might have been postponed given rising tensions - but were not. [68] In this regard, the November 8 announcement of US-Russia talks on resuming strategic nuclear arms inspections probably reduced some concerns.

For the most part, war fears have not spurred majorities in Europe to favor concessions to end the conflict. Exceptions are Italy, Greece, and Hungary, where pluralities support territorial trade-offs [69] and where public opinion opposes weapon transfers and/or continuing sanctions. [70] Also, polls in both Hungary and Romania show strong support for beginning negotiations. [71] Popular opinion in Turkey strongly favors neutrality and the government is eager to see negotiations begin, wanting to play a mediating role. [72] Also relevant, Europe has experienced numerous and growing protests about the surge in inflation, which is partially linked to the war. [73]

Sentiment in the Global South strongly favors a diplomatic resolution of the crisis. Polls in Mexico, Egypt, Saudi Arabia, India, Indonesia, Thailand, Kenya, Nigeria, and South Africa show public opinion to be supportive of compromise.[74] But this has little evident impact on NATO’s consensus for “staying the course.”

American public support for providing Ukraine with arms and aid remains strong (as measured in December 2022), despite slipping somewhat from earlier highs.[75] However, surveying various polls regarding US public concern about war escalation:

- 58% of US respondents polled in October believe that the USA is headed toward nuclear war.[76]
- 65% worried that the Ukraine war may escalate if the USA provides weapons that could hit Russia.
- 39% of US citizens (polled separately in October) felt nuclear war was unlikely, 38% thought “likely,” and 23% said they didn’t know - a not reassuring balance of opinion.[77]

A Chicago Council poll of US citizens in November 2022 found 47% of respondents saying that Washington should urge Kyiv to settle for peace as soon as possible (up from 38% in July) while 48% supported staying the course “for as long as it takes” (down from 58% in July). [78]

In sum, while support for aiding Ukraine remains relatively strong in the USA and most European allied countries, it is slipping. And that support weakens further when considering the prospect of a protracted war. Fears of a broader war and possible use of nuclear weapons are strong [79], and these probably feed support for negotiations. Also undermining support for the war especially in some European countries are the war’s economic effects.

Policy Impact of Late-2022 Missile Campaign

Several months of substantial Russian battlefield setbacks, culminating in the November loss of Kherson and retreat to the eastern bank of Dnieper River[80], helped spur speculation in the West that cease-fire or peace negotiations might soon be possible.[81] Also contributing to this assessment were serious personnel losses on both sides of the war, continuing fear of nuclear weapon use and world war, global economic distress, and the onset of winter. Leadership in France, Germany, the UK, and the USA hinted at a more moderate goal for a Ukrainian cease-fire of rolling back the Russian invasion to its February 2022 starting point.[82]

However, countervailing the prospect for fruitful negotiations was the onset of a Russian missile attack campaign targeting Ukrainian energy infrastructure.

The Russian missile campaign began in earnest on October 10 and grew in ferocity after Moscow's loss of Kherson on November 11. The onslaught involved more than 600 missiles and hundreds of drones fired between October 10 and December 29 - and it continues today. Initially, Moscow claimed the missile assault was in response to much less numerous Ukrainian strikes inside Russia and Crimea, notably one on October 8 that damaged the Kerch bridge which links Crimea and Russia.[83] However, fundamentally, Moscow's goal in the campaign has been to regain initiative following battlefield setbacks, derail Ukrainian force regeneration and upgrade efforts, and compel negotiations on favorable terms before Ukraine might mount a new major offensive. However, as it happened, the missile and drone exchanges undercut the impetus for negotiations.

On December 1, President Biden clarified that he was "prepared to speak with Mr. Putin if in fact there is an interest in him deciding he's looking for a way to end the war." [84] However, what Biden meant was that,

"There's one way for this war to end - the rational way: Putin should pull out of Ukraine, number one. But it appears he's not."

Not surprisingly, Moscow rejected this frame, countering that Kyiv and NATO had failed to address "the new realities" of Moscow's claim on four Ukrainian oblasts. As for the Ukrainian position, among the preconditions that Pres. Zelensky set for negotiations was Russian withdrawal and the restoration of Ukraine's state borders with Russia.[85] These pre-conditions are merely restatements of the current maximal goals on all sides. An initiative by a neutral third-party to host *unconditional negotiations* might surmount this impasse, but there is no sufficiently influential neutral power available. Some likely candidates - France, Germany, Sweden - have committed to the war. Nor do there appear to be substantive secret negotiations underway between Russia and Ukraine and/or US-NATO. It's instructive that French President Macron was rebuked sharply by some NATO allies and ignored by others when he merely suggested that a future peace settlement also include security guarantees for Russia.[86]

Ukraine's counter-strokes in the missile and drone battle, although modest, have increased Moscow's assertion of a US-Russia proxy-war (which is central to its thinking about nuclear use). Notably, the December 5 Ukrainian attacks on Russian airbases hundreds of miles inside Russia revealed a new accurate "deep strike" capability.[87] The purpose of the attack was to lessen Moscow's sense of advantage in the missile war, deny Russia a sanctuary status, stir Russian public concern, and bolster morale in Ukraine.

The December 5 attack seems to have utilized an old but updated system from the Soviet era: the Tu-141 Strizh, which has a 620-mile range.[88] Had US tech been added to improve accuracy? Did the strike on Russian territory - 450 miles from Ukraine and within 150 miles of Moscow - depend on the US Navstar system?[89] Even answering these questions in the negative will not resolve Moscow's claims of "proxy war." From Moscow's viewpoint, the capacity of Ukraine to come this far in the conflict has been entirely dependent on US-NATO financial, material, training, and operational support. This level of

support is nearly two-orders of magnitude greater than that afforded the Afghan Mujahideen during the Soviet-Afghanistan war - and the Mujahideen never attacked Soviet soil.[90]

Immediately following the December strikes, Putin revived his warnings about nuclear war and a Russia-NATO clash: "Such a threat is growing, it would be wrong to hide it." [91] Notably, the Russian Engels airbase, which was among those struck, houses nuclear-capable bombers - a strategic asset.[92] In accord with Russian doctrine, attacks against these involve greater risk of a nuclear response.

In a December 9 interview, NATO Secretary General Jens Stoltenberg recognized that the Russia-Ukraine war could "become a full-fledged war that spreads into a major war between NATO and Russia" [93] - a worry often voiced by Russian leaders. Some dissent regarding the attack also flared among NATO members.[94] While Italian Foreign Minister Antonio Tajani announced that Italy remained "against an escalation of the conflict," Latvian FM Edgars Rinkevics asserted that Kyiv should be allowed "to use weapons to target missile sites or air fields [in Russia] from where those operations are being launched." [95] Although US National Security spokesman John Kirby said that the United States shared "concerns over potential escalation," the US gave a passive "green light" for Ukrainian attacks deep into Russia. "It's their decision to make," said Kirby, although "we have not encouraged them to do that." [96]

According to Sec. of State Blinken, the "US neither encouraged nor enabled Kyiv to strike inside Russia." [97] A US defense source explained to the UK Times that, "We're not saying to Kyiv, 'Don't strike the Russians [in Russia or Crimea]'. We can't tell them what to do. It's up to them how they use their weapons." [98] The only prohibition that the source admitted was adherence to the Geneva Conventions. But this substantially understates US leverage and marks a departure from earlier, more cautious policy. Have US estimates of escalation risk changed? The Time's source explained:

"We're still using the same escalatory calculations but the fear of escalation has changed... It's different now. This is because the calculus of war has changed as a result of the suffering and brutality the Ukrainians are being subjected to by the Russians"

Former NATO commander US Adm James Stavridis (ret) clarifies this change:

"Having watched the Ukrainians suffer for months...it is increasingly hard to counsel them to simply sit back and take what Putin wants to dish out." [99]

In other words, what has changed is not the estimated risk of escalation, *but the impetus to run that risk.*

Washington has more than sufficient leverage to limit Ukraine's operations, as it has done repeatedly by refusing or apportioning some types of munitions and weapons. However, Washington's profound involvement in the war also renders it subject to moral hazard.[100] The USA has built and sustained

public and alliance support for “staying the course” by emphasizing the plight, courage, and stamina of the Ukrainian people, as well as by highlighting the depredations of Moscow. This somewhat limits Washington’s freedom to restrain Kyiv - especially given the late-2022 massive missile assault on Ukrainian infrastructure. Still, it’s unlikely that the deep attack went forward without Washington’s sanction. Subsequent US statements about the changed “calculus of war” seem more argumentative than explanatory - perhaps with the aim of motivating public and alliance support for accepting additional risk.

Locating Moscow’s Red Lines

How much risk did this specific case incur? As an isolated incident of limited scope with no obvious direct NATO involvement, Moscow did not treat it as a critical challenge to state stability. That said, some of Moscow’s so-called “red lines” were crossed. This was a deep attack into Russia and an attack on a strategic asset. At what point an accumulation of such incidents might be viewed as constituting a critical challenge is unclear. “Red lines” are not “trip wires” but boundary markers (in US practice as well as Russian). They delineate danger zones, like a sign marking a minefield. How many steps earn a decisive response is unclear. State leaders fail to recognize this at their peril.

What has been clear throughout the first ten months of the war is that Moscow’s threats of nuclear use and/or world war were meant to dissuade US-NATO involvement and dissuade support for the Ukrainian war effort. By contrast, Moscow’s missile attacks on Ukrainian infrastructure sought, among other things, to deter a subset of Ukrainian attacks, while also serving to answer Kyiv’s battlefield successes and impede preparations for future offensives. The fact that nuclear threats have so far had a dissuasive function targeting US-NATO, while actual attacks employed conventional means targeting Ukraine does not mean that careful management of US-NATO support for Ukraine will preclude nuclear use. Nuclear weapons are in the picture only because Moscow anticipates a critical (if not existential) challenge in the future by Ukrainian forces already substantially enabled by US-NATO.

Contemplating the numerous threats and warnings advanced by Moscow, Jeremy Shapiro - director of research at the European Council on Foreign Relations - avers:

"The problem that the Russians have had in their signaling is that their decision to escalate likely revolves around the progress that the Ukrainians make on the ground, not on any discrete action (such as the provision of new weapons systems) that the West might take. The likelihood of escalation, in other words, has stemmed from developments on the battlefield, not from the crossing of some arbitrary red line." [101]

On the same matter, Michael Kofman - director of the Russia Studies Program at CNA - offers a different but complementary view:

“It's worth noting that Russia hasn't used nuclear weapons even after suffering significant casualties and defeats in Ukraine, so the criteria are clearly beyond such battlefield losses.... [R]ather than a tactical defeat, it may be tied to the loss of cohesion and control over the forces in theater, leading to a collapse of the military, or a significant loss of territory within that context, such that Russia is unable to recover it.”[102]

As Kofman (and co-author Anya Fink) have pointed out elsewhere,[103] Russian thinking on nuclear use and signaling is carefully structured and not conducive to cavalier employment or gestures. So far, warnings have been an attempt at *deterrence by fear*. It is probably correct that a general collapse of the battlefield effort is a necessary condition of nuclear use - although more than that is needed too: a decisive Ukrainian drive on Crimea or toward the Russian border. In any consequent decision about nuclear use, the pivotal role of US-NATO in enabling this advance will be a significant factor because it helps define the conflict as a strategic clash, not simply a local war - a clash in which the apparent eclipse of Russian power is impending.

Testing Moscow's "Red Line" in 2023

Moscow's missile campaign also helped motivate a new, year-end \$45 billion US aid package,[104] including the promised delivery of Joint Direct Attack Munition (JDAM) guidance kits (which turn unguided bombs into highly accurate ones) and a Patriot air defense battery.[105] The Patriot has greater range and maximum altitude than Ukraine's existing air defense assets as well as some capability against ballistic missiles.[106] While the Patriot battery and other air defense systems in the arms transfer pipeline will improve Ukraine's capacity to winnow Russian attacks, JDAM kits will add to the nation's precision-strike capability.

Ukraine's precision-strike capability, although limited, is bolstered by NATO surveillance and intelligence support. Its potential was demonstrated in the January 1 attack on Russian soldiers' quarters in the Donestk region. Cell phone use apparently revealed the location which was then struck by US-supplied HIMARS rockets, killing ~90 Russian soldiers.[107] Ukraine is currently enhancing its long-range missile strike capability, and US Defense Secretary Austin has made clear that Washington will not stand in the way of this effort.[108]

President Biden has also announced training for Ukrainian troops in battalion-level maneuver operations.[109] And, to enhance such operations, the USA, Germany, the UK, Poland, and Canada will be sending modern main battle tanks: M1A2 Abrams, Leopard II, and Challenger[110]. Additionally, the USA will be sending Bradley Infantry Fighting Vehicles (IFV), Germany will send the Marder IFV, and France will dispatch the AMX-10RC.[111] (The AMX-10RC is a more lightly armored wheeled vehicle but it brings a 105-mm gun to the fight - a tank-killer.)

In sum, Ukraine has started 2023 with increased defensive and offensive capabilities pending. What Moscow may experience in 2023 is a NATO-enabled force able to blunt its missile assaults, conduct deep strikes into Russia, push forward on the ground to the Russian border, and contest for control of Crimea. US-NATO policy seems premised on the assumption that no step in Ukraine's advance will be sufficient to trigger a cataclysmic Russian response.

Can We Discount Moscow's Nuclear Threats?

Various reasons to discount the possibility of Russian nuclear use have been advanced, although none are truly reassuring.[112] To review them:

- First, Moscow's doctrine on nuclear use specifies that nuclear weapons will be employed against conventional threats only if the latter put at risk the survival of the Russian state. However, as noted earlier, this seems to have already been clarified to include action against imminent threats to the "territorial integrity" of Russia. *What then is the threshold for considering a threat to the State to be existential?* Clearly something less than a march on Moscow in progress. Speculation about Putin's political survival in the aftermath of a costly catastrophic failure - and about Russia's political stability generally - may pertain to this question. At any rate, it is already known that the prospect of nuclear use is under discussion within the Russian military.
- Second, Moscow is supposedly unwilling to risk a negative reaction from those nations and regions that have so far refused to condemn and/or sanction it - notably China, India, Turkey, and much of the Global South. But there's no reason to believe that all degrees, forms, and circumstances of nuclear use would earn daunting levels of disapprobation from Russia-friendly governments. This is especially true if Russia otherwise faces profound and humiliating defeat, and if it offers "good terms" for a cease-fire that are refused. Also figuring into the response calculus of non-aligned nations would be the fact that many value Russian power as a counterbalance to US power; They do not want to see it decimated. Related to this, Russia's international influence is based partly on the belief that it cannot and will not be cowed. In other words, simply accepting a humiliating defeat would also impose substantial reputational costs.
- Third, Moscow will be confidently deterred from using nuclear weapons by fear of US retaliation and the risk of escalation to a general Russia-NATO war. This proposition holds that Moscow will realize that no matter how bad the impending outcome of the current conflict may seem, the resort to nuclear weapons in any way or degree will only and surely make matters worse for Russia. But the truth of this proposition is far from self-evident. Indeed, it departs from basic tenets of nuclear strategy and extended deterrence as extolled by both Russian and US military leaders and thinkers. (Of course, beliefs about extended deterrence and escalation

control need not be sensible in order to be generally influential; Here the issue is what Russian strategic leaders believe.) That said, the prospect of retaliation and escalation is a sobering concern - but it cuts both ways: Would the USA be willing to risk Washington in a larger war in order to shield Bakhmut? At any rate, Moscow may seek options for nuclear use that it feels fall below the threshold for sparking general war between NATO and Russia.

- A fourth argument is that nuclear weapons would not be sufficiently effective on Ukrainian battlefields unless used in quantities that would also put Russian troops at risk, cause very substantial civilian casualties, and have lasting radiological effects on Russian occupied areas.[113] These are true limitations that pertain generally to the use of tactical nuclear weapons. Nonetheless, both Russia and the United States maintain stockpiles of these munitions as well as operational concepts to guide their use. Whether held for warfighting or deterrence, *no one who stockpiles these weapons sufficiently believes that all who possess them are convinced of their non-utility.*[114] At any rate, the drawbacks mentioned here don't address the most likely ways that Russia could put nuclear weapons to use.

Moscow can try to achieve a strategic effect through the use of nuclear weapons in ways that incur minimal, if any casualties or collateral damage. A warning blast would suffice - as suggested by Anya Fink, a research scientist at the Center for Naval Analysis.[115] This might involve a single tactical weapon in a deserted area or an underground test of a larger weapon (perhaps at the old Novaya Zemlya test site in the Arctic Ocean). Ulrich Kühn of the Carnegie Endowment for International Peace sketched a similar scenario in 2018 involving a no-casualty demonstration blast over the North Sea meant to deter NATO action with regard to a hypothetical Baltic conflict.[116] In any such case, the point would be to signal that the prospect of a qualitative leap in the character of the war was at hand.

Although demonstration blasts are consonant with Russian doctrine and thinking [117], this prospective use of nuclear weapons to influence the Russia-Ukraine conflict is also discounted by some:

“A showcase detonation of a nuclear warhead...will not scare off Kyiv. What it will do is destroy any remnants of Russia’s reputation as a signatory of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and deprive Moscow of Turkey, India, and China’s amicable neutrality.”[118]

It may be true that, on balance, *leadership in Kyiv* will not be daunted by a distant demonstration blast. But that leadership is also painfully aware that Ukraine’s present and future is heavily dependent on the USA, NATO, and the EU. A likely and achievable aim of Moscow’s atomic demonstration would be to collapse the European NATO consensus for war and impel a process of negotiation. And it is questionable that Moscow would worry more about its loss of reputation as a member of the CTBT than about the ongoing decimation of its military power, the sure advance of NATO to its borders, and its loss of reputation as a great power. (Notably, the CTBT is not yet in force, awaiting ratification by the USA, China, India, Pakistan, Iran, and Israel. Also, multiple arms control agreements have been tossed aside during the past two decades and North Korea has conducted six nuclear tests between 2006 and

2017 resulting in an array of sanctions comparable in some respects to those *already* imposed and Russia.)[119]

Moscow might alternatively collapse the NATO consensus for staying the course by using a half-dozen tactical nuclear weapons on the battlefield (with another few dozen held in ready reserve.) In this case, it would not be the limited tactical effect that would matter; Instead, what would register is the strategic shock accompanying any use of nuclear weapons. But this alternative would come at much higher cost and risk for Moscow; By contrast, a demonstration blast would *seem to signal a modicum of restraint*.

The arguments meant to allay concerns about nuclear use seem complacent given mounting tension between nuclear weapon superpowers and an emerging situation as ominous as the Cuban Missile Crisis, or more so. Alexander Gabuev at the Carnegie Endowment observes:

"Judging by his statements and conduct, the Russian leader appears to believe that the conflict he started has existential stakes for his country, his regime, and his rule, and that he can't afford to lose... some people understandably prefer to believe that under no conditions would the Kremlin use nuclear weapons in Ukraine, and that Russian nuclear saber-rattling can be dismissed. This is, in my view, a false assurance." [120]

Not all observers who discount Putin's threats necessarily believe that the probability of Russian nuclear use is near zero, however. Some - a "fear itself" cohort - seem principally focused on how the fear of possible nuclear outcomes may unnecessarily handicap very desirable military support and action.[121] This attests to the fact that other considerations can weigh into thinking about the Ukraine situation. These other factors include the expected degree of damage should use occur, response options, the prospects of escalation control, and the expected payoff for holding firm. One enduring strain of strategic thought East and West contends that nuclear conflicts can be meaningful won and that escalation can be controlled and limited.[122] Putative payoffs for holding firm in Ukraine could include the recovery of all stolen territory, the discouragement of future instances of nuclear threat, and even the decimation of Russian power. Each of these would be weighed against prospective risks and costs.

The exigencies of big power competition may help explain what Russian-American journalist and Putin-critic Masha Gessen finds incredulous about much of the Western leadership and expert discussion of Putin's nuclear threats:

"The more the Kremlin has signaled its readiness to drop a nuclear bomb, the more the rest of the world has sought a reason to believe that it will not.... In recent weeks, as Moscow has ramped up its warnings, it has become conventional wisdom, or perhaps just good form, to say that Putin isn't really going to use nukes." [123]

As suggested earlier, the US assessment of risk may be distorted by the prospect for gain. Washington's willingness to stay the course may derive *from the same reality* that makes the risk of nuclear use substantial: the eclipse of Russian power seems to be at hand. Depending on where one sits, this may seem a world historic opportunity worth the risk of nuclear use.

At heart, many Western observers simply fail to perceive the stakes of the war as Moscow does, while presuming to confidently predict Moscow's behavior when facing defeat. Former US ambassador to Ukraine Steven Pifer reviews many of the reasons commonly advanced to doubt Russian threats that were reviewed above, especially focusing on the severe reaction that Moscow would face should it resort to nuclear weapons. And he concludes:

"It makes little sense for the Kremlin to run that risk in *a conflict that is not existential*. Russia can lose this war - that is, the Ukrainian military could drive the Russians out - and the Russian state will survive. The Ukrainian army will not march on Moscow." [124] [emphasis added]

But it is dangerously presumptuous to think that Moscow would be this sanguine when facing defeat on its border and the likely advance of NATO. And it is surely wrong to think that Moscow sees this war simply as a limited regional conflict. This conflict has evolved to become a strategic showdown with the West, putting at risk Russia's regional power and global sway. A thorough Russian defeat will permanently and qualitatively constrict Moscow's global prerogatives, rendering its nuclear hand empty.

Warning Signs of Impending Nuclear Use [125]

Especially in the case of a demonstration blast Moscow might see no reason for extraordinary secrecy apart from wanting to shorten Washington's time for preparing public opinion. In any case, intelligence on nuclear activity leaked by Washington and directed at citizens and allied governments would probably not steel nerves - unlike early warning of the February 2022 invasion. More likely, any mention at all of impending nuclear activity would shake the pro-war consensus, although war hawks might probably press on. (No one knew better the power of nuclear weapons or was less deterred by it than Gen. Curtis LeMay, the commander of the US Air Force during the Cuban Missile Crisis, who advocated bombing Soviet positions on Cuba and thought the alternative path chosen by the Kennedy Administration to be "almost as bad as the appeasement at Munich.") [126]

It might be easiest to conceal preparations for a demonstration blast until late in the preparatory process at Novaya Zemlya because the site has been recently active conducting sub-critical nuclear tests. Preparations for using a tactical weapon would be more obvious, however, especially if battlefield use is intended.

Non-strategic warheads are kept separate from delivery systems and the warheads would have to be moved some distance in a secure fashion and then loaded onto delivery systems. (There are 47 known storage sites.)[127] Thousands of troops would be involved in any significant transport of nuclear weapons and launchers - although it also is true that some warheads are routinely moved for maintenance, making possible some surreptitious movement.

The key determinant, however, is that Moscow has no reason to conceal such activity; The purpose of the effort is signaling. In fact, it seems likely that Moscow would embed any movement toward nuclear use within a pre-announced strategic nuclear exercise involving a general rise in nuclear alert levels. Within this, a distant blast might come with short warning, followed immediately by *a step down* in alert level, signaling no intent to further escalate (while nonetheless remaining prepared to parry retaliation.)

Conclusion

What is the likelihood of Moscow employing nuclear weapons in the course of the Russia-Ukraine conflict? We could conclude “one-hundred percent” because Moscow is already using them to stake their threats and arrest the attention of NATO. But this is not the type of use that is most disconcerting. Amy Nelson and Alexander Montgomery, writing for the Brookings Institution, argue that attempting to decide a probability of nuclear *attack* is a fool’s enterprise, partly because all that can be managed are subjective estimates that vary widely.[128] Still, these may be based on causal chains that are discernibly grounded to varying degrees in relevant past conflict experience and rely, more or less, on falsifiable suppositions about human leadership behavior.[129] Nelson and Montgomery do allow that gross estimates may be useful - especially if presented as conditionals: higher likelihood if X, lower likelihood if Y.

Policy-wise, Nelson and Montgomery advance a game-theoretical approach that focuses our attention on devising ways to block the less desirable of the possible outcomes of the clash with Moscow. Essentially, they suggest investing in making credible threats of “catastrophic retaliation” to lower the likelihood of Moscow going nuclear. So, this is an affirmation of the approach adopted by the Biden administration. However, it suffers several short-comings:

First, it strongly privileges “staying the course” regardless of downside risks. It does so by devaluing (or actually sidestepping) the consequences of nuclear use. It professes to address concerns about a nuclear clash by advising Washington to do its best at escalation dominance - which cannot at all promise an escape from nuclear confrontation. (It is a game of competitive brinkmanship: “chicken.”) Such threats may not prove as credible as hoped because they discount Moscow’s option of reciprocal escalation - and both sides know this. An alternative approach might seek to directly mitigate the inducement for going nuclear rather than (or in addition to) raising its cost. This would entail some greater restraint and some new opening for negotiation.

Second, the strategy of threatening Moscow with an even more bitter defeat does not effectively address the most likely options for nuclear use: a demonstration test-blast or simply a dramatic increase in strategic nuclear readiness. Both aim to spur fear and collapse the Western consensus for war without giving cause for direct retaliation. Meeting this gambit with reciprocal increased readiness on the western side would only go to serve Moscow's purpose: panic. And this would be a "worthy panic" because hair-trigger standoffs are inherently unstable, conducive to inadvertent action. Therein resides the greatest danger of strategic nuclear conflict.

As Nelson and Montgomery assert, no precise estimate of the likelihood of nuclear use is possible. What can be usefully attempted, however, are broad estimates of how various developments on the ground might move the "gauge" of probability.

One prospective causal chain leading to nuclear use begins with NATO-empowered Ukrainian forces resuming their successful advance:

As the ASU/ZSU approaches the Russian border, increasingly strikes Russian territory with missiles and drones, and challenges Russian possession of Crimea, it is very likely that Moscow will perceive a critical challenge to its national security, political stability, and status as a world power. Unless US-NATO leaders decide to advance negotiations at this juncture (or before), Moscow may signal dramatic escalation. This is especially true if its battlefield forces seem to be in disarray.

Russian escalation could involve putting their strategic forces on high alert and possibly beginning to deploy some tactical nuclear units in an ostentatious fashion.[130] This would prompt a nuclear crisis or emergency. A dramatic additional step might be a nuclear warning blast over or under Russian territory. With or without this dramatic additional step, Washington will similarly raise the alert level of nuclear and conventional forces. These developments would represent a crisis more severe than the 1962 Cuban missile standoff; This, because a nuclear standoff today would occur in the context of a very deadly ongoing war occurring directly on the border of a nuclear weapon superpower.

A more destructive intentional use of a tactical nuclear weapon or weapons - involving mass casualties and material damage - is also possible. The drawbacks summarized earlier (in section on discounting nuclear threats) weigh against this type of attack (ie. intentional fatal use), but cannot preclude it. Also possible is mistaken, accidental, or rogue use of nuclear weapons. Experience (and common sense) suggest that this last category of use is more likely when tensions are greatly elevated.[131]

How to weigh these various dangers of nuclear use? Consistent with our review of current dynamics, past practice, and doctrine, we conclude that,

- It is likely that in response to a comprehensive Ukrainian breakthrough Moscow will move its strategic forces to "threat of war" alert level and begin to deploy elements of battlefield nuclear units.

- Regarding the additional or complimentary step of a nuclear warning blast in Russian territory: It is fair to say that it is unlikely, but it would be unwise to bet high odds against this eventuality in the context of a collapsing Russian effort.
- The use of even a limited number of tactical nuclear weapons near or against the leading edge of Ukrainian units would remain very unlikely in any context. Still, it would be irresponsible to simply ignore this possibility. Protection of Ukrainian units against radiological effects is essential and should begin immediately.
- Regarding mistaken, accidental, or rogue use of nuclear weapons under hair-trigger conditions in the course of high-intensity conventional war: Although no analytically rigorous calculation of probability is possible, it is judicious to *postulate* (or assume) a likelihood of unintentional or rogue use; This, in order to guide policy and defensive preparations. A probability in the range of 1/30 is (i) not implausible in light of past experience in hair-trigger nuclear standoffs [see ft. #131] and (ii) minimally restrained in light of downside risk. This is not meant as a hard and fast estimate, but rather an injunction to “act as if” in light of downside risk.
- The probability of escalation to a direct Russia-NATO conflict will remain low, although the eventuality cannot be reliably excluded given current war objectives on all sides and the trajectory of Russia-US threats and counter-threats. Russian nuclear use in Ukraine, either intentional or unintentional, may invite direct US intervention; Washington has pledged as much. And a US-NATO attack of any sort on Russia or Russian forces would substantially increase the likelihood of a nuclear response.

The experience of the Cuban Missile Crisis remains relevant to wisely managing the current confrontation. Reflecting on the crisis 26 years after the fact, US President Kennedy's national security advisor McGeorge Bundy estimated that the standoff had involved a 1/100 risk of nuclear war; Kennedy had thought the chances of general war were much higher - between 1/3 and 1/2.[132] The gap between these two would seem irresolvable, but Bundy finessed it by taking consequences into account, writing that "In this apocalyptic matter the risk can be very small indeed and still much too large for comfort."

Although the probability of a big power nuclear clash of any magnitude over Ukraine remains low, it would be irrational and irresponsible to act as though we can roll the nuclear dice and never come up "snake eyes." [133] Foremost in today's policy planning should be Bundy's observation that even a very limited nuclear exchange "would be a disaster beyond history." [134]

Addendum: US War Messaging - "Stay the Course"

US messaging regarding the possible use of nuclear weapons in this conflict has been varied, reflecting the changing balance among several goals. The goals include supporting Ukraine's defense, pressing forward with the war until Russia has been driven back and significantly punished, dissuading Russia's possible resort to nuclear weapons, managing the war's escalation potential, and sustaining allied government and public support for the war effort.

Dissuasion of Russian action has had two components: the issuance of counter-threats and occasional ventilation of diplomatic openings regarding the war and other security concerns (such as START). These statements additionally function to reassure allied governments and publics that the USA and NATO are managing nuclear and world war risks. Also serving reassurance are routine US official assertions that, while US security leaders are watching Russian nuclear activity closely and taking Russian warnings about nuclear weapons seriously, Russian nuclear use is "very unlikely." This lends support to "staying the course" in Ukraine by sounding neither cavalier nor alarmed about nuclear risks; It avers that the risk is seen, measured, and managed.

Attention to Russian violence and the plight, courage, and successful defensive action of the Ukrainian people has produced strong popular sympathy for Ukraine, especially among NATO and allied publics. However, translating this into sustained support for a protracted war despite the war's broader deleterious effects requires something more than sympathetic coverage of Ukraine's plight. Sympathy for this plight could just as easily favor a quick diplomatic resolution. So might attention to war costs beyond Ukraine affecting regional and global food scarcity, fuel shortages, and economic activity.[135] In this context of global humanitarian distress, the allied consensus on "staying the course" is disciplined by the insistence of top US and NATO leaders that they will follow Ukraine's lead in deciding when and what to negotiate - a "high-road" stance.

Putatively, the USA and NATO will not dictate to Kyiv. Much of the deference to Kyiv's leadership is performative, however. Had it entailed ongoing unreserved support "for as long as it takes," it would expose the allies to serious moral hazard. In fact, Kyiv has had to consistently plead for additional support and bolder action, relying on moral suasion and shaming. Nonetheless, US-NATO have apportioned military assistance in accord with their perceived strategic self-interest, view on overall regional security, and estimated risk of prompting a larger Russia-NATO conflict. The same is true for diplomatic efforts. At times, one or more allies have discouraged Ukraine's pursuit of talks; At other times, openness to talks has been encouraged.[136] When and if US-NATO supports Kyiv's determination to "stay the course" of war and defer negotiations, it is because US-NATO leaders themselves support staying the course and deferring negotiations - or so their behavior indicates.

END NOTES

1. Anna Clara Arndt and Dr Liviu Horovitz, [Nuclear rhetoric and escalation management in Russia's war against Ukraine: A Chronology](#) (Berlin: German Institute for International and Security Affairs, 03 Sep 2022); ["Putin loyalist dials up nuclear rhetoric as NATO partners push for more weapons for Ukraine,"](#) *CNN*, 19 Jan 2023; ["Russian State Duma Head Joins Officials Warning Of Nuclear Retaliation In Ukraine,"](#) *RFE/RL*, 22 Jan 2023.
2. Gustav Gressel, ["Signal and noise: What Russia's nuclear threat means for Europe,"](#) European Council on Foreign Relations, 2 Mar 2022.
3. **Cuban Missile Crisis**
 - National Security Archive, [Cuban Missile Crisis at 60](#), accessed 01 Jan 2023
 - Avalon Project, [The Cuban Missile Crisis](#), Yale Lillian Goldman Library, accessed 01 Jan 2023.
4. Moscow's perception of NATO as threatening should not be surprising much less incomprehensible. NATO was created in opposition to Moscow and served as the military counter-balance to the Soviet alliance for 40+ years. NATO expansion was both an instance and cause of the shared failure to integrate Russia with the post-Cold War European order. Regarding the structural character of NATO, as analyst Edward Luttwak has pointed out:

"NATO is not a security-talking shop but a veritable military force, complete with a hierarchy of operational war headquarters, intelligence and planning staffs, a joint surveillance force of AWACS aircraft, an air defense network with radar from Norway to Turkey and elaborate logistic facilities... In other words, NATO is a fighting force, temporarily at peace." Edward N. Luttwak, oped, ["A Look at Expanding NATO,"](#) *Washington Post*, 06 Jul 1997.
- Since the end of the Cold War, NATO or its leading members have conducted multiple regime-change efforts using both non-military and military, covert and open means. For Russia (or any nation), the close proximity of a powerful strategic competitor would constitute a potential "threat in being." At minimum, close proximity would give the alliance greater leverage over Moscow. To compensate for NATO's eventual spread to Ukraine, Russia would have to substantially increase surveillance and defenses along a ~2300-km border. It would still be vulnerable to increased cross-border surveillance, espionage, and covert action. And, of course, there's no easy way to compensate for the loss of 1,000-km of defensive depth. Recognizing these realities in no way justifies Moscow's recent actions or its behavior in general. Recognition only serves to illuminate the predictable paths of Russian policy.
5. [National Security Strategy of the United States](#) (Washington DC: The White House, Oct 2022).
6. National Security Archive, [The Underwater Cuban Missile Crisis at 60](#), George Washington University, accessed 01 Jan 2023.
7. Center for Naval Analysis, translation, [Foundations of State Policy of the Russian Federation in the Area of Nuclear Deterrence](#), June 2020.
8. US Dept of Defense, [2022 National Defense Strategy, incorporating the Nuclear Posture Review and the Missile Defense Review](#) (Washington DC: 2022).
9. [ibid](#)
10. The cohort of US allies include at least 48 states - namely, other NATO members and major non-NATO allies. "Friends" is a vague term but could include, for instance, other members of the Gulf Cooperation Council and select members of the Partnership for Peace not already encompassed by other categories. US Dept of State, ["Major Non-NATO Ally Status,"](#) 20 Jan 2021.

11. [“No other option’: Excerpts of Putin’s speech declaring war,”](#) *Al Jazeera*, 24 Feb 2022.

12. **Russian Nuclear Forces Combat Alert**

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