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Deterrence in the Emerging Threat Environment: What is Different and Why it Matters

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and
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Foreword by
Amb. Robert G. Joseph



NATIONAL INSTITUTE FOR PUBLIC POLICY

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Table of Contents

Foreword	v
Executive Summary	vii
Introduction	1
Inconvenient Truths About Deterrence Prognostication	2
The Past as Prelude	6
Recent Developments	13
Contemporary Deterrence Conditions and Their Implications for U.S. Deterrence Strategies.....	17
Deterrence Policy and Practice: Hedging in the Emerging Deterrence Context	20
Arms Control in the Emerging Deterrence Context.....	60
Conclusion	66
About the Authors	69

Foreword

Today it is commonplace for defense analysts to acknowledge that we face unprecedented deterrence challenges stemming from Russian and Chinese conventional and nuclear threats, simultaneously and in combination. But beyond this statement of the obvious, it is difficult to identify substantive thought on how the emerging trilateral security environment has affected the theory and practice of deterrence as we have known it in the past. Instead of new thinking, most references revert to accepted wisdom from the days when the U.S. and our allies sought to deter the Soviet Union through defensive deterrence of an adversary to whom we attributed the shared goal of strategic stability.

In this *Occasional Paper*, Keith Payne and David Trachtenberg take a markedly different approach to understanding the dynamics of contemporary deterrence. They argue convincingly that, while the fundamentals of deterrence are enduring, we must rethink past policies and reassess our defense requirements to deter Moscow and Beijing, both of whom appear increasingly willing to use the threat of nuclear weapons to achieve their expansionist goals. We must also hedge against greatly expanded deterrence uncertainties and prepare for deterrence failure. If we are going to adapt to the new realities of the threats we face, we must reassess, and if necessary, abandon long-standing precepts related to strategic force requirements, theater nuclear weapons, and arms control that are no longer consistent with our security requirements. This is a very tall but necessary order.

The authors admittedly do not provide completed answers to the questions they raise; that is not their goal. But they do provide a way forward. They admonish us to begin what they describe as a likely “generational process” to understand the implications of modern deterrence

conditions, and to identify the necessary policies and capabilities that can best ensure deterrence success in the complex setting of two near-peer revanchist powers who consider the U.S. to be the enemy and the greatest barrier to the achievement of the goals. The frequent threats of nuclear use made in the context of the war in Ukraine and the escalating crisis over Taiwan provide a sense of urgency to undertake this process. We can only hope that it is not too late.

Amb. Robert G. Joseph

Executive Summary

Deterrence theorists, policy makers, and commentators are now discussing “trilateral deterrence.” This, of course, refers to the simultaneous deterrence engagement of three great nuclear powers, the United States, Russia and China. It is commonplace to hear that trilateral deterrence is different and must affect U.S. deterrence policy—explaining why that is true and how policy should adjust is not commonplace, but it is important to start.

The unprecedented character of the emerging deterrence context is not simply that there now are three great nuclear powers involved. Rather, the critical additional condition is the reality that two of those three great nuclear powers have revanchist goals that put them in sharp conflict with the United States and long-standing U.S. deterrence redlines, and both show their willingness to exploit conventional and nuclear forces in pursuit of their expansionist goals. We are accustomed to thinking of nuclear weapons as serving defensive deterrence purposes. We convinced ourselves that the goal of all rational leaderships must be strategic stability—only an “unhinged” leadership supposedly could think otherwise. However, the reality now is that we confront opponents’ threatened use of nuclear weapons to support offensive, revanchist purposes. That is unprecedented and compels us to rethink our deterrence policies. This particular character of the emerging deterrence context is more novel and significant than the corresponding simple reality that there are now three great nuclear powers involved vice the bipolar context of the Cold War.

This is not to suggest that it is unimportant that the emerging deterrence dynamic involves three great nuclear powers. However, it is the characteristics of those three participants and their relationships that are most significant

The authors would like to thank ADM Richard Mies, USN (Ret.) for his thoughtful comments on an early draft of this *Occasional Paper*.

for U.S. deterrence policy. In this particular trilateral context, projections based on positing the interaction among three *non-descript* countries A, B, and C simply washes out the key factors that are likely to determine if and how deterrence actually functions. Commentary based on such projections is as likely to mislead as to enlighten.

Confident expectations about deterrence and deterrent threats presume the ability to know the mind of a potential aggressor and how it will calculate prospective loss versus gain and risk. There are, however, inherent unknowns in this regard that render deterrence a more or less uncertain business. This is so in a bilateral deterrence context; *but those uncertainties expand in the emerging multilateral deterrence context.*

The question is how should the United States now prepare to meet its enduring deterrence goals given these new realities?

Inconvenient Truths About Deterrence Prognostication

Discussions about how changes in the structure of international relations will affect the functioning of deterrence can be interesting and more or less informed, but it is important to acknowledge that no one can be high on the learning curve regarding the functioning of deterrence in the emerging trilateral (or more, multilateral) deterrence dynamic. Analysts and scholars are quite early in the process of trying to understand deterrence in a very different international context and current commentary often is dogged by continued reference to accepted wisdom inherited from the 1960s.

The problem is that the functioning of deterrence can be affected by an extremely wide range of factors—some of which may be well-known; others may be somewhat obvious (but not their significance in decision making); and

others may be completely obscure. Consequently, aside from the most obvious points about deterrence, the United States is now unavoidably in the world of speculation and conjecture, including uncertainty over what the ubiquitous word “stability” means and what in practice will help or hinder it. The prevalence of unavoidable uncertainties demands great humility rather than hubris.

This harsh reality was true in the bipolar world of the Cold War; it is even more significant in the emerging context of the three great nuclear powers. Those factors key to deterrence working or failing are multiplied with every new entry into a hostile deterrence dynamic—the imponderables multiply with every new possible interaction. It is for this reason, among others, that the emerging deterrence context is different and significant. The reality is that deterrence is more complex and unpredictable—the uncertainties, imponderables and unknowns are multiplied. In short, reality matters and predicting the functioning of deterrence in this multilateral context confronts expanding uncertainties and unknowns; that is an inconvenient truth.

The Past as Prelude

Scores of case studies from antiquity to the present demonstrate that deterrence often fails to function as expected for many different reasons in many different contexts, often surprisingly. A common theme in cases of deterrence failure is that the party hoping to deter misjudged the situation because it largely misunderstood the opponent’s goals, motivations, attention, determination, risk tolerance, perceptions of necessity, opportunity, and the stakes in contention, along with many other possible factors that tend to shape how leaderships calculate risk, cost and gain. In the emerging context, the functioning of

deterrence now appears to be even more complex in this regard.

Recent Developments

Recently, different commentators have observed with confidence that the likelihood of Russian nuclear employment in the Ukraine War is now increasing or, to the contrary, that it is highly unlikely, i.e., that deterrence of that event will respectively fail or succeed. Yet, there is an inadequate basis for the many seemingly knowledgeable, confident predictions in this regard. What we know is that Russia either will or will not employ nuclear weapons or other WMD. There can be very little basis for great confidence in predictions as to which is more or less likely because that decision will depend on the uncertain perceptions, values and psyches of a small number of foreign individuals in unique and stressful circumstances – hardly the basis for highly-confident prediction. This limitation in the ability to anticipate the functioning of deterrence has become more pronounced in the emerging multilateral deterrence context.

What we do know with confidence is that for deterrence to function by design in any context, opponents must decide that some level of accommodation or conciliation to U.S. demands is more tolerable than actions that would risk the U.S. deterrent threat. There must be this space for deterrence to work. Projections on the matter – whatever their opinion – must be speculative. We can *hope* that Moscow and Beijing will make decisions based on parameters that seem reasonable to us, and thus are predictable, but that expectation has often proved wrong in the past and hope is not a strategy.

The priority deterrence question that now follows from this discussion is important and should be stated plainly: How do we simultaneously deter multiple revanchist great powers, Russia and China, that appear

driven by the common belief that their respective expansionist goals are of such existential importance that they are willing to brandish nuclear first-use threats to advance them, and may see limited nuclear threats and employment as ways to work around U.S. deterrence policies?

We do not know how deterrence will be tested; we can only prepare as best we can and hedge against a wide range of plausible deterrence challenges. That hedging becomes much more complicated, and likely demanding, in this multilateral deterrence context because Russia and China have goals that are significantly incompatible with those of the United States and their leaderships can perceive and define “rational” in surprising ways—which will affect if and how deterrence can function.

The Analytical Challenge

How and why should the emerging multilateral deterrence context affect U.S. deterrence considerations and practice? The most basic point in this regard is the need to understand, to the extent feasible, those basic factors that can drive multiple opponents’ relevant decision making, i.e., their goals, motivations, attention, determination, risk tolerance, perceptions of necessity, opportunity, and the stakes in contention, *inter alia*.

The goal is a greater awareness of the opponent so that basic mistakes in U.S. deterrence strategies can better be avoided and deterrence is thus more likely to work in practice. The need to do so is not new, but the analytical challenge of usefully reducing ignorance in a hostile, multilateral deterrence context is greater than in the Cold War bilateral context because the number of factors to understand expands. Equally important, the interactions of those factors become more complex as multiple leaderships observe the interactions of each party, which may shape the

perceptions and decision making of all those involved and thus U.S. deterrence requirements. The United States is not simply deterring Russia and China sequentially or in isolation, but with each watching each and possibly shifting calculations based upon what they see in each engagement.

The need, therefore, is for great attention to the identification and understanding of the many different (and in some cases unique) decision-making drivers and how they interact across an increasing number of leaderships – most obviously including China and Russia, but also those countries whose behavior could seriously play in deterrence engagements among the three great nuclear powers, e.g., North Korea and Iran.

Deterrence Policy and Practice: Hedging in the Emerging Deterrence Context

Given a deterrence context in which two great nuclear powers are hostile to the United States, and the associated uncertainties of prognostication, it is important to emphasize at least three directions in U.S. deterrence policy. There is the need to hedge against: 1) coordinated Sino-Russian actions; 2) the increased uncertainty in deterrence requirements; and, 3) the likely increased uncertainties regarding the potential for deterrence failure.

Hedging Against Prospective Sino-Russian Coordination

In the emerging deterrence context, two of those great powers, i.e., Russia and China, see a third, i.e., the United States, as preventing the realization of their respective expansionist goals. In short, Russia and China have external goals that are inimical to long-standing U.S. interests and deterrence goals. Both have worked

assiduously to find ways to defeat U.S. deterrence strategies.

In this emerging context, the United States must consider the possibility that Russia and China will coordinate their actions to advance their respective goals in confrontations with the United States. The thread that binds Russia and China appears to be their common belief that it is the United States that prevents their necessary and rightful expansion and their common goal to overcome this impediment to their revanchist aspirations.

The danger of a coordinated, anti-American “entente” appears real and growing. This is an unprecedented possibility (likelihood?) with numerous implications, including, for example, the possibility of Russia and China confronting the United States with two simultaneous and coordinated regional wars and the corresponding U.S. need to deter their threats of limited theater nuclear escalation in two different geographical locations simultaneously. This is a deterrence challenge that U.S. conventional and theater nuclear capabilities may be unprepared to meet given the apparent near elimination of U.S. theater-range nuclear weapons proportional to the potential Sino-Russian theater nuclear threats.¹

The Two-War Standard Left Behind

For years following the Cold War, U.S. military planners designed a strategy that called on the United States to prepare to fight two major regional contingencies (MRCs) simultaneously in multiple theaters. This two-MRC

¹ Mark Schneider, “Does the United States Have Any Real Capability to Forward Deploy Nuclear Weapons Rapidly Outside of NATO?,” *RealClearDefense*, August 27, 2021, available at https://www.realcleardefense.com/articles/2021/08/27/does_the_united_states_have_any_real_capability_to_forward_deploy_nuclear_weapons_rapidly.

construct was embedded in various open U.S. military strategy documents and required U.S. forces to be sized and capable of successfully engaging adversaries in both Europe and Asia. It required a military that was sufficiently forward deployed and equipped to ensure a U.S. advantage on the battlefield.

This two-war standard became the benchmark against which the adequacy of U.S. forces was judged. Yet, by 2010, the United States had revised the two-MRC construct as a force sizing measure to focus on counter-terrorism and irregular warfare.

Restoring the two major regional contingency construct for U.S. force planning appears now to be logical and prudent to bolster deterrence. This would likely require greater regional power projection capabilities, including an expanded U.S. force presence abroad, along with a greater number of more flexible, technologically sophisticated, and survivable offensive and defensive military assets both in theater and capable of rapid deployment to theater as needed.

If the United States today is seen to be unprepared to respond to simultaneous, coordinated aggression, China and Russia may be spurred to action that otherwise could be deterred. Moscow and Beijing may see such a condition as providing them with an exploitable opportunity, and thus embolden both countries to seek to achieve their goals via the use of force – undercutting U.S. extended deterrence goals. History has repeatedly demonstrated that perceived weakness can be highly provocative to revisionist powers and lead to deterrence failure.

Addressing this deterrence gap likely is necessary now for extended deterrence purposes, but not sufficient. The shadow of nuclear threat will overhang any regional conflict that involves a coordinated Sino-Russian attack on U.S. and allied interests. The harsh deterrence reality is that establishing the U.S. conventional capability to counter a

two-front conventional war could compel Russia and China to accept the risk of engaging in nuclear escalation, if needed, to paralyze U.S. support for allies or to secure a slowly grinding military campaign. U.S. conventional and nuclear capabilities must provide an integrated approach to deterrence which helps to ensure that Russia and China have overwhelming disincentives to initiate coordinated conventional campaigns or to engage in nuclear escalation in the event that they decide to pursue such a campaign.

Sino-Russian Coordination: Potential Deterrence Challenges at the Strategic Force Level

Given the potential for Sino-Russian strategic coordination in hostilities against the United States, the adequacy of U.S. deterrence capabilities must be measured against the *combined forces* of two nuclear great powers, not each separately—a wholly unprecedented condition. For example, at the strategic nuclear level of consideration, the potential for Sino-Russian coordination includes the possibility that Beijing's and Moscow's combined strategic nuclear and advanced conventional capabilities will present a challenge to the continuing survivability of U.S. strategic retaliatory forces akin to when the massive Soviet ICBM deployments of the 1970s and early 1980s created a "window of vulnerability" for U.S. ICBM capabilities.

The survivability of U.S. strategic retaliatory forces against a Sino-Russian attack may come to the forefront of U.S. concerns given the combination of: 1) the large reductions in U.S. strategic force levels following the Cold War; 2) the contemporary buildup of Russian and Chinese strategic nuclear forces, and; 3) the prospective enormous combined numbers of Russian and Chinese strategic nuclear warheads.

***Deterrence Implications of the Potential for
Sino-Russian Coordinated Strikes:
U.S. Deterrence Threat Options***

In addition to the possible vulnerability of U.S. retaliatory forces is the corresponding question of the strategic deterrence threat options that the United States can credibly brandish against two hostile great nuclear powers who may be acting in concert and simultaneously – each of which has an expansive number of targets the United States may need to hold at risk for deterrence purposes. The question is whether that portion of the U.S. force posture that could survive a combined Sino-Russian strategic attack would have sufficient capacity and flexibility to support credible U.S. deterrence threat options against both Russia and China simultaneously. For example, if a sizable portion of the number of U.S. strategic warheads on ballistic missile carrying submarines were to survive a Sino-Russian strategic attack, would that level of U.S. retaliatory potential provide a credible deterrent to a Sino-Russian attack in the first place, or to follow-on Sino-Russian strikes if deterrence fails to prevent their first strike? It may well be true that, “Just one boat can carry enough nuclear warheads to place two warheads on each of Russia’s fifty largest cities.”² But that claim tells us nothing about deterrence, per se. The critical question is whether that type of threat, referred to as “counter-city,” or “minimum deterrence,” is an acceptable measure of capability for U.S. deterrence purposes.

A minimum deterrence (“counter-city”) posture has long been rejected by all U.S. administrations on a fully bipartisan basis. The United States has explicitly rejected such a policy – sometimes also referred to as an “assured destruction” threat – because of its incredibility as a

² William Perry and Tom Collina, *The Button* (Dallas, TX: BenBella Books, 2020), p. 119.

deterrent and its moral repugnance. Instead, the United States has pursued a “flexible response” deterrence policy intended to hold at risk credibly a range of opponents’ critical assets while avoiding societal damage to the greatest extent practicable. The desirability of flexible response options has been captured in multiple official, open policy documents. The targets to be held at risk for deterrence purposes potentially include opponents’ military capabilities, command and control capabilities, and civilian leadership, “while minimizing to the maximum extent possible collateral damage to population and civilian infrastructure.”³ This approach to deterrence has been made explicit in open U.S. policy documents for decades.

However, the potential for a combined Sino-Russian attack, whereby a fraction of their combined strategic potential might essentially destroy much of the U.S. retaliatory capability, suggests the possibility that the United States would essentially be left with a minimum deterrent. In addition to the moral and legal issues associated with threatening to destroy an opponents’ cities, such an approach to deterrence may well not be credible in numerous critical deterrence contexts—particularly including a Sino-Russian attack focused on U.S. retaliatory forces. If U.S. retaliatory options were reduced substantially, a relatively small number of surviving U.S. assets could easily be incapable of holding at risk the extensive assets that may be needed for the credible deterrence of these two great power adversaries, including their military forces and leadership. Such a limited U.S. deterrence posture could actually increase the risk of deterrence failure by presenting an incredible, ineffective

³ Adm. Richard Mies, USN (Ret.), “Strategic Deterrence in the 21st Century,” *Undersea Warfare*, Spring 2012, p. 16, available at https://igs.berkeley.edu/sites/default/files/files/events/mies_831_strat.in_21st_century_0.pdf.

U.S. retaliatory threat to two revanchist great powers. This possibility now warrants careful consideration.

***Sino-Russian Coordination: Potential Deterrence
Challenges at the Theater Nuclear Level***

Sino-Russian coordination could also present deterrence challenges at the level of non-strategic (theater) nuclear forces. How so? The United States must now hedge against the threat or reality of opponents' regional nuclear first use in *two theaters simultaneously*. This is a novel challenge that the United States must be prepared to confront if U.S. extended deterrence commitments to allies are to be credible and seen as such by allies and adversaries alike.

Is the United States currently prepared to deter credibly two simultaneous regional conflicts in which Sino-Russian nuclear escalation is threatened or carried out in Europe and Asia, without risking escalation to a highly-destructive strategic nuclear war? The significant imbalance in theater nuclear capabilities and deployments suggests otherwise and calls into question the credibility of U.S. extended deterrent threats. Should Moscow and Beijing believe that the United States lacks either the will or the capability to respond *proportionally* to their regional first use of nuclear weapons, extended deterrence will likely be undermined, and the risks of regional military aggression will grow. In this context, the assurance of allies currently protected by the U.S. extended nuclear deterrent (the "nuclear umbrella") may also be compromised. To hedge against this unprecedented deterrence challenge, a reconsideration of the size, characteristics, and deployment of U.S. theater nuclear forces is warranted, with the goal of having an overall deterrence force posture that is more flexible and adaptable to the new trilateral strategic environment.

Hedging Against Expanded Uncertainties Regarding Deterrence Requirements

The multiplication of uncertainties related to deterrence in the emerging international context increases the imponderables involved in predicting “how much is enough?” for U.S. deterrence needs. Defining that standard has always been more art than science, but it is made even more problematic by the expansion of participants, their revanchist goals and corresponding hostility to the United States.

Done properly, the application of deterrence requires understanding, to the extent feasible, the opponent to be deterred in the context of the engagement. However, rational leadership decision making can vary greatly because unique decision-making factors can drive leaders’ perceptions and calculations of value, cost and risk in surprising, unpredictable directions. There is a wide variety of operating factors, some seen, others unseen, that can be decisive in determining if and how deterrence will function. As a consequence, the functioning of deterrence is heavily context dependent. There can be no single “assured destruction” standard that defines the U.S. strategic deterrent, as was declared U.S. practice for more than a decade during the Cold War.

In the emerging multilateral deterrence context – given the expanded number of intensely-hostile opponents and wide range of plausible contexts in which U.S. deterrence must function – multiple, simultaneous measures of adequacy are needed. Those measures must take into account the many uncertainties involved in their definition, including how opponents’ leaders perceive and define acceptable risks in relation to their various goals. The variety of unavoidable uncertainties involved in setting multiple deterrence adequacy standards to sustain deterrence over the course of decades is daunting.

Nevertheless, it is necessary to plan now for that timeframe. As a result, the need to hedge against setting those standards incorrectly, particularly too narrowly, is acute.

The current U.S. nuclear modernization program was largely set in a time of great optimism regarding U.S. relations with Russia and China. The intensification of Russian and Chinese hostility related to their respective revanchist goals, and the associated *expanded deterrence uncertainties* of the emerging multilateral deterrence context highlight the potential danger of missing the need now to hedge adequately against these expanded uncertainties in U.S. considerations of “how much is enough?” for deterrence.

Hedging Against the Possibility of Deterrence Failure

Finally, the expansion of uncertainties and unknowns regarding deterrence applies to both *how* and *whether* deterrence will function. During the Cold War and after, commentators and officials alike frequently expressed unbounded confidence in this regard; but, even then, this confidence was largely speculative. To the extent that the United States is unprepared for the possibility of deterrence failure, it is unprepared for the realities of the emerging multilateral context. This point is not to detract whatsoever from the priority that must be placed on deterring conflict, but to recognize that even our best efforts to do so are not foolproof.

The implications of this harsh reality are profound. Most obvious perhaps is the potential value of active and passive strategic defenses to help mitigate the prospective destruction from Chinese, Russian or North Korean limited, coercive nuclear attacks, and to reduce the coercive value of their threats to launch such attacks. If

deterrence can be expected to prevent attack reliably and predictably, the need for defensive capabilities to limit damage in the event of deterrence failure is reduced. Yet, as confidence in the reliable, predictable functioning of deterrence wanes in the multilateral context, the capability to reduce damage in the event of deterrence failure can only be regarded as increasingly prudent. That is, in the emerging deterrence context in which confidence in the predictable functioning of deterrence is increasingly open to question, the *potential* value of defenses must increase, particularly for protection against limited, coercive nuclear attacks. This is another inconvenient truth.

Consequently, the United States should again consider the potential roles for active and passive defenses to hedge against the prospect for deterrence failure. This is a considerable departure from the prevalent missile defense policy orientation during much of the Cold War that unmitigated U.S. societal vulnerability is a useful and necessary component of deterrence stability, and that defenses can provide no meaningful protection against attack.

Arms Control in the Emerging Deterrence Context

In the emerging deterrence environment in which Moscow and Beijing seek to overturn the existing world order, the prospects for meaningful arms control agreements may appear bleak. Over the past half century the U.S. reliance on arms control as a means to reduce the relevance of nuclear weapons has not produced the desired results—actual results have often been the reverse of U.S. hopes and expectations. Nevertheless, President Biden has emphasized U.S. readiness to resume negotiations and some commentators assert that arms control with Russia is essential now more than ever.

Given the need to hedge against unprecedented deterrence challenges and uncertainties in the emerging threat environment, having greater flexibility to deal with the challenges posed by multiple nuclear adversaries—potentially operating in concert—is likely a necessary approach to minimize the chances of deterrence failure. There must be adequate U.S. deterrent capabilities to hedge against the unprecedented deterrence challenges of this context. This reality could call into question the adequacy of current U.S. nuclear force levels for deterrence and the prudence of continued adherence to New START limitations that were agreed to in a bilateral deterrence context very different from today's.

Consequently, the United States may need to reassess a deterrence force posture constrained by New START ceilings. In particular, a deterrent force with great resilience and flexible options may help to offset the combined numerical advantages and greater diversity of nuclear forces possessed by Russia and China. Establishing strict numerical force limits in any arms control agreement and locking in those limits for a period of years likely is incompatible with the flexibility and range of options that may be needed to hedge against the realities of the emerging threat context and changing circumstances. Any future arms control agreement that does not ensure that needed flexibility correspondingly may undermine “stability.”

In the past, the U.S. approach to strategic arms control was premised on an expectation that Soviet or Russian forces were the pacing measure, and that a high degree of continuity (i.e., continued mutual reductions via ever more restrictive agreements) in the direction of Soviet/Russian strategic forces provided a level of predictability and stability in the bilateral relationship. On that basis, Washington deemed reasonable long-term agreements with precise ceilings and limits “locked in.” However, in the

dynamic trilateral strategic environment, the prospects for past expected continuities and predictable Russian or Chinese behavior appear highly problematic. The U.S. approach to arms control must recognize this reality.

Conclusion

The emergence of a multilateral deterrence context in which two great nuclear powers share intense hostility toward the United States presents some unprecedented challenges for the United States. The emerging deterrence context is materially different from a bilateral context. It expands the uncertainties, imponderables and unknowns regarding the functioning of deterrence—which remains essential for U.S. and allied security, while being more uncertain. The basic principles of deterrence are enduring and unchanged, but the application of deterrence must adjust to different opponents and contexts. For U.S. deterrence planning, those differences must be taken into account in planning for deterrence at all levels, in planning for the possible failure of deterrence at all levels, and in planning for any future arms control negotiations.

Identifying the additional many ways in which the multilateral deterrence context is different from the past and the significance of those differences for U.S. deterrence planning is likely to be a generational process. That said, it is time to get beyond noting that this is an important topic and then defaulting to Cold War accepted wisdom. The “greatest generation” of deterrence scholars did the heavy intellectual lifting for their time and helped to preserve superpower peace through the Cold War. Deterrence conditions have changed dramatically, however, and it is time for a new generation to get back to this serious work.

Introduction

Deterrence theorists, policy makers, and commentators are now eagerly discussing “trilateral deterrence.” This, of course, refers to the simultaneous deterrence engagement of three great nuclear powers, the United States, Russia and China. Although the United States has for some time understood the importance of tailoring deterrence to specific adversaries, that tailoring becomes more complicated and complex when the number of peer adversaries increases. As ADM Charles Richard, Commander of U.S. Strategic Command, has rightly stated, “We have never before in our history faced two peer nuclear capable, potential opponents that we have to deter at the same time, that we have to deter differently.”⁴

The unprecedented character of the emerging deterrence context is not simply that there now are three great nuclear powers involved. Rather, the critical additional condition is the reality that two of those three great nuclear powers have revanchist goals that put them in sharp conflict with the United States and long-standing U.S. deterrence redlines, and both show their willingness to exploit conventional and nuclear forces in pursuit of their expansionist goals. We are accustomed to thinking of nuclear weapons as serving defensive deterrence purposes. We convinced ourselves that the goal of all rational leaderships must be strategic stability—only a leadership that is “unhinged” could think otherwise. However, the reality now is that we confront opponents’ threatened use of nuclear weapons to support offensive, revanchist purposes. That is unprecedented and compels us to rethink

⁴ Rebecca L. Heinrichs, “Transcript: A Conversation with Admiral Richard,” The Hudson Institute, September 14, 2021, available at <https://www.hudson.org/research/17264-transcript-a-conversation-with-admiral-richard>.

our deterrence policies. This particular character of the emerging deterrence context is more novel and significant than the simple fact that there are three great nuclear powers involved vice the bipolar context of the Cold War.

The question is how should the United States now prepare to meet its enduring deterrence goals given these new realities? It is commonplace to hear that the emerging threat context is different and must affect U.S. deterrence policy – explaining why that is true and how policy should adjust is not commonplace, but it is important to start.

Inconvenient Truths About Deterrence Prognostication

Discussions about how changes in the structure of international relations will affect the functioning of deterrence can be interesting and more or less informed, but it is important to acknowledge that no one can be high on the learning curve regarding the functioning of deterrence in the emerging trilateral (or more, multilateral) deterrence dynamic.

It took over three decades during the Cold War for the United States to reach a bipartisan consensus on U.S. deterrence goals and related measures of force requirements – not for a lack of brilliant minds working on the subject. Analysts and scholars are quite early in the process of trying to understand deterrence in a very different international structure; the subject seemingly has become a priority again after decades of relative inattention. In 2017 – following increasingly egregious behavior by Russia and China – Gen. Kevin Chilton, former Commander of U.S. Strategic Command, lamented a continuing lack of attention to the general subject:

Unfortunately, since the end of the Cold War...there has been a dearth of attention paid to

the rationale for the nuclear deterrent. The underlying principles and rationale for the deterrent have not gone away, but we have stopped educating, thinking, and debating, with informed underpinnings, the necessity and role of the US nuclear deterrent in today's world. Even more concerning has been the lack of informed debate on the subject. We have raised three generations of Air Force officers who may not have been exposed to the most fundamental and yet relevant arguments surrounding deterrence....⁵

Aside from the most obvious points about deterrence, the United States is now unavoidably in the world of speculation and conjecture, including uncertainty over what the ubiquitous word "stability" means and what in practice will help or hinder it. A former Secretary of the Navy, Richard Danzig, has quipped with regard to forecasting international relations in general that we are "driving in the dark."⁶ Another has rightly suggested: "To state the obvious, this is not an exact science. It's more like looking at a fog bank and trying to see what shape is in the fog. What is it that you can kind of see but can't fully make out?"⁷

⁵ Gen. Kevin Chilton, "On US Nuclear Deterrence," *Strategic Studies Quarterly*, Vol. 11, Issue 4 (Winter 2017), p. 2, available at https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-11_Issue-4/Chilton.pdf.

⁶ Richard Danzig, *Driving in the Dark: Ten Propositions About Prediction and National Security* (Washington, D.C.: Center for a New American Security, 2011), available at https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/CNAS_Prediction_Danzig.pdf?mtime=20160906081652&focal=none.

⁷ Newt Gingrich, "Newt Gingrich: My Predictions for the next 10 years—I expect these big changes," *FoxNews.com*, January 3, 2021, available at <https://www.foxnews.com/opinion/future-predictions-for-2020s-newt-gingrich>.

The prevalence of unavoidable uncertainty was highlighted by the noted scholar Colin Gray:

If you spend a lot of time talking about the future you can forget that you do not really know the subject. It is especially easy to forget one's basic ignorance when one is a defense planner.... Alas, the facts are that the future has not happened, and no amount of planning can make it visible to our gaze today. This incongruence is not to say that we are entirely ignorant about the future. Of course, we are not. It does mean that we would be well-advised not to use the all-too-familiar phrase, "the foreseeable future." The future is not foreseeable, at least not in a very useful sense. The challenge is to cope with uncertainty, not try to diminish it. That cannot be done reliably. Such ill-fated attempts will place us on the road to ruin through the creation of unsound expectations.⁸

There is nothing wrong with speculation and conjecture about the future functioning of deterrence, as long as everyone understands that informed speculation is the limit of what now is possible. Obviously, planning must be done and policy makers must establish some basis for doing so — there is no pause button on history. But, in contrast to the thousands of commentators' confident claims since the 1960s that one step or another surely would make or break deterrence, the prevalence of unavoidable uncertainties demands great humility rather than hubris.

Indeed, the most pervasive myth in this field is that confident prediction about the precise functioning of deterrence is possible. The difficulty in reaching confident

⁸ Colin S. Gray, "The 21st Century Security Environment and the Future of War," *Parameters*, Vol. 38, No. 4 (Winter 2008), p. 15, available at <https://press.armywarcollege.edu/cgi/viewcontent.cgi?article=2450&context=parameters>.

conclusions beyond the most obvious is not a matter of finding the right analyst or methodology. The problem is our unavoidable uncertainties regarding many factors and conditions that can lead to deterrence failure or success. That is, the functioning of deterrence can be affected by an extremely wide range of factors—some of which may be well-known; others may be somewhat obvious (but not their significance in decision making); and others may be completely obscure. And, unfortunately, we do not know the importance for deterrence of what we do not know.

This harsh reality was true in the bipolar world of the Cold War; it is even more significant in the particular context of the three contemporary great nuclear powers. Those factors key to deterrence working or failing are multiplied with every new entry into a hostile deterrence dynamic—the imponderables increase with every new possible interaction. It is for this reason, among others, that the emerging deterrence context is different and significant. The reality is that the expanded uncertainties, imponderables and unknowns render this multilateral deterrence environment more complex and unpredictable. In short, reality matters and predicting the functioning of deterrence in this multilateral context confronts expanding uncertainties and unknowns; that is an inconvenient truth.

Those who make or comment on deterrence policy often implicitly or explicitly fill in the unknowns and imponderables about the functioning of deterrence with their own presumptions—based on incomplete evidence or sheer speculation—about opponents and contexts. There are more- and less-informed ways to do so, but the U.S. understanding of opponents and context will likely never be adequate for highly confident predictions in many contexts. Simply put, regardless of the deterrence model underlying predictions about how deterrence will function—whether on paper or in mind—for virtually any

actual engagement it will not be possible to know with confidence how close or far it is from capturing reality.

Even explaining why deterrence worked or failed *in the past* is a challenge given our frequent ignorance of the specific factors that led to its apparent functioning or failure. With an abundance of historical evidence, we still often only know with confidence that deterrence either failed or failed to apply. We typically do not know with precision *why* deterrence failed because opponents do not often explain *why* they took an action that we hoped they would be deterred from taking. And, only rarely is evidence available to tell us *why* deterrence worked because all we see is that nothing much happened. Again, opponents rarely tell us why they decided *not* to do something they otherwise would have done, i.e., why they were deterred.

The Past as Prelude

An examination of scores of case studies from antiquity to the present demonstrates that deterrence often fails to function for many different reasons in many different contexts, often surprisingly.

A common theme in cases of deterrence failure is that the party hoping to deter misjudged the situation because it largely misunderstood the opponent's goals, motivations, attention, determination, risk tolerance, perceptions of necessity, opportunity, and the stakes in contention, along with many other possible factors that tend to shape how leaderships calculate risk, cost and gain. More than any other apparent single factor, the deterrer's lack of realistic expectations about the opponent is a condition that has contributed to deterrence failure when it was expected to provide security. This uncertainty can be lessened with serious effort, but not eliminated.

In most cases involving the United States, deterrence failures came as surprises to Washington. For example, on

September 19, 1962, *Special National Intelligence Estimate 85-3-62, The Military Buildup in Cuba*, essentially reported that the Soviet Union would not likely place missiles in Cuba because doing so “would indicate a far greater willingness to increase the level of risk in US-Soviet relations than the USSR has displayed thus far and consequently would have important policy implications with respect to other areas and other problems in East-West relations.”⁹ Less than one month later, photographic evidence proved that the Soviets had placed missiles in Cuba. Sherman Kent, then-head of the National Board of Estimates, stated of this mistake regarding Soviet decision making, “There is no blinking the fact that we came down on the wrong side.” Kent concluded, that “We missed the Soviet decision to put the missiles into Cuba because we could not believe that Khrushchev could make a mistake.”¹⁰

There are many additional cases in which the uncertainties surrounding deterrence and the motivations of various actors led to unanticipated results, including the failure of deterrence.¹¹ For example, in the 1973 Yom Kippur War, Egypt and Syria attacked Israel despite their reported expectation that Israel possessed nuclear weapons at the time.¹² The Arab attack demonstrated that a desire to

⁹ Sherman Kent, “A Crucial Estimate Relived,” in *Sherman Kent and the Board of National Estimates, Collected Essays* (Washington, D.C.: Center for the Study of Intelligence, Central Intelligence Agency, 1994), accessed at <www.cia.gov/csi/books/shermankent/toc.html> on August 9, 2000.

¹⁰ Ibid.

¹¹ One Israeli scholar has attributed the Western propensity to miscalculate the motivations of aggressive states as indicative of “serious fallacies in Western, and especially United States, strategic thinking in respect to cross-cultural situations.” See Yehezkel Dror, *Crazy States* (Millwood, NY: Kraus-Thomson, 1980), p. xv.

¹² As reported in Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), p. 342; and John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton & Co., 2001), p. 132.

reclaim lost honor due to territorial losses in the 1967 “Six Day War” was a sufficient impetus to run great risk.¹³ As noted historian Donald Kagan has pointed out, “The reasons for seeking more power are often not merely the search for security or material advantage. Among them are demands for greater prestige, respect, and deference, in short, honor.”¹⁴ U.S. leaders were surprised by this large-scale attack because, according to then-Secretary of State Henry Kissinger, “Our definition of rationality did not take seriously the notion of [Egypt and Syria] starting an unwinnable war to restore self-respect. There was no defense against our own preconceptions.”¹⁵ An examination of such occasions of apparent deterrence failure helps to explain such misunderstandings: “Other states have challenged substantially stronger nations for reasons that appear difficult to understand, at least to those observers who are not conversant with the weaker state’s culture.... Such hard to comprehend attacks by weaker states pose a special danger to stronger nations. The attacks may be unanticipatable because the stronger nation cannot comprehend the weaker nation’s cost-benefit calculus.”¹⁶

The Japanese attack on Pearl Harbor in 1941 is another case in point. Japan believed that if it could decimate the U.S. naval fleet “then U.S. power would be effectively neutralized during the time required for the Japanese to build up a strong defensive system, which the United States

¹³ See Gordon A. Craig, Alexander L. George, *Force and Statecraft: Diplomatic Problems of Our Time*, Third Edition (New York: Oxford University Press, 1995), pp. 188, 191.

¹⁴ Donald Kagan, *On the Origins of War and the Preservation of Peace* (New York, NY: Anchor Books, 1995), p. 569.

¹⁵ Henry Kissinger, *Year of Upheaval* (Boston: Little Brown & Co., 1982), p. 465.

¹⁶ Barry Wolf, *When the Weak Attack the Strong: Failures of Deterrence* (Santa Monica, CA: RAND, 1991), pp. 6-7, available at <https://www.rand.org/pubs/notes/N3261.html>.

would not want to challenge in a prolonged struggle.”¹⁷ As Yale Professor Bruce Russett explained, “Japan's sole strategy involved dealing maximum losses to the United States at the outset, making the prospects of a prolonged war as grim as possible, and counting, in an extremely vague and ill-defined way, on the American people's ‘softness’ to end the war.”¹⁸ Clearly, the Japanese leadership misread the situation and miscalculated the effect such an attack would have on American resolve. The Japanese miscalculation was compounded by an American reluctance to believe Japan would actually attack. As then-Assistant Secretary of State Dean Acheson put it, “No rational Japanese could believe an attack on us could result in anything but disaster.”¹⁹

Other examples demonstrate how the uncertainties of leadership decision making can lead to deterrence failures. These include the conflict over the Falkland Islands in 1982, when Argentina sought to reclaim the territory from Great Britain by the use of military force, despite Britain's possession of a nuclear arsenal. In this case, Argentinian President Gen. Leopoldo Galtieri clearly underestimated the resolve of then-British Prime Minister Margaret Thatcher (known as the “Iron Lady”) to deploy the British Navy 8,000 miles from the United Kingdom and to go to war to defend British sovereignty over the small South Atlantic territory. Galtieri declared, “Though an English reaction was considered a possibility, we did not see it as a probability. Personally, I judged it scarcely possible and

¹⁷ Ibid, p. 12.

¹⁸ Bruce M. Russett, “Pearl Harbor: Deterrence Theory and Decision Theory,” *Journal of Peace Research*, Vol. 4, No. 2, 1967, p. 99.

¹⁹ Quoted in, Paul J. Sanders, “When Sanctions Lead to War,” *The New York Times*, August 21, 2014, available at <https://www.nytimes.com/2014/08/22/opinion/when-sanctions-lead-to-war.html#:~:text=American%20officials%20at%20the%20time,to%20Tokyo%20%E2%80%94%20only%20a%20weak>.

totally improbable. In any case, I never expected such a disproportionate answer.... It seems so senseless to me.”²⁰ In short, “the Argentinian leadership simply did not believe that the British would consider the Falklands worth fighting over.”²¹ The defeat of Argentina led to Galtieri’s ouster.

The 1991 Gulf War also provides ample evidence of a leadership unexpectedly undeterred and motivated by drivers considered to be of greater significance than U.S. posturing. Saddam Hussein invaded Kuwait to reclaim what he considered Iraq’s “19th province.” Saddam miscalculated American resolve and did not believe the United States would actually respond in force.²² His launching of SCUD missile attacks on Israel was intended to widen the conflict by drawing the Israelis into the war and causing the Arab states in the anti-Iraq coalition to break off their military support. As one assessment concluded:

Here was a non-nuclear power engaged in what can only be described as a “blatantly offensive” and high-risk provocation of a putative nuclear power, possibly seeking not to discourage but *to encourage its retaliation*. The central balance of terror proposition that universal rationality and prudence in the face of a nuclear retaliatory threat ensures the deterrence of such high-risk behavior

²⁰ Oriana Fallaci, “Galtieri: No Regrets, No Going Back,” *Times* (London), June 12, 1982, p. 4, cited in Keith B. Payne, *Deterrence in the Second Nuclear Age* (Lexington, KY: The University Press of Kentucky, 1996), p. 115.

²¹ Wolf, *op. cit.*, p. 12.

²² “Interrogator Shares Saddam’s Confessions,” *CBS News 60 Minutes*, January 24, 2008, available at <https://www.cbsnews.com/news/interrogator-shares-saddams-confessions/>.

is here again contradicted by actual leadership behavior.²³

More recently, Russia's invasion of Ukraine occurred despite U.S. warnings that it would lead to severe economic consequences for Russia. The Russian invasion of Ukraine demonstrated the fallacy of what some have called "Deterrence by Detection" or "Deterrence by Disclosure."²⁴ Simply informing Russia that the United States knew what Moscow was up to by publicly releasing information about the Russian military buildup on Ukraine's borders was clearly inadequate to prevent Russia from invading. Nor did the forewarning of severe sanctions serve as an effective deterrent. Secretary of State Antony Blinken declared, "The purpose of those sanctions is to deter Russian aggression;"²⁵ Pentagon spokesman John Kirby stated, "we believe there's a deterrent effect" to sanctions;²⁶ and National Security Advisor Jake Sullivan stated, "The president believes that

²³ Keith B. Payne, *The Great American Gamble* (Fairfax, VA: National Institute Press, 2008), p. 277. (Emphasis in original).

²⁴ See, for example, Justin Katz, "US Should Pursue 'Deterrence By Detection,' Says Marine Corps Commandant," *Breaking Defense*, September 1, 2021, available at <https://breakingdefense.com/2021/09/us-should-pursue-deterrence-by-detection-says-marine-corps-commandant/>; also see Eric Edelman, "The Pros and Cons of 'Deterrence by Disclosure,'" *The Dispatch*, February 21, 2022, available at https://thedispatch.com/p/the-pros-and-cons-of-deterrence-by?utm_source=url.

²⁵ Yacob Reyes, "Blinken: Sanctioning Russia now will undercut deterrence," *Axios*, January 23, 2022, available at <https://www.axios.com/2022/01/23/blinken-sanctioning-russia>.

²⁶ Ronn Blitzer, "Pentagon spox says threat of Russia sanctions has 'deterrent effect', but admits invasion may be 'days away'," *Fox News*, February 13, 2022, available at <https://www.foxnews.com/politics/pentagon-spox-kirby-us-not-considering-sanctions-against-russia>.

sanctions are intended to deter.”²⁷ Clearly, this is another example of how deterrence can fail when the parties do not understand or misperceive the objectives or resolve of each other.

These are only a handful of the numerous historical examples that demonstrate the uncertainties associated with the functioning of deterrence. Confident expectations about deterrence and deterrent threats presume the ability to know the mind of a potential aggressor and how it will calculate prospective loss versus gain and risk. There are, however, inherent unknowns in this regard that render deterrence a more or less uncertain business. This is so in a bilateral deterrence context; *but those uncertainties expand in the emerging multilateral deterrence context.*

As these historical cases illustrate, U.S. and others’ expectations regarding opponents’ calculations of risk and benefit have *not* always been based on a firm understanding of the opponent or the context. This is *not* a criticism of U.S. intelligence efforts; it is a reflection of the limits on prediction in international relations. If an opponent’s behavior is shocking, rather than acknowledge uncertainty, U.S. commentators and some officials often assert that the opponent must suffer from a lack of reason; we could not otherwise so misjudge their perceptions and calculations. In truth, only infrequently in history do leaders long remain in power if they suffer from serious psychopathologies. Much more likely is that we misunderstand how opponents perceive their goals, risks and opportunities.

The “so what” following from this discussion of theory and history is that even the most confident-sounding claims about whether and how deterrence will work in real-world

²⁷ The White House, “Press Briefing by Press Secretary Jen Psaki and National Security Advisor Jake Sullivan, February 11, 2022,” available at <https://www.whitehouse.gov/briefing-room/press-briefings/2022/02/11/press-briefing-by-press-secretary-jen-psaki-and-national-security-advisor-jake-sullivan-february-11-2022/>.

cases reflect more or less informed speculation. The future now appears to be even more complex in this regard, with additional uncertainties, imponderables and unknowns. That is another inconvenient truth.

Recent Developments

Recently, different commentators have observed with confidence that the likelihood of Russian nuclear employment in the Ukraine War is now increasing or, to the contrary, that it is highly unlikely,²⁸ i.e., that deterrence of that event will respectively fail or succeed. Yet, there is an inadequate basis for the many seemingly knowledgeable, confident predictions in this regard.²⁹ The Russian decision to use nuclear weapons, if it occurs, will follow from Moscow's calculation of incentives and disincentives about which Western commentators can only speculate. In the unavoidable absence of understanding those incentives and disincentives, and how President Putin weighs them, predictions about Russian nuclear use must be speculative, and often sheer guesswork.

What we know is that Russia either will or will not employ nuclear weapons or other WMD. There can be very little basis for great confidence in predictions as to which is more or less likely because that decision will depend on the uncertain perceptions, values and psyches of a small number of foreign individuals in unique and stressful

²⁸ See for example, Adm. James Stavridis, "Putin Won't Use a Nuke, Chemical Weapons, Maybe," *Bloomberg Opinion*, July 20, 2022, available at, <https://www.bloomberg.com/opinion/articles/2022-07-20/ukraine-russia-war-why-putin-won-t-use-a-nuclear-weapon>.

²⁹ See for example, the discussion in, Eric Schlosser, "What If Russia Uses Nuclear Weapons In Ukraine," *The Atlantic*, June 20, 2022, available at https://www.theatlantic.com/ideas/archive/2022/06/russia-ukraine-nuclear-weapon-us-response/661315/?utm_source=email.

circumstances—hardly the basis for highly-confident prediction. This limitation in the ability to anticipate the functioning of deterrence has become more pronounced in the emerging multilateral deterrence context.

Moscow's incentives to employ WMD may increase if Putin doubles down to prevent a loss he cannot tolerate. CIA Director William Burns has stated that Putin "doesn't believe he can afford to lose" because he has "staked so much on the choices that he made to launch this invasion."³⁰ This may be a key consideration because cognitive studies suggest that individuals often are highly risk tolerant in this type of condition—it is called the "gamblers' fallacy."³¹ The risks for Moscow of employing nuclear weapons, however, may be sufficient to overcome the motivations. As noted above, projections on the matter—whatever their opinion—must be speculative. We will become more aware with enough strategic warning or only after the fact, but we simply cannot be confident which factors will be decisive in Putin's decision making. We can *hope* that Moscow and Beijing will make decisions based on parameters that seem reasonable to us, and thus are predictable, but that expectation has often proved wrong in the past and hope is not a strategy.

What we do know with confidence is that for deterrence to function by design in any context, opponents must decide that some level of accommodation or conciliation to U.S. demands is more tolerable than actions that would risk the U.S. deterrent threat. There must be this space for deterrence to work.

³⁰ Lawrence Richard, "Putin believes 'doubling down' key to winning in Ukraine, thinks he 'can't afford to lose'," *Fox News*, May 8, 2022, available at <https://www.foxnews.com/world/putin-doubling-down-win-ukraine-cant-afford-to-lose-cia-chief-warns>.

³¹ See for example, William J. Gering and Adrian R. Willoughby, "The Medial Frontal Cortex and the Rapid Process of Monetary Gains and Losses," *Science*, Vol. 22, March 22, 2002, pp. 2279-2282.

The priority deterrence question that now follows from this discussion is important and should be stated plainly: How do we simultaneously deter multiple revanchist great powers, Russia and China, that appear driven by the common belief that their respective expansionist goals are of such existential importance that they are willing to brandish nuclear first-use threats to advance them, and may see limited nuclear threats and employment as ways to work around U.S. deterrence policies?

For example, a Russian decision to threaten or employ nuclear weapons could be a coercive tactic to paralyze further Western support for Ukraine and thereby enable Moscow to achieve a bloody victory, i.e., “escalate to win.”³² Russia reportedly already has warned the United States in a demarche of “unpredictable consequences” if it provides “sensitive” arms to Ukraine,³³ amid many other explicit nuclear threats.

NATO’s 2022 *Strategic Concept* states that a fundamental Alliance goal is the deterrence of nuclear coercion and tactics.³⁴ That is a goal that already appears to be slipping away given the number of brazen Russian nuclear first-use threats surrounding its aggression in Ukraine. The deterrence of actual Russian employment of nuclear weapons, of course, also is a fundamental NATO goal. The prominent Cold War “balance of terror” model of deterrence stability tells us that this should not be a

³² See for example, Mark Schneider, “Russian Nuclear ‘De-Escalation’ of Future War,” *Comparative Strategy*, Vol. 37, No. 5 (March 2019), pp. 361-372; and, Dave Johnson, *Russia’s Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds*, Livermore Papers on Global Security, No. 3, February 2018, pp. 66-99, available at <https://cgsr.llnl.gov/content/assets/docs/Precision-Strike-Capabilities-report-v3-7.pdf>.

³³ DeYoung, op. cit.

³⁴ NATO, *NATO 2022 Strategic Concept*, pp. 1, 7, available at www.nato.int/strategic-concept/#StrategicConcept.

deterrence problem because no *rational* leadership would actually employ nuclear weapons in this way. And, in fact, commentators often now again assert with confidence that Putin's nuclear threats are a bluff or that he must be "unhinged." The latter conclusion likely reflects an enduring inadequacy in our understanding of how differently opponents can define what is rational behavior. There may be comfort in projecting onto opponents, including Putin, Western notions of what is rational because that means Putin's nuclear threats are only a bluff—what a relief. Yet, Russia's, and to some extent China's, nuclear first-use threats, and the possibility of employment, are here and now;³⁵ they demand that we consider anew how best to deter in contemporary conditions and the capabilities needed to support deterrence best practice.

We do not know how deterrence will be tested; we can only prepare as best we can, while "driving in the dark," and hedge against a wide range of plausible deterrence challenges. That hedging becomes much more complicated and likely demanding in the emerging deterrence context in which two great nuclear powers have goals that are significantly incompatible with those of the United States.

³⁵ While China expresses an official nuclear "no first use policy," the veracity of that claim is highly problematic and is inconsistent with other Chinese expressions. For a discussion of this point see, Keith B. Payne, Matthew Costlow, and David Trachtenberg, et al., "Deterring China in the Taiwan Strait," *Journal of Policy & Strategy, Special Issue*, Vol. 2, No. 2, pp. 22-23, C-5. See also, "China threatens Japan with nuclear war over intervention in Taiwan," *Business Standard*, July 23, 2021, available at https://www.business-standard.com/article/international/china-threatens-japan-with-nuclear-war-over-intervention-in-taiwan-121072300030_1.html.

Contemporary Deterrence Conditions and Their Implications for U.S. Deterrence Strategies

Recognition of the inconvenient truths about deterrence prediction and contemporary conditions leads to the second part of this discussion: How and why the emerging international context should affect U.S. deterrence considerations and practice.

The most basic point in this regard is the need to understand, to the extent feasible, those basic factors that can drive multiple opponents' relevant decision making, i.e., as noted above, their goals, motivations, attention, determination, risk tolerance, perceptions of necessity, opportunity, and the stakes in contention, *inter alia* (even the personal health conditions of a given leader can be important in this regard).³⁶ The need to do so is not new with the condition of multilateral deterrence, but pursuing an understanding of opponents for deterrence purposes is a task made much more challenging by the expansion of uncertainties regarding opponents and contexts to be so understood. During the bipolar Cold War, the focus was on the Soviet Union; other countries were considered "lesser included cases,"³⁷ i.e., if the Soviet Union could be deterred

³⁶ See, for example, John Stoessinger, *Why Nations Go to War* (New York: St. Martin's Press, 1993), p. 213; Donald Kagan, *On the Origins of War* (New York: Doubleday, 1995), pp. 8, 569; Bert E. Park, M.D., *Ailing, Aging, Addicted* (Lexington, KY: University Press of Kentucky, 1993), passim; Richard Ned Lebow, *Between Peace and War* (Baltimore, MD: Johns Hopkins University Press, 1981), pp. 220-231; and, Jonathan Clemente, "In Sickness, In Health," *Bulletin of the Atomic Scientists*, Vol. 63, No. 2 (March/April 2007), pp. 38-44.

³⁷ James Anderson, "China's Arms Buildup Threatens the Nuclear Balance," *The New York Times*, July 29, 2020, available at <https://nyti.ms/3f6A4NH>; and, Rachel Cohen, "USAF Rethinks Relationship Between Conventional, Nuclear Weapons," *Air Force*

reliably with available forces, others would be too. In addition, for more than a decade during the Cold War, U.S. declaratory policy identified a single “all-purpose” type of strategic deterrence threat as being effective against Moscow and all “rational” foreign leaderships, i.e., a nuclear threat to population and industry.³⁸ The emerging deterrence context does not afford those convenient shortcuts in the formulation of U.S. deterrence policy because the potential for great variation in the values, goals and decision-making calculations of multiple foreign leaderships cannot be so dismissed.³⁹ In short, different leaderships can perceive and define “rational” in different ways – which will affect if and how deterrence can function.

All attempts to improve understanding will be frustrated, at least in part, by a lack of data, ambiguous data, and conflicting data; this is unavoidable. However, the goal of reducing ignorance for deterrent purposes is *not* perfect knowledge, which is unobtainable. The goal is a greater awareness of the opponent so that basic mistakes in U.S. deterrence strategies can better be avoided and deterrence is thus more likely to work in practice.

The Analytical Challenge

As noted, the analytical challenge of usefully reducing ignorance in the emerging multilateral deterrence context is

Magazine Online, August 19, 2020, available at <https://www.airforcemag.com/usaf-rethinks-relationship-betweenconventional-nuclear-weapons/>.

³⁸ *Draft Memorandum for the President*, Secretary of Defense [Robert S. McNamara] to the President [Lyndon B. Johnson], Subj: Strategic Offensive and Defensive Forces, January 15, 1968, p. 8. (Originally classified; sanitized and declassified on January 5, 1983).

³⁹ See the discussion in, Keith B. Payne, “Deterrence is Not Rocket Science: It is More Difficult,” *Information Series*, No. 527 (July 6, 2022), available at https://nipp.org/information_series/keith-b-payne-deterrence-is-not-rocket-science-it-is-more-difficult-no-527-july-6-2022/.

greater than in the Cold War bilateral context because the number of factors to understand expands. Equally important, the interactions of those factors become more complex as multiple leaderships observe the interactions of each party, which may shape the perceptions and decision making of all those involved and thus U.S. deterrence requirements. The United States is not simply deterring Russia and China sequentially or in isolation, but with each watching each and possibly shifting calculations based upon what they see in each engagement.

An obvious example of this added complication is now trying to understand how the war in Ukraine may influence China's perception of the opportunities, costs and risks of moving violently against Taiwan, and how that may affect needed U.S. efforts to deter China from doing so. In short, the task includes trying to understand how developments in one geographic area could affect the decision making of opponents in distant areas, and thereby shape U.S. deterrence goals and practice in those distant areas. This is the opposite of the U.S. Cold War focus on the Soviet Union, with the apparent expectation that all others were "lesser included cases."⁴⁰

The need, therefore, is for great attention to the identification and understanding of the many different (and in some cases unique) decision-making drivers and how they interact across an increasing number of leaderships – most obviously including China and Russia, but also those countries whose behavior could seriously play in deterrence engagements among the three great nuclear powers, e.g., North Korea and Iran.

The Cold War analytic practice of some commentators to posit non-descript countries A and B, and then essentially use game theory to deduce conclusions about the functioning of deterrence and the U.S. requirements for

⁴⁰ Anderson, *op. cit.* See also, Cohen, *op. cit.*

deterrence was woefully inadequate at the time. In the emerging trilateral deterrence context, the leaderships of the participants are in many ways unique decision makers, and Russia and China have worldviews that conflict sharply with that of the United States. In this particular trilateral context, projections based on positing the interaction among three *non-descript* countries A, B, and C simply washes out the key factors that are likely to determine if and how deterrence actually functions. Commentary based on such projections is as likely to mislead as to enlighten.

Deterrence Policy and Practice: Hedging in the Emerging Deterrence Context

There are several additional implications for the practice of deterrence in the new multilateral deterrence dynamic. For example, given a deterrence context in which two great nuclear powers are hostile to the United States, and the associated uncertainties of prognostication, it is important to emphasize at least three directions in U.S. deterrence policy. There is the need to hedge against: 1) coordinated Sino-Russian actions; 2) the increased uncertainty in deterrence requirements; and, 3) the likely increased uncertainties regarding the potential for deterrence failure.

Hedging Against Prospective Sino-Russian Coordination

As noted above, the existence of three great nuclear powers is not the only unprecedented feature of the new era. Equally important is that two of those great powers, i.e., Russia and China, see a third, i.e., the United States, as preventing the realization of their respective expansionist goals. In short, Russia and China have external goals that

are inimical to long-standing U.S. interests and deterrence goals. Both have worked assiduously to find ways to defeat U.S. deterrence strategies. As one *Washington Post* writer has rightly put it: “The idea that the United States can choose between confronting Russian aggression or Chinese aggression is attractive, until it meets reality. In truth, these two expansionist dictatorships are working together to undermine our security, prosperity and freedom. Moscow and Beijing view their struggles against the West as intertwined, so we must acknowledge that connection as well.”⁴¹

The nature of the emerging deterrence context demands U.S. consideration of the possibility that Russia and China will coordinate their actions to advance their respective goals in confrontations with the United States. Indeed, despite their long-standing historical animosities and past territorial disputes, Russia and China have moved decidedly closer in their level of military and political cooperation and coordination. The thread that binds them together appears to be their common belief that it is the United States that prevents their necessary and rightful expansion and their common goal to overcome this impediment to their revanchist aspirations.

Some argue that China and Russia are unlikely to overcome decades of mutual suspicion and form a true alliance.⁴² Yet, the danger of a coordinated, anti-American “entente” appears real and growing. As one commentary noted:

This entente will last. Economic and political interests are mutually complementary for the

⁴¹ Josh Rogin, “The U.S. can confront both China and Russia,” *Washington Post*, August 5, 2022, p. A15.

⁴² See, for example, the comments of various analysts in “Ask the Experts: Will China and Russia Stay Aligned?,” *Foreign Affairs*, June 21, 2022, available at <https://www.foreignaffairs.com/ask-the-experts/2022-06-21/will-china-and-russia-stay-aligned>.

foreseeable future. Russia is a significant source of hydrocarbons for energy-poor China and a longtime supplier of advanced weapons. Russia has hegemonic aspirations in the former Soviet territory, Eastern Europe and the Middle East. China has comparable aspirations in the Indo-Pacific region and the Middle East (and world-wide in due course). The entente is growing stronger, as China's unambiguous support for Russia in Europe's current crisis proves.⁴³

Putin himself has declared that "the era of a unipolar world order has come to an end," noting that "new powerful and increasingly assertive centers have been formed." He chastised the West for "stubbornly clinging to the shadows of the past," saying that Western states "seem to believe that the dominance of the West in global politics and the economy is an unchanging, eternal value." However, he noted, "Nothing lasts forever."⁴⁴ At the same time, Xi Jinping hailed the closer relationship with Russia, declaring, "Cooperation between China and Russia is currently ascending in all spheres," and stating that "This is evidence of the high resilience and ingenious potential of Chinese-Russian cooperation."⁴⁵ Moreover, China's Foreign Ministry noted, "Since the beginning of this year, Russia-China practical cooperation has developed steadily," adding that China is "willing to, together with Russia,

⁴³ John Bolton, "Entente Multiplies the Threat From Russia and China," *The Wall Street Journal*, February 15, 2022, available at <https://www.wsj.com/articles/entente-multiplies-the-threat-from-russia-and-china-foreign-policy-alliance-beijing-moscow-xi-putin-11644943618>.

⁴⁴ Address by Vladimir Putin to the St. Petersburg International Economic Forum Plenary Session, June 17, 2022, available at <http://en.kremlin.ru/events/president/transcripts/68669>.

⁴⁵ Remarks of Xi Jinping to the St. Petersburg International Economic Forum Plenary Session, June 17, 2022, available at <http://en.kremlin.ru/events/president/transcripts/68669>.

continue to support each other on issues concerning core interests and major concerns such as sovereignty and security, intensify strategic coordination between the two countries, and strengthen communication and coordination in major international and regional organizations.”⁴⁶

This cooperation is increasingly evident in the military sphere. Russia and China reportedly have participated in a growing number of joint military exercises, including joint naval drills and an extensive military exercise in China last year.⁴⁷ In February 2022, Putin and Xi announced that Moscow and Beijing had agreed to a “friendship” with “no limits.”⁴⁸ As the Commander of U.S. Indo-Pacific Command, ADM John Aquilino, declared, “If those two nations were to truly demonstrate and deliver a ‘No Limits policy,’ I think what that means is that we’re currently [in an] extremely dangerous time and place in the history of humanity, if that were to come true.”⁴⁹

A detailed “think-tank” study notes in this regard, “The Chinese and Russian armed forces have become each

⁴⁶ Mike Brest, “China pursuing ‘largest military buildup in history since WWII,’ US commander says, *Washington Examiner*, June 27, 2022, available at <https://www.washingtonexaminer.com/policy/defense-national-security/chinas-enacting-largest-military-buildup>.

⁴⁷ Yusuf Çetiner, “Joint Russo-Chinese ZAPAD/INTERACTION-2021 Exercise Comes To An End,” *overtdefense.com*, August 16, 2021, available at <https://www.overtdefense.com/2021/08/16/the-zapad-interaction-2021-exercise-carried-out-by-russian-and-chinese-forces-comes-to-an-end/>.

⁴⁸ *Joint Statement of the Russian Federation and the People’s Republic of China on the International Relations Entering a New Era and the Global Sustainable Development*, February 4, 2022, available at https://fm.cnb.com/applications/cnbc.com/resources/editorialfiles/2022/03/31/Joint_Statement_of_the_Russian_Federation_and_the_Peoples_Republic_of_China_on_the_International_Relations_Entering_a_New_Era_and_the_Global_Sustainable_Development__President_of_Russia.pdf.

⁴⁹ Brest, op. cit.

other's most important foreign exercise partner."⁵⁰ Moreover, it states, "In terms of functional capabilities, China and Russia seem prepared to extend their drills to novel domains like cyber and outer space. Beijing and Moscow have already been aligning their arms control policies regarding these areas."⁵¹ The Director of the Defense Intelligence Agency, Lt. Gen. Scott D. Berrier, has called the level of cooperation "their deepest since any time before the Sino-Soviet split" and an effort "to maximize their power and influence."⁵²

In May 2022, China and Russia reportedly conducted their fourth joint bomber exercise since 2019, involving patrols over the Sea of Japan and maneuvers to the east of Taiwan.⁵³ As one analyst described it, "these China-Russia bomber exercises are the most visible indicator they are engaged in some level of offensive nuclear coordination." In addition, "Joint exercises with nuclear-capable bombers...indicate possible Chinese-Russian coordination of other offensive nuclear weapons like intermediate-range and intercontinental-range ballistic missiles."⁵⁴ Russia and China recently stepped up their naval patrols in the Pacific

⁵⁰ Richard Weitz, "Assessing Chinese-Russian Military Exercises," Center for Strategic and International Studies, July 2021, p. 1, available at https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/210709_Weitz_Chinese-Russian_Exercises.pdf?sVj9xEhVUrzel_Mbf5pOdJqAQwUvn2zq.

⁵¹ *Ibid.*, p. 5.

⁵² Scott Berrier, *Statement for the Record, Worldwide Threat Assessment*, before the Senate Armed Services Committee, May 10, 2022, p. 20, available at <https://www.armed-services.senate.gov/imo/media/doc/Berrier%20Statement%20to%20ASC.pdf>.

⁵³ Rick Fisher, "A War Over Taiwan Raises the Threat of Combined China-Russia Nuclear Operations," *The Epoch Times*, June 4, 2022, available at https://www.theepochtimes.com/a-war-over-taiwan-raises-the-threat-of-combined-china-russia-nuclear-operations_4511201.html.

⁵⁴ *Ibid.*

near Japan, and 10 Russian and Chinese warships reportedly circumnavigated the Japanese archipelago last October,⁵⁵ with additional transits reportedly taking place more recently. Japan's Defense Minister Nobou Kishi stated, "The fact that about 10 Russian and Chinese ships sail around Japan on the same route in a short period of time is a display of the military presence of both countries around Japan."⁵⁶

Russia apparently also has assisted China with development of an early warning system to detect strategic missile launches. Russian President Putin has called this "a very serious thing, which will radically improve the defense capability of the People's Republic of China."⁵⁷ As one Russian analyst noted, "integration of the two countries' early warning systems facilitates further convergence of Russia and China's defence strategies—resulting in the formation of a common defence policy."⁵⁸ Moreover, Sino-Russian coordination in missile defense activities reportedly has included "simulated command post-level missile defense exercises."⁵⁹

⁵⁵ "Russian warships pass south of Tokyo: Japan's Defense Ministry," *Nikkei Asia*, June 1, 2022, available at <https://asia.nikkei.com/Politics/International-relations/Indo-Pacific/Russian-warships-pass-south-of-Tokyo-Japan-s-Defense-Ministry>.

⁵⁶ Dzirhan Mahadzir, "Chinese, Russian Warships Continue to Circle Japan, Defense Minister Says," *U.S. Naval Institute News*, June 24, 2022, available at <https://news.usni.org/2022/06/24/chinese-russian-warships-continue-to-circle-japan-defense-minister-says>.

⁵⁷ "Russian warships pass south of Tokyo: Japan's Defense Ministry," op. cit.

⁵⁸ Alexander Korolev, "China-Russia cooperation on missile attack early warning systems," *East Asia Forum*, November 20, 2020, available at <https://www.eastasiaforum.org/2020/11/20/china-russia-cooperation-on-missile-attack-early-warning-systems/>.

⁵⁹ "Russian warships pass south of Tokyo: Japan's Defense Ministry," op. cit.

China has openly expressed its desire to overcome what it refers to as a “century of humiliation” by Western powers and Japan,⁶⁰ and its military buildup—according to ADM Richard—includes a “breathtaking” expansion of its nuclear forces.⁶¹ He has called this a “strategic breakout” by China, stating, “A strategic breakout denotes the rapid qualitative and quantitative expansion of military capabilities that enables a shift in strategy and requires the DoD to make immediate and significant planning and/or capability shifts.”⁶² He further noted that this “points towards an emboldened PRC that possesses the capability to employ any coercive nuclear strategy today.”⁶³ Beijing’s aggressive actions against Taiwan and its brandishing of nuclear threats against those who might stand in the way of its forceful absorption of the island appear to be an attempt to coerce other powers, particularly the United States, into accepting as a *fait accompli* China’s efforts at territorial aggrandizement. This is a unique deterrence challenge for the United States.

Russia has shocked the world by using military force and coercive nuclear threats in its attempt to reconstitute a Russian empire. Russia’s invasion of Ukraine—a democratic neighbor that poses no military threat to Russia—has as its goal not only to destroy that country’s independence and territorial sovereignty but, as Russia’s

⁶⁰ Christopher A. Ford, *Defending Taiwan: Defense and Deterrence*, Occasional Paper, Vol. 2, No. 2 (Fairfax, VA: National Institute Press, 2022), available at <https://nipp.org/wp-content/uploads/2022/02/Vol.-2-No.-2-Ford.pdf>.

⁶¹ Statement of Charles A. Richard, Commander, United States Strategic Command, Before the Senate Armed Services Committee, March 8, 2022, p. 2, available at <https://www.armed-services.senate.gov/imo/media/doc/2022%20USSTRATCOM%20Posture%20Statement%20-%20SASC%20Hrg%20FINAL.pdf>.

⁶² *Ibid.*, p. 2.

⁶³ *Ibid.*, p. 5.

Ambassador to the United States declared, to overturn the U.S. and NATO-led “world order.”⁶⁴

As part of its coercive efforts, Russia has threatened nuclear use against NATO and non-NATO states, and has long been engaged in an extensive nuclear modernization program, building exotic new nuclear weapons systems – a number of which are unaccountable under the New START Treaty. New systems reportedly include a heavily-MIRVed ICBM, a nuclear torpedo, a hypersonic glide vehicle launched from an ICBM, a nuclear-powered cruise missile, and other systems intended to defeat U.S. missile defenses and which Russian President Putin has referred to as “invincible.”⁶⁵

The potential for Sino-Russian coordinated hostilities is an unprecedented possibility (likelihood?) with numerous implications, including, for example, the possibility of Russia and China confronting the United States with two simultaneous and coordinated regional wars and the corresponding U.S. need to deter their simultaneous threats of limited theater nuclear escalation in two different geographical locations. As several retired military analysts have noted, “The United States must now seriously consider its options to counter a new collective nuclear blackmail.”⁶⁶ In this case, Russia and China may be more

⁶⁴ Natalie Colarossi, “Putin Using Ukraine Invasion to Change ‘World Order’: Russian Ambassador,” *Newsweek*, April 18, 2022, available at <https://www.newsweek.com/putin-using-ukraine-invasion-change-world-order-russian-ambassador-1698657>.

⁶⁵ Nathan Hodge, Barbara Starr, Matthew Chance and Emma Burrows, “Putin claims new ‘invincible’ missile can pierce US defenses,” *CNN*, March 1, 2018, available at <https://www.cnn.com/2018/03/01/europe/putin-russia-missile-intl/index.html>.

⁶⁶ Dan Leaf and Howard Thompson, “U.S. Must Counter Collective Nuclear Blackmail,” *RealClear Defense*, June 18, 2022, available at https://www.realcleardefense.com/articles/2022/06/18/us_must_counter_collective_nuclear_blackmail_838067.html.

successful in deterring the United States from responding to their aggression than the United States may be in deterring Sino-Russian aggression in the first place. The consequences of this would call into sharp question the credibility of U.S. extended deterrence for allies.

Those who contend that relative nuclear force numbers do not matter for deterrence should consider the implications of Sino-Russian collaboration. This is a deterrence challenge that U.S. conventional and theater nuclear capabilities may be unprepared to meet given the apparent near elimination of U.S. theater-range theater nuclear weapons proportional to the potential Sino-Russian theater nuclear threats.⁶⁷

The Two-War Standard Left Behind

For years following the Cold War, the United States was considered the sole superpower and the U.S. military was the preeminent fighting force in the world. In the wake of the demise of the Soviet Union, U.S. military strategy transitioned from a focus on deterring global conflict to one centered on regional contingencies. As the 1992 *National Military Strategy of the United States* explained, "Because of the changes in the strategic environment, the threats we expect to face are regional rather than global.... [therefore] our plans and resources are primarily focused on deterring and fighting regional rather than global wars."⁶⁸ Accordingly, U.S. military planners designed a strategy that called on the United States to prepare to fight two major regional contingencies (MRCs) simultaneously. This two-

⁶⁷ Schneider, "Does the United States Have Any Real Capability to Forward Deploy Nuclear Weapons Rapidly Outside of NATO?," op. cit.

⁶⁸ Joint Chiefs of Staff, *National Military Strategy of the United States*, January 1992, p. 11, available at <https://history.defense.gov/Portals/70/Documents/nms/nms1992.pdf?ver=AsfWYUHa-HtcvnGGAuWXAg%3d%3d>.

MRC construct was embedded in various open U.S. military strategy documents and required U.S. forces to be sized and capable of successfully engaging adversaries in both Europe and Asia. It required a military that was sufficiently forward deployed and equipped with the most modern and sophisticated military technology that would ensure a U.S. advantage on the battlefield. This two-war standard became the benchmark against which the adequacy of U.S. forces was judged.⁶⁹

This standard carried over into the 2001 *Quadrennial Defense Review* (QDR), which noted: “For planning purposes, U.S. forces will remain capable of swiftly defeating attacks against U.S. allies and friends in any two theaters of operation in overlapping timeframes.”⁷⁰ However, the 2001 QDR adjusted U.S. military planning to focus on decisively defeating an adversary in one theater of operations before securing victory in another while conducting “a limited number of lesser military and humanitarian contingencies.”⁷¹ As the strategy explained, “At the direction of the President, U.S. forces will be capable of decisively defeating an adversary in one of the two theaters in which U.S. forces are conducting major combat

⁶⁹ Department of Defense, *Report of the Quadrennial Defense Review*, May 1997, p. 12, available at

<https://history.defense.gov/Portals/70/Documents/quadrennial/QDR1997.pdf?ver=qba2TZwCFGCITKIgPIpNvg%3d%3d>.

⁷⁰ Department of Defense, *Quadrennial Defense Review Report*, September 3, 2001, p. 21, available at

<https://history.defense.gov/Portals/70/Documents/quadrennial/QDR2001.pdf?ver=AFts7axkH2zWUHncRd8yUg%3d%3d>.

⁷¹ Department of Defense, *Quadrennial Defense Review Report*, February 6, 2006, p. 36, available at

<https://history.defense.gov/Portals/70/Documents/quadrennial/QDR2006.pdf?ver=2014-06-25-111017-150>.

operations by imposing America's will and removing any future threat it could pose."⁷²

The notion of fighting a two-front war against major powers is not simply theoretical. The United States did so in World War II. In the late 1930s and early 1940s, the United States was ill-prepared militarily to prosecute a conflict against Germany and Japan simultaneously. Consequently, as recounted by one historian, U.S. leaders agreed on "a global strategy for the United States in the event of a two-front, coalition war against Germany and Japan which called for a defensive effort in the Far East so that American and Allied forces could concentrate in the European theatre to defeat Germany first."⁷³ This sequential approach to warfighting was considered half a century later as the Clinton Administration drafted a military strategy that was dubbed "Win-Hold-Win," but which reportedly was abandoned as untenable.⁷⁴

In 2006, the Department of Defense revised its "Force Planning Construct" to focus on irregular warfare and to "consider a somewhat higher level of contributions from international allies and partners" that would allow the United States to "wage two nearly simultaneous conventional campaigns (or one conventional campaign if already engaged in a large-scale, long-duration irregular campaign), while selectively reinforcing deterrence against opportunistic acts of aggression."⁷⁵ By 2010, however, the United States apparently had revised the two-MRC

⁷² Department of Defense, *Quadrennial Defense Review Report*, September 3, 2001, op. cit., p. 21.

⁷³ Mark A. Stoler, "The 'Pacific-First' Alternative in American World War II Strategy," *The International History Review*, Vol. 2, No. 3, July 1980, p. 432.

⁷⁴ John T. Correll, "Back to Win-Hold-Win," *Air Force Magazine*, October 1, 1999, available at <https://www.airforcemag.com/article/1099edit/>.

⁷⁵ Department of Defense, *Quadrennial Defense Review Report*, February 6, 2006, op. cit., p. 38.

construct as a force-sizing measure to focus on counterterrorism and irregular warfare.⁷⁶

The 2014 QDR further scaled back U.S. planning objectives, seeking to defeat one regional adversary while imposing severe costs on another. It called for a force,

...capable of simultaneously defending the homeland; conducting sustained, distributed counterterrorist operations; and in multiple regions, deterring aggression and assuring allies through forward presence and engagement. If deterrence fails at any given time, U.S. forces could defeat a regional adversary in a large-scale multi-phased campaign and deny the objectives of—or impose unacceptable costs on—another aggressor in another region.”⁷⁷

With the re-emergence of sharp great power conflicting interests as outlined in the 2017 *National Security Strategy of the United States of America* and the 2018 *National Defense Strategy*, the United States shifted its conceptual focus from irregular warfare and lesser regional contingencies to threats posed by Russia and China. The 2021 *Interim National Security Strategic Guidance* noted, “Both Beijing and Moscow have invested heavily in efforts meant to check U.S. strengths and prevent us from defending our interests and allies around the world.” The critical question is whether the U.S. armed forces today have adopted a revised force-planning construct that prepares for simultaneous

⁷⁶ Department of Defense, *Quadrennial Defense Review Report*, February 2010, available at https://history.defense.gov/Portals/70/Documents/quadrennial/QDR2010.pdf?ver=vVJYRVwNdnGb_00ixF0UfQ%3d%3d.

⁷⁷ Department of Defense, *Quadrennial Defense Review*, 2014, p. 44, available at <https://history.defense.gov/Portals/70/Documents/quadrennial/QDR2014.pdf?ver=tXH94SVvSQLVw-ENZ-a2pQ%3d%3d>.

regional conflicts against nuclear peer adversaries in Europe and the Indo-Pacific.

The prospect of a revanchist China and Russia working together to challenge U.S. national security interests worldwide suggests that the time has come to consider restoring the two major regional contingency force-sizing construct as a means of bolstering deterrence. This would likely require greater regional power projection capabilities, including an expanded U.S. force presence abroad, along with a greater number of more flexible, technologically sophisticated, and survivable offensive and defensive military assets both in theater and capable of rapid deployment to theater as needed.

Such a force expansion may well require additional fiscal resources than those currently budgeted; however, some in Congress have shown a willingness to go beyond the levels of defense spending requested by the Biden Administration. For example, the Senate Armed Services Committee and the Senate Appropriations Committee approved a level of defense funding for fiscal year 2023 well in excess of the administration's budget request.⁷⁸ And the House approved version of the National Defense Authorization Act for Fiscal Year 2023 also exceeds the level

⁷⁸ The Senate Armed Services Committee approved a level of defense funding roughly \$45 billion more than what the administration requested. See Senate Armed Services Committee Press Release, "Reed and Inhofe File Fiscal Year 2023 National Defense Authorization Act," July 18, 2022, available at <https://www.armed-services.senate.gov/press-releases/reed-and-inhofe-file-fiscal-year-2023-national-defense-authorization-act>. The Senate Appropriations Committee also added significantly to the administration's defense request. See "Senate appropriators seek \$850 billion for defense, largest total of 4 key committees," *Breaking Defense*, July 28, 2022, available at <https://www.google.com/amp/s/breakingdefense.com/2022/07/senate-appropriators-seek-850-billion-for-defense-largest-total-of-4-key-committees/amp/>.

of defense funding requested by the administration by approximately \$37 billion.⁷⁹

***Deterrence Implications of the Potential for
Sino-Russian Coordination in
Regional Wars***

During World War II, Japan was essentially spurred to take action against the United States by U.S. sanctions at a time when the United States was ill-prepared militarily to defeat Japanese and German aggression simultaneously. Similarly, if the United States today is seen to be unprepared to respond to simultaneous, coordinated aggression, China and Russia may be spurred to action that otherwise could be deterred.

What does this mean for U.S. extended deterrence goals in the emerging international environment? If the United States were manifestly unable to respond adequately to simultaneous, regional conflicts with Russia and China, that U.S. inadequacy could easily provoke the violation of long-standing U.S. redlines that are meant to deter attacks on allies and partners. Moscow and Beijing could see such a situation as providing them with an exploitable opportunity to achieve their goals via the use of force—undercutting the U.S. capacity to deter coordinated aggression and U.S. extended deterrence goals.

In short, U.S. military planning and capabilities unprepared for Sino-Russian regional aggression on two fronts could lower the apparent risks for Sino-Russian aggression, and thus embolden both countries to seek to achieve their goals via the use of force. A U.S. force posture

⁷⁹ Sandra Erwin, "House of Representatives passes 2023 defense authorization bill," *Space News*, July 14, 2022, available at <https://spacenews.com/house-of-representatives-passes-2023-defense-authorization-bill/>.

that does not sufficiently prepare for the prospect of Sino-Russian coordination may convey weakness to opponents looking for U.S. weakness; such perceived weakness can be highly provocative to revisionist powers and lead to deterrence failure.

This is a realistic concern as Russia and China have goals that essentially demand their violation of expressed U.S. redlines in Europe and Asia, respectively. A prudent U.S. strategy to deter coordinated Sino-Russian aggression in Asia and Europe must be backed by a force structure and posture that takes preparedness for this possibility seriously and conveys a strong determination and capability to enforce the U.S. extended deterrence redlines that both Russia and China find inimical to their respective goals.

Addressing a deterrence gap at the conventional force level likely is necessary now for extended deterrence purposes, but not sufficient. The shadow of nuclear threat will overhang any regional conflict that involves a coordinated Sino-Russian attack on U.S. and allied interests. The harsh deterrence reality is that establishing the U.S. conventional capability to counter a two-front conventional war could compel Russia and China to accept the risk of engaging in nuclear escalation if needed to paralyze U.S. support for allies or to secure a slowly grinding military campaign. The war in Ukraine has conclusively illustrated this prospective danger.

Consequently, U.S. nuclear deterrence capabilities must complement U.S. regional forward-deployed and power projection capabilities to help deter Sino-Russian aggression and to deter their possible nuclear escalation in the event of regional conflict. That is, U.S. conventional and nuclear capabilities must provide an integrated approach to deterrence that helps to ensure that Russia and China have overwhelming disincentives to initiate coordinated conventional campaigns or to engage in nuclear escalation in the event that they decide to pursue such a campaign.

In this new strategic environment, the prospect of coordinated Sino-Russian military moves presenting the United States with two simultaneous, major regional wars in their bids to overturn the existing world order necessitates renewed thinking about the strategy and resources needed to ensure the continued functioning of extended deterrence. This is true with regard to U.S. conventional force and nuclear force preparations for deterrence.

Sino-Russian Coordination: Potential Deterrence Challenges at the Strategic Force Level

At the strategic nuclear level of consideration, Beijing's and Moscow's combined strategic nuclear and advanced conventional capabilities could, in the future, present a challenge to the continuing survivability of U.S. strategic retaliatory forces akin to when the massive Soviet ICBM deployments of the 1970s and early 1980s created a "window of vulnerability" for U.S. ICBM capabilities.⁸⁰ Those who may deem such a threat to be far-fetched should recall that in 1969, at the height of the Sino-Soviet split, the Soviet Union reportedly raised the possibility of a Soviet-U.S. "joint attack on China's nuclear facilities."⁸¹

Some estimates suggest that China could deploy at least 4,000 nuclear weapons by the early 2030s if it deploys MIRVed ICBMs in the new ICBM fields under

⁸⁰ See for example, President's Commission on Strategic Forces, *Report of the President's Commission on Strategic Forces* (April 1983).

⁸¹ Robert Farley, "How the Soviet Union and China Almost Started World War III," *National Interest*, February 9, 2016, available at <https://nationalinterest.org/feature/how-the-soviet-union-china-almost-started-world-war-iii-15152>. See also, Callum Hoare, "World War II: Moscow Probed US Over 'Joint Attack on China's Nuclear Facilities,'" *Express* (UK), August 13, 2020, available at <https://www.express.co.uk/news/world/1322440/world-war-3-moscow-nuclear-attack-china-us-soviet-union-cold-war-beijing-spt>.

construction.⁸² When combined with Russia's 1,550 New START-accountable deployed strategic nuclear weapons, its unaccountable strategic nuclear weapons and its arsenal of non-strategic nuclear weapons, the potential deterrence implications of combined Sino-Russian capabilities become much more significant.

For example, given the potential for Sino-Russian strategic coordination in hostilities against the United States, the adequacy of U.S. deterrence capabilities must be measured against the *combined forces* of two nuclear great powers, not each separately—a wholly unprecedented condition. To serve deterrence purposes, U.S. nuclear forces must be *manifestly* survivable against a potential strike by this prospective combination of forces.

It has long been recognized that forces that are vulnerable to attack may invite an attack in a crisis rather than deter attack. As ADM Richard Mies, former Commander of U.S. Strategic Command, has pointed out, "...below certain [U.S. force] levels, potential adversaries may be encouraged to challenge us. A smaller arsenal may appear to be a more tempting and easier target for preemption...."⁸³

The survivability of U.S. strategic retaliatory forces against a Sino-Russian attack may come to the forefront of U.S. concerns given the combination of: 1) the large reductions in U.S. strategic force levels following the Cold War; 2) the contemporary buildup of Russian and Chinese strategic nuclear forces; and, 3) the prospective enormous combined numbers of Russian and Chinese strategic nuclear warheads. The "window of vulnerability" that developed decades ago may become a significant renewed

⁸² China's new DF-41 ICBM reportedly can carry "up to 10 warheads." See, Center for Strategic and International Studies, *DF-41 (Dong Feng-41/CSS-X-20)*, July 31, 2021, available at <https://missilethreat.csis.org/missile/df-41/>.

⁸³ Adm. Mies, USN (Ret.), op. cit.

challenge as both Russia and China deploy strategic nuclear forces in ever greater number and sophistication with the explicit purpose of negating the U.S. strategic deterrent and providing coercive cover for their own expansionist aggression. Preserving the survivability of forces needed for a credible retaliatory deterrent threat may again become a challenge given the limited number of U.S. retaliatory forces and the potential number of Sino-Russian forces that could be targeted against them.

This reality may be disturbing because for many commentators this concern has been considered part of a happily forgotten past. But, it is not “worst-case analysis.” It simply recognizes the harsh realities of the emerging deterrence context.

For example, every U.S. administration has recognized the unique contributions for deterrence made by ICBMs. To preserve their survivability over time, the United States may well need to consider the number, type, and basing mode of this land-based deterrent.

In the 1980s, the United States considered multiple deployment options for the MX (“Peacekeeper”) ICBM, including a multiple protective shelter basing scheme, deployment on small submarines, and an air-basing mode.⁸⁴ These options were ultimately rejected due to cost, operational, environmental, and other considerations. These options may still be unacceptable, but the question of preserving a survivable, land-based deterrent in the face of a prospective combined Sino-Russian force warrants consideration.

In principle, some protection of the ICBM force could be achieved through a variety of measures, including dispersal, mobility, concealment, and measures of active and passive defense (to include missile defense and silo

⁸⁴ Office of Technology Assessment, *MX Missile Basing* (Washington, D.C.: U.S. Government Printing Office, September 1981), available at <https://ota.fas.org/reports/8116.pdf>.

hardening). An “adaptive preferential defense” concept may be useful in minimizing the vulnerability of U.S. ICBMs to preemptive attack. As described in a 1981 Office of Technology Assessment report, “Preferential defense is a tactic for multiplying the effectiveness of a defensive system if it is only required to defend a subset of the targets under attack.”⁸⁵

In addition, a survivable bomber force also provides unique deterrence value. As ADM Richard has noted, “Bombers are among the most flexible, visible, and versatile leg of our nation’s delivery platforms.”⁸⁶ It reportedly has been more than 30 years since U.S. bombers have been on alert.⁸⁷ Given the prospective Sino-Russian strategic threat, attention to the alert status of the bomber force may again be in order. Restoring the bomber alert status could improve its survivability and send a clear deterrent message to adversaries.

***Deterrence Implications of the Potential for
Sino-Russian Coordinated Strikes:
U.S. Deterrence Threat Options***

Corresponding to the survivability of U.S. retaliatory forces is the question of the strategic deterrence threat options that the United States can credibly brandish against two hostile great nuclear powers who may be acting in concert and simultaneously – each of which has an expansive number of

⁸⁵ Ibid.

⁸⁶ *Statement of Charles A. Richard, Commander, United States Strategic Command, Before the Senate Armed Services Committee, April 20, 2021, p. 14, available at <https://www.armed-services.senate.gov/imo/media/doc/Richard04.20.2021.pdf>.*

⁸⁷ Robert Hill, “Why America Should Place Some Bombers (And Tankers) Back On Nuclear Alert,” *19fortyfive.com*, May 21, 2021, available at <https://www.19fortyfive.com/2021/05/why-america-should-place-some-bombers-and-tankers-back-on-nuclear-alert/>.

targets the United States may need to hold at risk for deterrence purposes. The question is whether that portion of the U.S. force posture that could survive a combined Sino-Russian strategic attack would have sufficient capacity and flexibility to support credible U.S. deterrence threat options against both Russia and China simultaneously.

For example, if a sizable portion of the number of U.S. strategic warheads on ballistic missile carrying submarines were to survive a Sino-Russian strategic attack, would that level of U.S. retaliatory potential provide a credible deterrent to a Sino-Russian attack in the first place, or to follow-on Sino-Russian strikes if deterrence fails to prevent their first strike? It may well be true that, "Just one boat can carry enough nuclear warheads to place two warheads on each of Russia's fifty largest cities."⁸⁸ But that claim tells us nothing about deterrence, *per se*. The critical question is whether the type of deterrent threat typically associated with reduced U.S. force numbers, referred to as "counter-city," or "minimum deterrence," is an acceptable measure of capability for U.S. deterrence purposes, which is the fundamental reason for the existence of U.S. strategic forces.

For over five decades and on a fully bipartisan basis, the United States has explicitly rejected a "counter-city," "minimum deterrence" policy – sometimes also referred to as an "assured destruction" threat – despite its relatively modest retaliatory force requirements, because of its potential incredibility as a deterrent and its moral repugnance. Instead, the United States has pursued a deterrence policy intended to provide a range of U.S. threat options to support credible deterrence in a variety of possible circumstances. The targets to be held at risk for deterrence purposes potentially could include opponents' military capabilities, command and control capabilities and civilian leadership, "while minimizing to the maximum

⁸⁸ Perry and Collina, *op. cit.*, p. 119.

extent possible collateral damage to population and civilian infrastructure.”⁸⁹ This “flexible response” approach to deterrence has been made explicit in multiple open U.S. policy documents for decades.

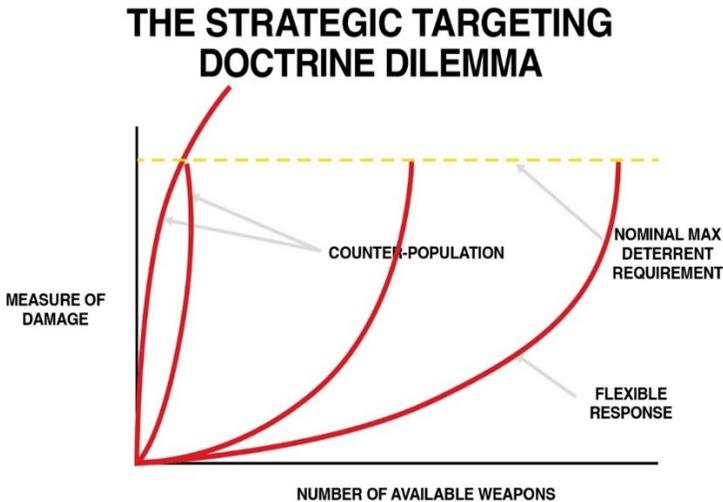
However, the potential for a combined Sino-Russian attack suggests the future possibility that the United States would essentially be left with a minimum deterrent. In addition to the moral and legal issues associated with threatening to destroy an opponents’ cities with nuclear weapons, such an approach to deterrence may well not be credible in numerous critical deterrence contexts—particularly including a Sino-Russian attack focused on U.S. retaliatory forces. U.S. retaliatory options could be reduced substantially, and a relatively small number of surviving U.S. assets could be incapable of holding at risk the extensive assets that may be needed for the credible deterrence of these two great power adversaries, including their military forces and leadership. Such a limited approach to deterrence could actually increase the risk of deterrence failure by presenting an incredible, ineffective U.S. deterrence threat to two revanchist great powers.

As ADM Mies has rightly observed, if the number of U.S. retaliatory forces is reduced, the “greatest concern” is that there would be a corresponding reduction in “the range of flexible response options designed to provide the president with *minimum use of force*. Ultimately, below a certain level, to remain credible our targeting doctrine and policies would have to shift away from our traditional flexible response targets to counter-population targets... This transition would be counter to our historical practice, politically less tolerable, and morally repugnant.”⁹⁰

⁸⁹ Mies, op. cit., p. 16.

⁹⁰ Ibid., p. 16.

The Figure below is ADM Mies' notional illustration of this practical relationship between survivable strategic force numbers and U.S. deterrence threat options.⁹¹



As noted, a minimum deterrence (“counter-population”) posture has long been rejected by U.S. administrations on a bipartisan basis. For example, the Clinton Administration concluded:

We will retain strategic nuclear forces sufficient to deter any future hostile foreign leadership with access to strategic nuclear forces from acting against our vital interests and to convince it that seeking a nuclear advantage would be futile. Therefore, we will continue to maintain nuclear forces of sufficient size and capability to hold at

⁹¹ *Ibid.*, p. 15. Used here with permission.

risk a broad range of assets valued by such political and military leaders.⁹²

Similarly, the Obama Administration noted that the United States will “maintain significant counterforce capabilities against potential adversaries. The new [nuclear employment] guidance does not rely on a ‘counter-value’ or ‘minimum deterrence’ strategy.”⁹³ Moreover, it stated that the United States seeks “to minimize collateral damage to civilian populations and civilian objects” and “will not intentionally target civilian populations or civilian objects.”⁹⁴ And the Trump Administration concluded that the United States must be able to “respond to a broad range of contingencies with tailored options,”⁹⁵ declaring “the United States will field nuclear and non-nuclear capabilities that provide U.S. leadership a range of tailored response options to deter escalation and accomplish U.S. objectives if deterrence fails. U.S. nuclear forces are designed, sized, and postured in such a way that no adversary should ever contemplate a successful disarming first strike or limited nuclear employment.”⁹⁶ In addition, it reaffirmed, “The

⁹² The White House, *A National Security Strategy of Engagement and Enlargement*, July 1994, p. 12, available at <https://history.defense.gov/Portals/70/Documents/nss/nss1994.pdf?ver=YPdbuschbfpPz3tyQQxaLg%3d%3d>.

⁹³ Department of Defense, *Report on the Nuclear Employment Strategy of the United States*, June 12, 2013, p. 4, available at https://uploads.fas.org/2013/06/NukeEmploymentGuidance_DODbrief061213.pdf.

⁹⁴ *Ibid.*, pp. 4-5.

⁹⁵ Department of Defense, *Nuclear Posture Review*, February 2018, p. 44, available at <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>.

⁹⁶ Department of Defense, *Report on the Nuclear Employment Strategy of the United States – 2020*, November 30, 2020, p. 4, available at <https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/NCB/21-F->

United States has for decades rejected a deterrence strategy based on purposely threatening civilian populations, and the United States will not intentionally target civilian populations.”⁹⁷

In short, for over five decades the United States, on a fully bipartisan basis, has favored a deterrence policy of “flexible response” that can credibly hold at risk a range of opponents’ critical assets while avoiding societal damage to the greatest extent practicable. The desirability of flexible response options has been captured in multiple official policy documents including, for example, Presidential Directive-59 (PD-59) – the “Countervailing Strategy” of the Carter Administration. As then-Secretary of Defense Harold Brown stated in 1979, “It is tempting to believe, I realize, that the threat to destroy some number of cities – along with their population and industry – will serve as an all-purpose deterrent. The forces required to implement such a threat can be relatively modest....Unfortunately, however, a [deterrence] strategy based on assured destruction alone no longer is wholly credible....a strategy and a force structure designed only for assured destruction is not sufficient for our [deterrence] purposes.”⁹⁸

The threat to U.S. retaliatory forces posed by the prospective combination of China’s and Russia’s strategic offensive forces suggests the possibility that the U.S. strategic deterrent could be reduced to an incredible and morally repugnant “minimum deterrent,” and thereby increase the potential for deterrence failure at the strategic and regional levels. This possibility now warrants careful consideration.

0591_2020_Report_of_the_Nuclear_Employment_Strategy_of_the_United_States.pdf.

⁹⁷ Ibid., p. 6.

⁹⁸ Harold Brown, *Department of Defense Annual Report Fiscal Year 1980* (Washington, D.C.: USGPO, January 25, 1979), pp. 75-76.

Sino-Russian Coordination: Potential Deterrence Challenges at the Theater Nuclear Level

While coordinated Russian-Chinese threats and actions would present unprecedented regional and strategic deterrence challenges for the United States, as discussed above, Sino-Russian coordination could also present deterrence challenges at the level of non-strategic (theater) nuclear forces. How so? The extreme imbalance in theater nuclear capabilities in favor of Russia and China, coupled with their aggressive foreign policy designs and increasingly strident nuclear threats against Western countries and Japan, suggest that the United States must hedge against the threat or reality of opponents' regional nuclear first use in *two* theaters *simultaneously*. This is a novel challenge that the United States must be prepared to confront if U.S. extended deterrence commitments to allies are to be credible and seen as such by allies and adversaries alike.

Russia and China continue to build and deploy additional non-strategic nuclear weapons, while the United States has greatly reduced the number of its deployed nuclear weapons overseas. Unclassified estimates indicate that Russia's stockpile of deployed non-strategic or theater nuclear weapons alone may be 10 times or more the number of similar U.S. weapons.⁹⁹

⁹⁹ See, for example, Amy F. Woolf, *Nonstrategic Nuclear Weapons*, Congressional Research Service, Report RL32572, March 7, 2022, available at <https://crsreports.congress.gov/product/pdf/RL/RL32572/46>. Also see Mark B. Schneider, "Russian Nuclear Strategy," *Journal of Strategy and Politics*, Vol. 2, No. 1 (2017), p. 123, available at <https://studyofstrategyandpolitics.files.wordpress.com/2017/12/russian-nuclear-strategy.pdf>; and Robert G. Joseph, "Second to One," *National Review*, July 2, 2012, available at <https://www.nationalreview.com/2012/07/second-one-robert-g-joseph/>.

As demonstrated by Russia's ongoing aggression against Ukraine and numerous nuclear threats, the prospect that Russia might use nuclear weapons in a conflict must be taken seriously. Indeed, President Putin has established the predicate for Russian nuclear employment in Ukraine by declaring that, "A threat absolutely unacceptable to us was being systemically created" in Ukraine.¹⁰⁰

Russia's military doctrine is clear on the conditions for nuclear weapons employment—and those conditions include non-nuclear threats that pose an existential threat to the Russian Federation.¹⁰¹ Putin's statements suggest that Russia faces an existential threat from Ukraine. In a televised speech to the Russian people on February 24, 2022, he stated:

For the United States and its allies, it is a policy of containing Russia, with obvious geopolitical dividends. For our country, it is a matter of life and death, a matter of our historical future as a nation. *This is not an exaggeration; this is a fact. It is not only a very real threat to our interests but to the very existence of our state and to its sovereignty.* It is the red line which we have spoken about on numerous occasions. They have crossed it.¹⁰²

¹⁰⁰ Alina Selyukh, "Here's what Putin said about Ukraine in his Victory Day speech," *NPR*, May 9, 2022, available at <https://www.npr.org/2022/05/09/1097547054/russia-marks-wwii-victory-overshadowed-by-ukraine>.

¹⁰¹ *Executive Order on Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence*, June 2, 2020, available at https://archive.mid.ru/en/web/guest/foreign_policy/international_safety/disarmament/-/asset_publisher/rp0fiUBmANaH/content/id/4152094.

¹⁰² "Transcript: Vladimir Putin's Televised Address on Ukraine," *Bloomberg News*, February 24, 2022, available at <https://www.bloomberg.com/news/articles/2022-02-24/full-transcript-vladimir-putin-s-televised-address-to-russia-on-ukraine-feb-24>. (Emphasis added).

By one estimate, Putin has made nearly three dozen explicit nuclear threats to date against NATO.¹⁰³ Indeed, the rhetoric used by Russian leaders has become increasingly strident and ominous. For example, former President Dmitri Medvedev declared that “the United States and their useless mongrels should remember the words of scripture: ‘Judge not, lest you be judged; So that one day the great day of God’s wrath will not come to their house.’” He warned that “the idea to punish a country with the largest nuclear potential is absurd and potentially creates the threat to mankind's existence.”¹⁰⁴ If the West continues to arm Ukraine, he argued, it could lead to “a full-fledged nuclear war.”¹⁰⁵ Other Russian officials have made similar dire warnings.¹⁰⁶

China, as well, is rapidly expanding its theater nuclear forces, and its development of nuclear capable short-, medium-, and intermediate-range ballistic missiles such as the DF-15 (CSS-6) suggests that nuclear payloads are possible. Moreover, Beijing apparently has threatened Japan with nuclear strikes should Tokyo intervene to

¹⁰³ Peter Huessy, “The New Nuclear Window of Vulnerability,” *Warrior Maven*, July 11, 2022, available at <https://wariormaven.com/global-security/nuclear-war-russia-ukraine>.

¹⁰⁴ Brett Wilkins, “Russian Official Makes Nuclear Threat Over US Support for Ukraine War Crimes Probe,” *Common Dreams*, July 6, 2022, available at <https://www.commondreams.org/news/2022/07/06/russian-official-makes-nuclear-threat-over-us-support-ukraine-war-crimes-probe>.

¹⁰⁵ Greg Norman, “Medvedev: NATO's involvement in Russia-Ukraine conflict brings risk of 'full-fledged nuclear war',” *Fox News*, May 12, 2022, available at <https://www.foxnews.com/world/medvedev-nato-russia-ukraine-war-nuclear-warning>.

¹⁰⁶ See, for example, the June 17, 2022 congressional letter to President Biden quoting several Russian officials, available at https://gop-foreignaffairs.house.gov/wp-content/uploads/2022/06/20220617_POTUS-Ltr_US-Response-to-Russian-Nuclear-Intimidation.pdf.

defend Taiwan in the event of Chinese military action.¹⁰⁷ Similarly, China has threatened Australia with “retaliatory punishment” if Australian forces intervene in any Taiwan scenario¹⁰⁸ and has suggested that Australia’s close cooperation with the United States and United Kingdom makes it a “potential nuclear war target.”¹⁰⁹

Is the United States currently prepared to deter credibly two simultaneous regional conflicts in which Sino-Russian nuclear escalation is threatened or carried out in Europe and Asia, without risking obvious escalation to a highly-destructive strategic nuclear level? The significant imbalance in theater nuclear capabilities and deployments suggests otherwise and calls into question the credibility of U.S. extended deterrent threats.

Why so? In the near-absence of proportional, regional U.S. nuclear capabilities, deterrence could fail because Russia and China understandably question whether the United States would be willing to turn a regional conflict into a potentially suicidal intercontinental nuclear war, and thus calculate that they are at greater freedom to engage in regional, limited nuclear threats or employment. This was a Cold War concern for the United States in its extension of deterrence to allies. At that time, Washington addressed this problem largely via the presence of forward-deployed forces, including thousands of theater nuclear weapons, and limited strategic options. But those theater nuclear forces have long since nearly been eliminated.

¹⁰⁷ “China threatens Japan with nuclear war over intervention in Taiwan,” *op. cit.*

¹⁰⁸ Hu Xijin, “China needs to make a plan to deter extreme forces of Australia,” *Global Times*, May 7, 2021, available at <https://www.globaltimes.cn/page/202105/1222899.shtml>.

¹⁰⁹ Yang Sheng, “Nuke sub deal could make Australia ‘potential nuclear war target’,” *Global Times*, September 16, 2021, available at <https://www.globaltimes.cn/page/202109/1234460.shtml>.

It must be recognized that this deterrence challenge does not simply follow from extensive Russian and Chinese theater nuclear capabilities and the absence of comparable U.S. capabilities; it is not just a question of nuclear weapons “bean counting.” Rather, this deterrence challenge follows from the diversity of Sino-Russian nuclear capabilities and their revanchist political goals and actions that directly threaten U.S. allies and partners. Their international political goals are the driver of their arms and behavior, and the source of this new deterrence challenge. Should Moscow and Beijing believe that the United States lacks either the will or the capability to respond *proportionally* to their regional first use of nuclear weapons, extended deterrence may well be undermined, and the risks of Sino-Russian regional military aggression will grow.

Recognizing this, the 2018 *Nuclear Posture Review* called for development of a new nuclear sea-launched cruise missile (SLCM-N) to “provide a needed non-strategic regional presence, an assured response capability, and an [Intermediate-Range Nuclear Forces] INF-Treaty compliant response to Russia’s continuing Treaty violation.”¹¹⁰ According to DoD, this capability was seen as necessary to provide greater flexibility in deterrence options and thereby to strengthen extended deterrence and the assurance of allies.¹¹¹

Given Russia’s and China’s stream of coercive regional nuclear threats, diverse U.S. theater response options that *are proportional to the threats* and readily available in

¹¹⁰ Department of Defense, *Nuclear Posture Review*, February 2018, op. cit., p. 55.

¹¹¹ Office of the Under Secretary of Defense for Policy, Department of Defense, “The Sea-Launched Cruise Missile-Nuclear (SLCM-N): Policy and Strategy,” cited in *Arms Control and International Security Papers*, Vol. 1, No. 11, *Strengthening Deterrence and Reducing Nuclear Risks, Part II: The Sea-Launched Cruise Missile-Nuclear (SLCM-N)*, July 23, 2020, p. 6, available at <https://www.state.gov/wp-content/uploads/2020/07/T-Paper-series-SLCM-N-Final-508.pdf>.

different theaters may well be of great value for credible extended deterrence. Senior U.S. military leaders have observed that *prudent* planning for deterrence now points to the need for continued development of the SLCM-N. The need to hedge against increasing uncertainties regarding Sino-Russian regional nuclear threats helps to explain why that is true. It also helps explain support for the SLCM-N on the part of the Chairman and Vice Chairman of the Joint Chiefs of Staff, the Commander of U.S. Strategic Command, and the Commander of U.S. European Command. As ADM Richard has stated, "The current situation in Ukraine and China's nuclear trajectory have further convinced me a deterrence and assurance gap exists.... I support reestablishing SLCM-N as necessary to enhance deterrence and assurance."¹¹²

In short, the United States must hedge against expanded uncertainties regarding extended deterrence at regional, theater, and strategic levels. In particular, the stark U.S. disadvantage in theater nuclear forces may foster the belief in Beijing and Moscow that their coercive nuclear threats or employment can support their expansionist territorial goals while their strategic nuclear capabilities will deter the United States at the strategic nuclear level. To hedge against this unprecedented deterrence challenge, a reconsideration of the size, characteristics, and deployment of U.S. theater nuclear forces is warranted, with the goal of having an overall deterrence force posture that is more flexible and adaptable to the new trilateral strategic environment. Hedging against Sino-Russian regional nuclear threats may now require expanding U.S. options for non-strategic nuclear weapons and delivery systems to strengthen the credibility of U.S. extended deterrence guarantees and thus

¹¹² Bryant Harris, "US nuclear commander backs sea-launched cruise missile Biden would cancel," *Defense News*, June 7, 2022, available at <https://www.defensenews.com/2022/06/07/us-nuclear-commander-backs-sea-launched-cruise-missile-biden-would-cancel/>.

assuring allies. The now-resurrected 1980s criticism of this direction,¹¹³ i.e., that such forces reflect a rejection of deterrence in favor of “war-fighting,” simply misses their potential value for deterrence in the emerging threat environment.

Hedging Against Expanded Uncertainties Regarding Deterrence Requirements

The need for hedging against uncertainty in U.S. deterrence policy was recognized two decades ago in the 2001 *Nuclear Posture Review* (NPR). Then-Defense Secretary Donald Rumsfeld emphasized at the time, “the probability of surprise and ubiquity of uncertainty are dominant strategic considerations for the U.S.”¹¹⁴ One of the authors of this *Occasional Paper* commented at the time, “The [2001] NPR addressed the fundamental challenge...[that]...the circumstances of the contemporary security environment introduce even greater uncertainties into the functioning of deterrence than existed during the Cold War, undermining its predictability and reliability. Recognizing this uncertainty marks a significant shift in perspective regarding U.S. strategic policy, with far-reaching implications.”¹¹⁵

¹¹³ See the discussion in, Rose Gottemoeller, “The Case Against a New Arms Race: Nuclear Weapons Are Not the Future,” *Foreign Affairs Online*, August 9, 2022, available at <https://www.foreignaffairs.com/world/case-against-new-arms-race>.

¹¹⁴ Donald H. Rumsfeld, *Annual Report to the President and the Congress*, 2002, p. 84, available at https://history.defense.gov/Portals/70/Documents/annual_reports/2002_DoD_AR.pdf?ver=2014-06-24-153732-117.

¹¹⁵ Keith B. Payne, “The Nuclear Posture Review: Setting the Record Straight,” *The Washington Quarterly* (Vol. 28, No. 3, June 2005), p. 137, available at <https://ciaotest.cc.columbia.edu/olj/twq/sum2005/sum2005i.pdf>.

Almost two decades later, the 2018 *Nuclear Posture Review* (NPR) essentially repeated the point that the United States must hedge against uncertainties in its elaboration of deterrence policy.¹¹⁶ These uncertainties include likely adversary goals, determination, modes of communication and decision making, and willingness to inflict and accept costs in pursuit of their goals. Each of these factors can affect if and how deterrence functions. The multiplication of such uncertainties in the emerging trilateral deterrence context, and the potential for Sino-Russian coordination, increase the imponderables involved in predicting “how much is enough?” for U.S. deterrence needs. Defining that standard has always been more art than science, but it is made even more problematic by the expansion of participants, their revanchist goals, and corresponding hostility to the United States.

Deterrence is a function of leadership decision making, which can be affected by many different factors. Consequently, the application of deterrence is an enormous and unavoidably difficult ongoing undertaking. As already emphasized, to do so properly requires an understanding, to the extent feasible, of the opponent to be deterred in the context of the engagement, including the opponent’s foreign and domestic goals (how those goals are prioritized and the opponent’s determination to achieve those goals), modes of decision making, willingness to accept risk, willingness to absorb and inflict hurt, cultural norms and values, perceptions of the deterrer, and even the health of key leaders, among many other factors potentially pertinent to decision making. There are few, if any, universal constants in this regard; instead there is a wide variety of operating factors, some seen, others unseen, that can vary greatly across time, place and opponent, and may be decisive in determining if and how deterrence will function.

¹¹⁶ Department of Defense, *Nuclear Posture Review*, February 2018, op. cit., p. IX.

In short, rational leadership decision making can vary greatly because unique decision-making factors can drive leaders' perceptions and calculations of value, cost and risk in surprising, unpredictable directions. As a prominent historian and political scientist jointly observed: "Not all actors in international politics calculate utility in making decisions in the same way. Differences in values, culture, attitudes toward risk-taking, and so on vary greatly. There is no substitute for knowledge of the adversary's mind-set and behavioral style, and this is often difficult to obtain or to apply correctly in assessing intentions or predicting responses."¹¹⁷ As a consequence, the functioning of deterrence "is heavily context dependent."¹¹⁸

For the application of deterrence, generalizations often are less helpful than an understanding of the opponent's worldview, priorities, calculations and definition of reasonable behavior. As defense analyst Kurt Guthe has observed, "In matters related to deterrence, generalizations can be useful, but specifics are essential. The questions that must always be kept in mind are: Who is being deterred? From what action? By whom? For what reason? By what threats? And in what circumstances?"¹¹⁹

Consequently, as suggested above, there can be no single "assured destruction" standard that defines the U.S. strategic deterrent, as was declared U.S. practice for more than a decade during the Cold War. The declared U.S. "assured destruction" deterrent was based on the expectation that threatening large portions of Soviet population and industry was an adequate basis for strategic deterrence. And, as noted above, all other opponents were

¹¹⁷ Gordon A. Craig, Alexander L. George, op. cit., p. 188.

¹¹⁸ Ibid., p. 192.

¹¹⁹ See, Kurt Guthe, "Nuclear Weapons Acquisition and Deterrence," in *Understanding Deterrence*, Keith Payne, ed., (New York: Routledge, 2013), p. 12. See also, Herman Kahn, *On Escalation: Metaphors and Scenarios* (New York: Praeger, 1965), p. 23.

considered lesser included cases. This became the declared adequacy standard for U.S. strategic forces for more than a decade. It made the calculation of U.S. strategic deterrence requirements a relatively easy, indeed almost mechanical task, i.e., how many survivable U.S. strategic nuclear weapons were needed to threaten the destruction of large percentages of Soviet population and industry?¹²⁰ Much public commentary on what is and is not needed for strategic deterrence continues to be derived from this problematic Cold War standard.

However, in the emerging multilateral deterrence context—given expansionist and hostile opponents and the wide range of plausible contexts in which U.S. deterrence must function—multiple, simultaneous measures of adequacy are needed. Those measures must take into account the many uncertainties involved in their definition, including how opponents' leaders perceive and define acceptable risks in relation to their various goals. Once those measures are agreed upon, it must be recognized that they likely will shift over time, perhaps rapidly, in a dynamic deterrence threat environment. The variety of unavoidable uncertainties involved in setting multiple deterrence adequacy standards is daunting. For example, no one can know with confidence what U.S. deterrence requirements will be in 2030 given the range of opponents and contexts in which U.S. capabilities must support deterrence. Nevertheless, it is necessary to plan now to sustain deterrence over the course of decades. As a result, the need to hedge against setting those standards incorrectly, particularly too narrowly, is acute.

The unprecedented level of uncertainties introduced by the multilateral deterrence context calls for renewed

¹²⁰ See Alain Enthoven and K. Wayne Smith, *How Much is Enough? Shaping the Defense Program, 1961-1969* (New York: Harper and Row, 1971), pp. 67, 207-208.

consideration of the adequacy standards for U.S. deterrence capabilities. As two analysts have rightly observed:

...the present need for nuclear deterrence in general does not take policymakers and citizens very far in determining “how much is enough” to deter given adversaries, or in determining “how much is too much.” Policymakers often err on the side of caution, but what is cautious depends on context and how risks are defined.¹²¹

The current U.S. nuclear modernization program was largely set in a time of great optimism regarding U.S. relations with Russia and China. The intensification of Russian and Chinese hostility related to their respective revanchist goals, and the associated *expanded deterrence uncertainties* of the multilateral deterrence context highlight the potential danger of missing the need now to hedge adequately against these expanded uncertainties in U.S. considerations of “how much is enough?” for deterrence.

Hedging Against the Possibility of Deterrence Failure

Finally, the expansion of uncertainties and unknowns regarding the functioning of deterrence applies to both *how* and *whether* deterrence will function. The inconvenient truth is that no one knows if optimistic predictions in this regard are true or false, or even what probability may be assigned to them as being true. During the Cold War and after, commentators and officials alike often made

¹²¹ George Perkovich and Pranay Vaddi, *Proportionate Deterrence: A Model Nuclear Posture Review* (Washington, D.C.: Carnegie Endowment for International Peace, 2021), p. 97, available at https://carnegieendowment.org/files/Perkovich_Vaddi_NPR_full2.pdf.

predictions with unbounded confidence;¹²² but, even then, in a less complex context, great confidence was largely speculative. To the extent that the United States is unprepared for the possibility of deterrence failure, it is unprepared for the realities of the emerging multilateral deterrence context. This point is not to detract whatsoever from the highest priority that must be placed on deterring conflict, but to recognize that even our best efforts to do so are not foolproof.

ADM Richard has cautioned that “Every operational plan in the Department of Defense, and every other capability we have in DOD, rests on the assumption that strategic deterrence, and in particular nuclear deterrence, ...is holding right,” and that, “if that assumption is not met, particularly with nuclear deterrence, nothing else in the Department of Defense is going to work the way it was designed.”¹²³

The implications of this harsh reality are numerous. Most obvious perhaps is the potential value of active and passive strategic defenses to help mitigate the prospective destruction from Chinese, Russian or North Korean limited, coercive nuclear attacks and to reduce the coercive value of their threats to launch such attacks. In the past, some

¹²² For example, “Our conclusion, in its narrowest terms, must be that the deliberate resort to war by a nuclear power against a power capable of effective retaliation is permanently ruled out...the deliberate resort to major nonnuclear warfare between such powers is also ruled out.” Louis Halle, “Does War Have a Future?” *Foreign Affairs*, Vol. 52, No. 1 (October 1973), p. 23; and, “Deterrence is ensured by having a survivable [nuclear] capability to hold at risk what potentially hostile leaders value, and we will maintain that capability.” John Deutch, Testimony in, U.S. House, Committee on Foreign Affairs, *U.S. Nuclear Policy: Hearings*, 103rd Congress, 2nd Session (Washington, D.C.: USGPO, 1995), p. 36. (Emphasis added).

¹²³ Quoted in Amy Hudson, “Richard Says Nuclear Deterrence Connected to All Other DOD Capabilities,” *Air Force Magazine*, May 7, 2021, available at <https://www.airforcemag.com/richard-says-nuclear-deterrence-connected-to-all-other-dod-capabilities/>.

prominent scholars, including Herman Kahn and Colin Gray, emphasized the need for U.S. defensive capabilities to mitigate the catastrophic consequences of deterrence failure. In the emerging deterrence context, defenses against coercive threats may serve both to strengthen deterrence and to limit damage if deterrence initially fails.

To a considerable extent, the level of reasonable confidence in deterrence functioning shapes the *potential* value of such defenses, i.e., if deterrence can be expected to prevent attack reliably and predictably, the need for defensive capabilities to limit damage in the event of deterrence failure is reduced. Yet, as confidence in the reliable, predictable functioning of deterrence wanes in the multilateral context, the capability to reduce damage in the event of deterrence failure can only be regarded as increasingly prudent. That is, in the emerging deterrence context in which unbounded confidence in the predictable functioning of deterrence is increasingly open to question, the potential value of defenses must increase, particularly including protection against limited, coercive nuclear threats. This is another inconvenient truth.

There have been several periods in U.S. history where robust nationwide missile defenses were considered but rejected as either too costly, too technologically immature, or inconsistent with arms control objectives and accepted strategic policy that equated mutual vulnerability with stability. For example, in the late 1960s, the limited Safeguard anti-ballistic missile (ABM) system—a successor to the Sentinel ABM system—was intended to provide a point defense of U.S. retaliatory forces against Soviet attack and a relatively modest Chinese missile threat,¹²⁴ but was

¹²⁴ In 1969, Harold Brown, later Secretary of Defense in the Carter Administration, advocated for the deployment of 100 to 1000 U.S. missile defense interceptors to defend against the emerging missile threat from China. See, Harold Brown, "Security Through Limitations," *Foreign Affairs*, Vol. 47, No. 3 (April 1969), p. 430.

decommissioned and dismantled shortly after becoming operational.¹²⁵

In 1983, President Reagan announced his Strategic Defense Initiative (SDI), which was intended to provide a comprehensive defense against Soviet missile attacks by deploying a variety of terrestrial and space-based defensive components. In the 1990s, President George H.W. Bush proposed a scaled-down missile defense program that would focus on protection against limited ballistic missile strikes from any source, including from accidental or unauthorized launches. The “Global Protection Against Limited Strikes” (GPALS) program was proposed as a cooperative venture with both NATO and Russia.

However, concerns over cost and technological feasibility, a general belief that mutual vulnerability was the best way to ensure deterrence and that missile defenses were destabilizing, and continued U.S. adherence to the 1972 U.S.-Soviet ABM Treaty led to the scaling back of strategic missile defense programs and the absence of deployment.¹²⁶

It was not until President George W. Bush withdrew the United States from the ABM Treaty in 2002 and an initial deployment of “rudimentary” missile defenses against “rogue state” missile threats took place in 2004 – more than

¹²⁵ See edited extract from *Department of the Army Historical Summary, FY 1969* (Washington, D.C.: U.S. Army Center of Military History, 1973, pp. 31-33, 89-90), available at

<https://www.mda.mil/global/documents/pdf/1969%20Sentinel-Safeguard.pdf>. Also see John W. Finney, “Safeguard ABM System to Shut Down; \$5 Billion Spent in 6 Years Since Debate,” *The New York Times*, November 25, 1975, available at <https://www.nytimes.com/1975/11/25/archives/safeguard-abm-system-to-shut-down-5-billion-spent-in-6-years-since.html>.

¹²⁶ Atomic Heritage Foundation, “Strategic Defense Initiative (SDI),” July 18, 2018, available at <https://www.atomicheritage.org/history/strategic-defense-initiative-sdi>.

two decades after Ronald Reagan unveiled his proposed SDI program—that the United States began to focus again on deployment and the potential damage-limiting benefits of missile defenses.

In the emerging trilateral context wherein uncertainties of deterrence functioning predictably expand, greater emphasis on missile defenses that provide both a deterrent to adversary missile strikes and a measure of “insurance” against the failure of deterrence is prudent. In this regard, it may be time to consider the benefits of enhancing cooperative missile defense approaches that align with the security interests of U.S. allies and strategic partners.

Most recently, Israel has developed a laser system for missile defense called “Iron Beam,” which has been tested successfully and may dramatically reduce the cost of defending against missile attack. As Israeli Prime Minister Naftali Bennett has stated, “The Iron Beam’s interceptions are silent, they’re invisible and they only cost around \$3.50” for each shot.¹²⁷ As one analyst has observed, “laser defense could well become a new arena of sustained collaboration in the long-standing strategic partnership” between the United States and Israel.¹²⁸

In addition to active defenses, a measure of passive defenses would be desirable in the event of deterrence failure. The United States virtually abandoned its civil defense program more than a half century ago. Reconsidering a program focused on providing some measure of protection for the American people in the event of coercive attacks would be an obvious policy shift, but

¹²⁷ Laurie Kellman, “Israel successfully tests new laser missile defense system,” *Defense News*, April 15, 2022, available at <https://www.defensenews.com/training-sim/2022/04/15/israel-successfully-tests-new-laser-missile-defense-system/>.

¹²⁸ Ilan Berman, *The Logic of Israel’s Laser Wall*, *Information Series*, No. 526 (Fairfax, VA: National Institute Press, June 23, 2022), available at <https://nipp.org/wp-content/uploads/2022/06/IS-526.pdf>.

would now be prudent as a potential hedge against the prospect of deterrence failure. Doing so should not be considered provocative by Moscow or Beijing. China reportedly has an enormous system of underground tunnels labeled the “Great Underground Wall,”¹²⁹ and Russia has long taken civil defense measures seriously; the Moscow subway, for example, apparently was built to double as a fallout shelter in the event of nuclear war.¹³⁰

In short, the emerging multilateral context creates expanded uncertainties regarding deterrence, including whether it will continue in all cases to function as hoped. Increased uncertainty in this regard is likely unavoidable. And, as noted above, to the extent the functioning of deterrence is increasingly problematic, the value of measures to protect society in the event of its failure increase. Consequently, the United States should again consider the potential roles for active and passive defenses to hedge against the prospect for deterrence failure. This is a considerable departure from the prevalent missile defense policy orientation during much of the Cold War that unmitigated U.S. societal vulnerability is a useful and necessary component of deterrence stability, and that defenses can provide no meaningful protection against attack.

¹²⁹ “The tunnels of the underground great wall are hundreds of meters underground, deep in mountain areas, and are difficult to detect from space. Details of the tunnels have not been publicized for obvious security reasons, but it is known that they are scattered across China and are not all connected to one another. They are designed to withstand nuclear and conventional attacks.” Hui Zhang, “The Defensive Nature Of China’s ‘Underground Great Wall,’” *Bulletin of the Atomic Scientists*, January 16, 2012, available at <https://thebulletin.org/2012/01/the-defensive-nature-of-chinas-underground-great-wall/>.

¹³⁰ See, for example, Georgy Manaev, “Underground Soviet shelters and the secret Metro-2,” *Russia Beyond*, December 26, 2013, available at https://www.rbth.com/science_and_tech/2013/12/26/underground_soviet_shelters_and_the_secret_metro-2_32967.html.

Arms Control in the Emerging Deterrence Context

Colin S. Gray frequently remarked that arms control works best when least needed, i.e., arms control works best when the parties involved do not have inimical goals that create hostilities among them and there are few pressures for competitive armament.¹³¹ However, as discussed above, Russia, China, and the United States do not share the same goals and have inimical foreign policy objectives. While the United States seeks continuation of a classically liberal world order, Russia and China seek to overturn a world order that they believe has been unfairly dominated by the United States and the West.

In the new deterrence environment in which Moscow and Beijing seek to overturn the existing world order, the prospects for meaningful arms control agreements may appear bleak. Over the past half century the U.S. reliance on arms control as a means to reduce the relevance of nuclear weapons has not produced the desired results—the divergence between U.S. actions to reduce reliance on nuclear weapons and the actions of potential adversaries, particularly including Russia and China, has been stark.

Nevertheless, President Biden has emphasized U.S. readiness to resume negotiations,¹³² and some commentators contend that arms control is essential now more than ever. For example, one analyst has written that the war in Ukraine means that “nuclear arms control must be strengthened and not further dismembered” and that the “strategic stability dialogue” between Washington and

¹³¹ This point is the theme of Colin S. Gray, “*House of Cards: Why Arms Control Must Fail* (Ithaca: Cornell University Press, 1992).

¹³² Quoted in Michelle Nichols, “Biden, Putin Strike Conciliatory Tones as Nuclear Arms Talks Start at U.N.” *Reuters*, August 1, 2022, available at <https://www.reuters.com/world/biden-urges-russia-china-engage-nuclear-talks-2022-08-01/>.

Moscow must be resumed.¹³³ Others have concluded that Russia's actions in Ukraine—including the potential for actual nuclear use—highlight the growing dangers of nuclear weapons and lend credence to the view that because nuclear deterrence appears increasingly fragile, “The only way to eliminate the danger is to reinforce the norm against nuclear use and pursue a more sustainable path toward their elimination.”¹³⁴ Indeed, as a summary of the Biden Administration's *Nuclear Posture Review* (NPR) notes, “The NPR underscores our commitment to reducing the role of nuclear weapons and reestablishing our leadership in arms control. We will continue to emphasize strategic stability, seek to avoid costly arms races, and facilitate risk reduction and arms control arrangements where possible.”¹³⁵

There is every reason to work to strengthen the “norm against nuclear use.” There is little doubt, however, that doing so rests largely on sustaining deterrence to minimize the prospects for war. Over the past half century, arms control negotiations have often not produced the desired results—actual results have often been the reverse of U.S. hopes and expectations.¹³⁶ As a 2020 Joint Chiefs of Staff

¹³³ Andrei Zagorski, “Arms Control Must Remain the Goal,” *Arms Control Today*, April 2022, available at <https://www.armscontrol.org/act/2022-04/features/arms-control-must-remain-goal>.

¹³⁴ Daryl G. Kimball, “New Approaches Needed to Prevent Nuclear Catastrophe,” *Arms Control Today*, April 2022, available at <https://www.armscontrol.org/act/2022-04/focus/new-approaches-needed-prevent-nuclear-catastrophe>.

¹³⁵ Department of Defense, *Fact Sheet: 2022 Nuclear Posture Review and Missile Defense Review*, March 2022, available at <https://media.defense.gov/2022/Mar/29/2002965339/-1/-1/1/FACT-SHEET-2022-NUCLEAR-POSTURE-REVIEW-AND-MISSILE-DEFENSE-REVIEW.PDF>.

¹³⁶ David J. Trachtenberg, *Overselling and Underperforming: The Exaggerated History of Arms Control Achievements*, Information Series, No. 497 (Fairfax, VA: National Institute Press, July 22, 2021), available at <https://nipp.org/wp-content/uploads/2021/07/IS-497.pdf>.

publication states: “Despite concerted US efforts to reduce the role of nuclear weapons in international affairs and to negotiate reductions in the number of nuclear weapons, since 2010 no potential adversary has reduced either the role of nuclear weapons in its national security strategy or the number of nuclear weapons it fields. Rather, they have moved decidedly in the opposite direction.”¹³⁷

Russia’s promotion of and reliance on nuclear weapons, its use of arms control negotiations to codify unilateral advantages, extensive record of arms control violations, and refusal to negotiate limits on non-strategic nuclear weapons suggest that Moscow sees arms control as a “zero-sum game,” achieving successes at America’s expense. Moreover, Moscow’s stark violation of the 1994 Budapest Memorandum—in which Russia pledged “to refrain from the threat or use of force against the territorial integrity or political independence of Ukraine”¹³⁸—suggests that Vladimir Putin places greater importance on territorial aggrandizement than on adherence to international agreements and the rule of law. This hardly bodes well for future arms control efforts with Russia.

In addition, despite U.S. efforts to encourage participation by China in arms control talks, Beijing has consistently refused to take part in any arms control negotiations. The lack of transparency on China’s part makes traditional forms of arms control exceedingly difficult. Moreover, Russia’s and China’s actions are governed by their own perceptions of national security requirements and their own foreign policy goals and

¹³⁷ Joint Chiefs of Staff, *Joint Publication 3-72, Joint Nuclear Operations*, April 17, 2020, p. I-1, available at https://irp.fas.org/doddir/dod/jp3_72_2020.pdf.

¹³⁸ *Memorandum on Security Assurances in connection with Ukraine’s accession to the Treaty on the Non-Proliferation of Nuclear Weapons*, December 5, 1994, available at <https://www.pircenter.org/media/content/files/12/13943175580.pdf>.

objectives; they are not simply mechanistically fashioned to be in line with U.S. requirements and goals—however self-evidently reasonable Washington believes its own policies and goals to be.¹³⁹

The New START Treaty, which the Biden Administration extended for five years in 2021, locks the United States into ceilings on deployed strategic nuclear weapons and delivery systems until 2026. In addition, it does not limit non-strategic or “tactical” nuclear forces where, as noted above, Russia maintains a significant advantage. As one analysis concluded, “because of the difficulties and our lack of leverage in expanding treaty negotiations to include tactical nuclear forces and production capability, if we jointly agree to reduce our strategic forces to even lower levels, the asymmetries in our respective stockpiles will become even more pronounced.”¹⁴⁰

Moreover, New START is a bilateral agreement between the United States and Russia and imposes no constraints on China’s nuclear modernization programs. Given the need to hedge against unprecedented deterrence challenges and uncertainties in the new international environment, having greater flexibility to deter the challenges posed by two great nuclear adversaries—potentially operating in concert—is likely a necessary approach to minimize the chances of deterrence failure and to strengthen the norm against nuclear use.

As suggested above, should Russia and China coordinate their actions as part of an anti-U.S. coalition,

¹³⁹ For a comprehensive historical critique of arms race dynamics, see David J. Trachtenberg, Michaela Dodge, and Keith B. Payne, *The “Action-Reaction” Arms Race Narrative vs. Historical Realities* (Fairfax, VA: National Institute Press, March 2021), available at <https://nipp.org/wp-content/uploads/2021/04/Action-Reaction-pub.pdf>.

¹⁴⁰ Mies, *op. cit.*, p. 15.

their combined nuclear capabilities would far exceed those of the United States. This could call into question the deterrence adequacy of current U.S. nuclear force levels and the prudence of continued adherence to New START limitations that were agreed to in a bilateral deterrence context much less harsh than today's.

Consequently, the United States may need to reassess a deterrence force posture constrained by New START ceilings to provide an effective and credible deterrent against a Sino-Russian military consortium. In particular, a deterrent force with great resilience and flexible options may help to offset the combined numerical advantages and greater diversity of nuclear forces possessed by Russia and China. This certainly is not to say that U.S. nuclear forces must mimic or match Russian and Chinese forces one-for-one. But, they must be adequate to hedge against the unprecedented deterrence challenges of the emerging trilateral context.

Importantly, any agreement that establishes ostensibly "equal" limits on the strategic forces of the United States, Russia, and China, will likely work to the U.S. disadvantage given asymmetries in non-strategic nuclear weapons and the prospective need for the United States to maintain sufficient capabilities to deter coordinated Sino-Russian aggression. In addition, establishing strict numerical force limits in any arms control agreement and locking in those limits for a period of years likely is incompatible with the flexibility and range of options that may be needed to hedge against the the realities of the new threat context and changing circumstances. Any future arms control agreement that does not ensure that needed flexibility correspondingly may undermine "stability." The Strategic Offensive Reductions Treaty ("Treaty of Moscow") signed in 2002 by President George W. Bush provided for a range

of operationally deployed strategic nuclear weapons¹⁴¹—a formula that may be worth revisiting in any future arms agreement.

In the past, the U.S. approach to strategic arms control was premised on an expectation that Soviet or Russian forces were the pacing measure, and that a high degree of continuity (i.e., continued mutual reductions via ever more restrictive agreements) in the direction of Soviet/Russian strategic forces provided a level of predictability and stability in the bilateral relationship. On that basis, Washington deemed reasonable long-term agreements with precise ceilings and limits “locked in.”¹⁴² However, a combination of Soviet (and subsequently Russian) nuclear weapons developments and arms control treaty violations has demonstrated the fallacy of Washington’s earlier sanguine expectations. And, in the contemporary dynamic strategic threat environment, the prospects for past expected continuities and predictable Russian or Chinese behavior appear highly problematic. The U.S. approach to arms control must adapt to this reality. In particular, it is imperative that future arms control agreements allow the United States to meet the needs for the deterrence of Sino-Russian aggression, together or separately, at the regional and strategic levels.

The classic goals of strategic arms control focus not on the reduction of weapons per se but on reducing the risk of war.¹⁴³ Given the multiplicity of deterrence challenges posed in the emerging environment, there is little basis for

¹⁴¹ See *Treaty Between the United States of America and the Russian Federation on Strategic Offensive Reductions (SORT/Treaty of Moscow)*, May 24, 2002, available at

https://media.nti.org/documents/sort_moscow_treaty.pdf.

¹⁴² See Trachtenberg, Dodge, and Payne, *The “Action-Reaction” Arms Race Narrative vs. Historical Realities*, op. cit.

¹⁴³ See, Thomas Schelling and Morton Halperin, *Strategy and Arms Control* (New York: Twentieth Century Fund, 1961), p. 2.

the past optimistic expectations of continuities that undergirded the traditional U.S. approach to arms control negotiations—the expectation of a single pacing opponent, the expectation of a long-term trend of ever-deeper negotiated reductions, and the expectation that agreements could lead to more amicable political relations in general. Those expectations now appear contrary to the harsh realities of the emerging multilateral context, and the U.S. approach to arms control must recognize this reality.

In 1960, the United States faced a similarly unprecedented emerging threat context as the Soviet Union began its massive acquisition of strategic nuclear weapons. In that then-emerging threat context, Herman Kahn advised: “...we must do our homework. We must know what we are trying to achieve, the kinds of concessions that we can afford to give, and the kinds of concessions that we insist on getting... All of this will require, among other things, much higher quality preparations for negotiations than have been customary.”¹⁴⁴ The United States now must contend with an unprecedented multilateral threat context; U.S. preparation for any arms control negotiations should now heed Kahn’s advice from 1960.

Conclusion

The basic principles of deterrence are enduring and unchanged; but the application of deterrence must adjust to different opponents and contexts. For U.S. deterrence planning, the emerging multilateral context is materially different from the Cold War bilateral context that drove our thinking about deterrence. Those differences must be taken into account in planning for deterrence at all levels and in planning for the possible failure of deterrence. The

¹⁴⁴ Herman Kahn, *On Thermonuclear War* (Princeton, NJ: Princeton University Press, 1960), p. 576.

emergence of a new deterrence context in which two great nuclear powers share intense hostility toward the United States presents some unprecedented challenges for the United States. It expands the uncertainties, imponderables and unknowns regarding the functioning of deterrence – which remains essential for U.S. and allied security, while also being more uncertain.

In this context, given the considerable variation in opponents' worldviews and how they may define reasonable behavior, the Cold War practice of focusing on the greatest deterrence challenge and considering all others to be lesser included cases is an obvious mistake – despite the attractiveness of its relative ease. Increasingly necessary is to be as informed as possible about the decision-making drivers of multiple opponents in diverse circumstances and to tailor U.S. deterrence strategies accordingly. Positing *non-descript* countries A, B, and C, and extrapolating expected behaviors and deterrence policy on that basis is convenient, but likely to mislead – even more so than in the past.

Identifying the additional many ways in which the emerging deterrence context is different from the past and the significance of those differences for U.S. deterrence planning is likely to be a generational process. That said, it is time to get beyond noting that this is an important topic and then defaulting to Cold War accepted wisdom. The “greatest generation” of deterrence scholars did the heavy intellectual lifting for their time and helped to preserve superpower peace through the Cold War. Deterrence conditions have changed dramatically, however, and it is time for a new generation to get back to this serious work. We are now at a beginning point.

A significant element of this serious work is to understand the implications for deterrence of the multilateral deterrence context and the need for hedging against the challenges presented by that context. Those challenges now include: the potential for Sino-Russian

coordination in hostilities against the United States; expanded uncertainties regarding the calculation of “how much is enough?” to support multiple U.S. deterrence strategies; and, expanded uncertainties about the reliability of deterrence functioning to support U.S. goals, i.e., uncertainties regarding *if* deterrence will “work.” In addition, it is important to seek an understanding of the implications of the multilateral deterrence context and the associated need for hedging — *before* entering into new arms control negotiations.

The first step in this learning process is to identify the broad outlines of what the emerging international context means for U.S. deterrence strategies and the force posture needed to support those strategies. To date, most public commentary, even by noted experts, has been to lament that a new context demands new thinking about deterrence. The discussion above is an initial effort to get past that now-obvious point and take the learning process a first, tentative step further.

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