OCCASIONAL PAPER

Volume 1, Number 1

Redefining "Stability" for the New Post-Cold War Era

Dr. Keith B. Payne

Foreword by Larry D. Welch, General, USAF (Ret.)





Redefining "Stability" for the New Post-Cold War Era

Keith B. Payne

National Institute Press®

Published by National Institute Press® 9302 Lee Highway, Suite 750 Fairfax, Virginia 22031

Copyright © 2021 by National Institute Press®

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by an electronic, mechanical or other means, now known or hereafter invented, including photocopying, and recording or in any information storage or retrieval system, without permission in writing from the publisher. The views expressed in this book are the author's alone and do not represent any institution with which he is or has been affiliated.

Table of Contents

Foreword by Larry D. Welch, General, USAF (ret.)	v
Executive Summary v	ii
Introduction	1
The Cold War Stability Paradigm and Post-Cold War Geopolitical Realities1	.3
Stability and Geopolitical Developments in the Contemporary Era: Rogue Missile Threats to the United States, Strategic Defense and Stability1	.7
Stability and Geopolitical Developments in the Contemporary Era: Revanchist Goals and Coercive Limited Nuclear First-Use Threats2	27
Stability and Geopolitical Developments in the Contemporary Era: Deterrence Stability in a Multidimensional Threat Environment4	13
Contemporary Realities and Resilient Deterrence: Rethinking the Cold War Stability Paradigm and its Force Typology5	55
Conclusion6	5
About the Author	59

Foreword

This Occasional Paper raises important issues regarding thinking about stable deterrence. It does not raise issues about the fundamental principles of deterrence: to confront the potential adversary with the potential for cost and risk far greater than the potential for benefit from an action inimical to our national interests. The issue is the validity of the calculation of cost and risk vs. benefit. Thinking in terms of Cold War and post-Cold War is not enough. The deterrence calculus did not change abruptly with the demise of the Soviet Union. Instead the scope of deterrence considerations and needs expanded. The cost and risk vs. benefit calculus became increasingly complex. With that, the complexity of the demands of a continuing stable deterrent also became increasingly complex. Stability is not served by no change; it is served by continuous change to meet changing needs. From 1945 to the mid-1980s, the overriding need was to deter armed conflict between NATO and the Warsaw Pact. We expected the balance of nuclear capabilities to make a major contribution to that need and they served that purpose. We did not expect those capabilities to deter other challenges to our national security interests and they did not. Now we face a world where the cost and risk vs. benefit calculus must address a wide range of potential national security challenges. This Occasional Paper offers deeper understanding of those challenges and the need to focus our thinking both deeper and more broadly. This is an important contribution to continuing effective deterrence.

Larry D. Welch, General, USAF (Ret.)

Executive Summary

During the early years of the Cold War, American civilians developed a particular nuclear deterrence paradigm that is known popularly as a "stable balance of terror" or "mutual assured destruction" (MAD). Despite these different labels, the common ingredient of this paradigm was the expectation that a reliable condition of US-Soviet mutual societal vulnerability to nuclear retaliation would ensure "stable" mutual deterrence. Generally, a stable condition was defined as one in which mutual deterrence would function reliably because neither side could have sufficient incentive to employ nuclear weapons first or take highly provocative steps that would risk nuclear war-the potential cost of mutual societal destruction would be too Mutual US-Soviet societal vulnerability to nuclear high. retaliation was expected to ensure an overpowering disincentive to either's nuclear provocation or to large-scale conventional attacks that could escalate to nuclear war.

The Cold War stability paradigm has had enormous influence on declared US policies. Numerous official US public reports described US vulnerability to Soviet nuclear capabilities as stabilizing because stability required that Soviet leaders have confidence in their deterrence threat to the United States. Indeed, establishing and sustaining strategic stability has been an openly expressed, bipartisan US goal for decades and US policy declarations continue to identify deterrence "stability" as the overarching goal. Throughout much of the Cold War, US officials and government reports openly and regularly endorsed as stabilizing this condition of mutual vulnerability to retaliation.

Destabilizing, according to this stability paradigm, are strategic defensive forces such as missile defense that might

The author would like to thank General Larry Welch for his thoughtful Foreword, Michael Guillot, Tom Scheber, David Trachtenberg and Matt Costlow for their helpful comments, and the Sarah Scaife Foundation and the Smith Richardson Foundation for their generous support that made this *Occasional Paper* possible.

intercept an opponent's forces enroute to their societal targets, and passive civil defenses such as sheltering that might help mitigate an opponent's nuclear attack. So-defined destabilizing forces also include offensive capabilities with the combination of characteristics such as explosive power (yield), accuracy, and speed that might enable them to target an opponent's military assets on the ground. Under the Cold War stability paradigm, such "counterforce" capabilities inevitably were deemed *unnecessary* for deterrence and destabilizing.

For decades, popular Western assessments of deterrence stability have continued to label US forces as stabilizing or destabilizing according to this typology. It established seemingly clear limitations on the types of forces that the United States should deploy or avoid to ensure deterrence stability.

Beginning in the mid-1970s, in response to the continuing Soviet buildup of nuclear and conventional capabilities, actual declared US nuclear policy openly shifted away from this Cold War deterrence paradigm, to include identifying some supposedly destabilizing counterforce capabilities as necessary for credible deterrence. By the mid-1980s, the United States openly discarded its earlier declarations that its strategic deterrent was based on a threat to destroy Soviet society, i.e., population and industry. As US deterrence policy evolved on a bipartisan basis, such "countervalue" deterrent threats were generally deemed to be insufficiently credible for deterrence purposes and immoral. That important fact, however, often is dismissed or ignored in popular Western commentary on US nuclear policy. Instead, the Cold War paradigm's force typology based on the notion that stable deterrence should rest on mutual nuclear threats to society continues to be a prominent and enduring feature in popular commentary. There are even academic suggestions

that the Cold War paradigm's definition of deterrence stability now be extended to North Korea.

For six decades, every declared US strategic policy/force structure evolution that has veered away from the Cold War stability paradigm and force typology whether advanced by a Democratic or Republican administration—has had to fight through harsh domestic and foreign public criticism based on that sanguine paradigm. It remains the source of much popularly expressed: jargon used to discuss deterrence and nuclear forces; understanding of what constitutes a condition of deterrence "stability" and the characterization of US strategic forces as "stabilizing" or "destabilizing"; and, commentary on strategic arms control (i.e., to establish and codify stable deterrence).

Criticism of the US nuclear policy and force developments that were initiated by President Obama and President Trump, based on this Cold War stability concept and its associated force typology, often continues to dominate the contemporary public debate. Despite the fact that US declared policy has—on a fully bipartisan basis-long since departed from key tenets of the Cold War stability paradigm, its continuing prominence in critical commentary keeps much of the popular debate firmly anchored in the 1960s and a Cold War threat context that has little relationship to contemporary geopolitical realities.

The narrowness and parochialism of that stability paradigm rendered it a problematic basis for US policy during the Cold War and declared policy eventually departed from it in key ways. Those problems have been magnified greatly by post-Cold War geopolitical developments. Nevertheless, its enduring influence is why, after all these years, many commentators continue to assert that most US strategic armament programs – whether strategic missile defense, graduated response options, lowyield weapons, or any "new" capability – assuredly are unnecessary and/or "destabilizing." This is the critique from the familiar Cold War stability paradigm and associated force typology expressed in a new and radically different threat environment that renders that paradigm archaic.

New geopolitical realities call for a renewed popular understanding of both the conditions that constitute deterrence stability and associated guidelines for US and allied policies and capabilities that are more compatible with preventing war given post-Cold War realities. The most obvious of these new realities are: 1) the reported development, increasing sophistication and potential expansion of rogue state nuclear missile capabilities; 2) great power and rogue state coercive nuclear threats, including nuclear escalation threats apparently intended to help advance their revanchist goals of changing the established liberal post-Cold War order by military force if necessary and, 3) the emergence of a multidimensional international threat context, including adversaries with diverse Weltanschauungen (worldviews) and advanced military capabilities.

Continuing to base commentary regarding US policy and forces on the Cold War stability paradigm and its force typology risks: 1) assessing US forces according to an outdated metric that excludes key considerations with regard to deterrence, the assurance of allies, and nonproliferation; 2) missing US and allied deterrence needs that are driven by contemporary geopolitical realities much different from those of the Cold War; and, 3) expecting strategic stability to prevent attack when the basis for such a sanguine expectation may no longer exist and deterrence may be more fragile than expected.

In the post-Cold War era, deterrence stability may require very different policies and underlying US forces than those deemed stabilizing by the Cold War stability paradigm—as has long been recognized in US declared policy. Nevertheless, the Cold War paradigm and its typology of forces remain the enduring basis for much continuing popular, vocal opposition to contemporary US deterrence policy and force posture programs. US and allied weapons programs often are tarred with the usual "destabilizing" label when, in reality, some level of those forces may now be essential to the deterrence of opponents and the absence of war.

Whether one believes that the current US missile defense and nuclear rebuilding programs are necessary for deterrence or not, it must now be recognized that the Cold War stability paradigm is inadequate for considering the question given the diverse threats and opponents the United States now confronts in a multidimensional international threat context. The public debate should finally catch up to the bipartisan evolution of declared policy and post-Cold War realities. Why is this important? Because sustained public support for effective Western nuclear deterrence may be critical to preventing future wars and to limiting the post-Cold War expansion of antidemocratic, authoritarian, indeed despotic, great powers.

In spite of our reliance on the idea that deterrence will work, we usually do not analyze carefully the basic concepts behind such a policy. This somewhat lackadaisical interest in bedrock concepts is probably related to a subconscious fear that our foundations cannot stand close examination.

Herman Kahn, On Thermonuclear War, 1960

Introduction

During the early years of the Cold War, American civilians developed a particular nuclear deterrence paradigm that is known popularly as a "stable balance of terror" or "mutual assured destruction" (MAD). Despite these different labels, the common ingredient of this paradigm was the expectation that a reliable condition of US-Soviet mutual societal vulnerability to nuclear retaliation would ensure "stable" mutual deterrence. Generally, a stable condition was defined as one in which mutual deterrence would function reliably because neither side could have sufficient incentive to employ nuclear weapons first or take highly provocative steps that would risk nuclear war—the potential cost of mutual societal destruction would be too high.

The reasoning behind the paradigm's sanguine conclusion that deterrence could be so stable was not complex: for sensible US and Soviet leaders, no goal short of an imminent threat to national existence could be worth the risk of taking an action that could trigger the opponent's possible nuclear retaliation. *Mutual US-Soviet societal vulnerability to nuclear retaliation* was expected to ensure an overpowering disincentive to either's nuclear provocation or to large-scale conventional attacks that could escalate to nuclear war. The two superpowers were expected to be mutually deterred from such acts as their rational or

sensible responses to the overwhelming risks presented by the other's threat of nuclear retaliation. The same mutual threat mechanism was expected to overshadow any plausible incentives opponents might have to employ nuclear weapons and thereby produce "stability": "Thus mutual vulnerability was a central ingredient to strategic stability – but it was the vulnerability of one's society, not of one's weapons. This core insight would later form the logical underpinning of the concept of MAD..."¹

The Cold War stability paradigm has had enormous influence on declared US policies. As one commentator concludes: "Stability became an essential metric for evaluating nuclear forces, particularly regarding the wisdom of new nuclear capabilities and deployment options. Equally important, stability became the new rationale for US-Soviet nuclear arms control."² Indeed, establishing and sustaining strategic stability has been an openly expressed, bipartisan US goal for decades and US policy declarations continue to identify deterrence "stability" as the overarching goal. For example, the 2010 *Nuclear Posture Review* (NPR) repeatedly refers to the goal of stability, usually in the context of describing nuclear policies or forces.³ The DOD's 2013 public report on US

¹ Michael Gerson, "The Origins of Strategic Stability: The United States and the Threat of Surprise Attack," in, Elbridge Colby and Michael Gerson, eds., *Strategic Stability: Contending Interpretations* (Carlisle Barracks, PA: U.S. Army War College Press, 2013), p. 35.

² Ibid., p. 34.

³ See for example, Department of Defense, *Nuclear Posture Review Report* (April 2010), pp. iii, iv. Senior DOD official in the Obama Administration Brad Roberts has observed, "The 2010 Nuclear Posture Review (NPR) report catalogued a number of decisions explicitly taken in pursuit of strategic stability." Brad Roberts, "Strategic Stability Under Obama and Trump," *Survival*, Vol. 59, No. 4 (August-September 2017), p. 48. Also, "The sizing of U.S. forces remains overwhelmingly driven by the requirements of essential equivalence and strategic stability with Russia." William Perry and James Schlesinger, et al., *America's Strategic*

nuclear employment strategy repeatedly refers to the goal of "ensuring strategic stability with Russia and China."⁴ The 2017 US *National Security Strategy* emphasized that the US nuclear policy goal is to "Maintain Stable Deterrence" and that arms control will be considered if it contributes to "strategic stability."⁵

Throughout much of the Cold War, US officials and government reports openly and regularly endorsed as stabilizing this condition of mutual vulnerability to retaliation: *destabilizing*, according to this stability paradigm, are strategic defensive forces such as missile defense that might intercept an opponent's forces enroute to their societal targets, and passive civil defenses such as sheltering that might help mitigate an opponent's nuclear attack.⁶ Numerous official US public reports described US vulnerability to Soviet nuclear capabilities as stabilizing because stability required that Soviet leaders have confidence in their deterrence threat to the United States. A standard emphasis in the *Arms Control Impact Statements* of the US Arms Control and Disarmament Agency (ACDA)

⁵ White House, *The National Security Strategy of the United States of America*, Washington, D.C., December 2017, pp. 30-31. See also, James Anderson, "China's Arms Buildup Threatens the Nuclear Balance," *The New York Times*, July 29, 2020, at https://nyti.ms/3f6A4NH.

⁶ See for example, Statement of Paul Warnke in, U.S. Senate, Committee on Banking, Housing and Urban Affairs, *Civil Defense*, Hearings, 95th Congress, 2nd Session (Washington, D.C.: USGPO, 1979), p. 4; and, Henry S. Rowen, "Formulating Strategic Doctrine," Commission on the Organization of the Government for the Conduct of Foreign Policy, Volume 4, Appendix K, *Adequacy of Current Organization: Defense and Arms Control* (Washington, D.C.: USGPO, June 1975), p. 228. More recently see, Department of Defense, *Ballistic Missile Defense Review Report* (February 2010), pp. 12-13.

Posture (Washington, D.C.: United States Institute of Peace Press, 2009), p. xvii.

⁴ Department of Defense, *Report on Nuclear Employment Strategy of the United States Specified in Section* 491 *of* 10 U.S.C., June 12, 2013, pp. 3, 5, 8, at https://fas.org/blogs/security/2013/06/nukeguidance/.

was that this concept of mutual deterrence and stability constitutes "the primary objective of both US strategic force modernization and US arms control policy,"⁷ and that the Soviet Union would enhance "stability" by deploying strategic nuclear forces that the United States could *not* counter.⁸

Because the Cold War stability paradigm equated the condition of assured mutual societal vulnerability to deterrence stability,⁹ US strategic capabilities were deemed destabilizing if they might threaten to provide some protection for US society by countering an opponent's nuclear deterrent forces before or after their launch, thereby upsetting mutual vulnerability and deterrence stability. In short, "stability hinges on mutual vulnerability."¹⁰

The Cold War paradigm's charge against strategic defenses – that they undercut deterrence stability – continues to be heard frequently today. For example, those

⁷ This particular line is repeated in numerous impact statements. See for example, House of Representatives, Committee on Foreign Affairs, U.S. Senate, Committee on Foreign Relations, Joint Committee Print, *Fiscal Year 1985 Arms Control Impact Statements, Statements Submitted to the Congress by the President Pursuant to Section 36 of the Arms Control and Disarmament Act* (Washington, D.C.: USGPO, 1984), p. 95.

⁸ House of Representatives, Committee on Foreign Affairs, U.S. Senate, Committee on Foreign Relations, Joint Committee Print, Fiscal Year 1982 Arms Control Impact Statements, Statements Submitted to the Congress by the President Pursuant to Section 36 of the Arms Control and Disarmament Act (Washington, D.C.: USGPO, 1981), p. 107.

⁹ See for example, the discussion in Alain Enthoven and K. Wayne Smith, *How Much is Enough? Shaping the Defense Program*, 1961-1969 (New York: Harper and Row, 1971), Chapters 5 and 6. See also, William R. Van Cleave, "The US Strategic Triad," *The US War Machine* (New York: Crown Publishers, 1983), pp. 64-67.

¹⁰ Ankit Panda and James Acton, "Why the Pentagon Must Think Harder About Inadvertent Escalation," *Defense News Online*, December 2, 2020, available at

https://www.defensenews.com/opinion/commentary/2020/12/02/w hy-the-pentagon-must-think-harder-about-inadvertent-escalation/.

favoring missile defense are "those who believe the United States should possess the ability to win a nuclear war" in contrast to "those who prioritize the stability of mutual deterrence."¹¹ Critiques of a successful 2020 US strategic missile defense test observe gravely and with certainty: "The world's nuclear powers for decades have deterred each other by maintaining the mutual ability to destroy cities and military sites with atomic weapons. Once one country can stop nuclear-tipped ICBMs, that mutual deterrence breaks down."¹² Another negative critique of the same successful US missile defense test claims with the same certainty: "The consequences for strategic stability and future arms control are serious." Why? Because, "promoting mutual vulnerability" enhances "stability."¹³

¹¹ Richard Purcell, "Nuclear Damage Limitation in an Era of Great Power Competition," *Global Security Review*, January 23, 2020, available at https://globalsecurityreview.com/nuclear-damage-limitation-greatpower-competition/. See also, Eric Gomez, "It Can Get You into Trouble, but It Can't Get You Out" in, Caroline Dorminey and Eric Gomez, *America's Nuclear Crossroads* (Washington, D.C.: CATO Institute, 2019), pp. 17-28; Jon Wolfsthal, "U.S.-Russian Nuclear Stability and Deterrence," in *Blundering Toward Nuclear Chaos*, Jon Wolfsthal, ed. (Washington, D.C.: Global Zero, May 2020), p. 3; Subrata Ghoshroy, "Why Does Missile Defense Still Enjoy Bipartisan Support in Congress?" in, *Bulletin of the Atomic Scientists*, September 24, 2020, at https://thebulletin.org/2020/09/why-does-missile-defense-still-enjoybipartisan-support-in-congress/; Daniel Post, "Deterring North Korea," *warontherocks.com*, January 29, 2021, at

https://warontherocks.com/2021/01/deterring-north-korea/; and, William J. Perry and Tom Z. Collina, *The Button* (Dallas, TX: BenBella Books, Inc., 2020), pp. 151-152.

¹² David Axe, "A U.S. Navy Destroyer Just Shot Down an ICBM Target – Expect Trouble in Moscow and Beijing," *Forbes Online*, November 18, 2020, available at

https://www.forbes.com/sites/davidaxe/2020/11/18/a-us-navy-destroyer-just-shot-down-an-icbm-target-expect-trouble-in-moscow-and-beijing/?sh=47e2b79c6a66.

¹³ Ankit Panda, "A New U.S. Missile Defense Test May Have Increased the Risk of Nuclear War," Carnegie Endowment for International Peace, November 19, 2020, at,

Yet another somber critique of the test states similarly: "The danger of atom bombs being used again was already increasing. Now it's grown once more."¹⁴ Such judgements in opposition to US missile defense are derived from the Cold War stability paradigm.

So-defined destabilizing forces also include offensive capabilities with the combination of characteristics such as explosive power (yield), accuracy, and speed that might enable them to target an opponent's military assets on the ground.¹⁵ Under the Cold War stability paradigm, such "counterforce" capabilities inevitably were deemed *unnecessary* for deterrence and destabilizing.

For decades, Western popular assessments of deterrence stability have continued to label US forces as stabilizing or destabilizing according to this typology. It established seemingly clear limitations on the types of forces that the United States should deploy: "In order to establish a mutual stability policy, it is necessary to classify strategic systems as either stabilizing or destabilizing and to avoid the latter."¹⁶

Of course, an alternative approach to deterrence that departed from this dominant Cold War stability paradigm

https://carnegieendowment.org/2020/11/19/new-u.s.-missile-

defense-test-may-have-increased-risk-of-nuclear-war-pub-

^{83273#:~:}text=Issues,A%20New%20U.S.%20Missile%20Defense%20Test %20May,the%20Risk%20of%20Nuclear%20War&text=A%20November %202020%20U.S.%20missile,the%20Rubicon%2C%20with%20irreversibl e%20implications.

¹⁴ Andreas Kluth, "A Successful U.S. Missile Intercept Ends the Era of Stability: Deterrence No Longer Works When One Power Can Shoot Down Incoming Nukes," *Bloomberg Opinion*, November 30, 2020, available at https://www.bloomberg.com/opinion/articles/2020-11-30/a-successful-u-s-missile-intercept-ends-the-era-of-nuclear-stability.

¹⁵ See for example, Jerome Kahan, Security in the Nuclear Age: Developing U.S. Strategic Arms Policy (Washington, D.C.: Brookings Institution, 1975), pp. 272-273.

¹⁶ Ibid., p. 272.

emerged in parallel with it, led most notably by the scholarly works of Herman Kahn, Albert Wohlstetter, and somewhat later, Colin Gray.¹⁷ It rejected the Cold War stability paradigm's axiom that a large-scale threat to Soviet society would provide reliable deterrence stability and serve as the appropriate measure of adequacy for US deterrence force requirements.

Beginning in the mid-1970s, in response to the continuing Soviet buildup of nuclear and conventional capabilities, declared US nuclear policy openly shifted in the direction of this alternative approach to deterrence, to include identifying limited nuclear deterrence response options and some supposedly destabilizing counterforce capabilities as necessary for credible deterrence.¹⁸ And Harold Brown noted in 1979: "....it would be imprudent to place the United States in a position in which uncontrolled escalation would be the only course we could follow. Massive retaliation may not be appropriate, *nor will its prospect be sufficiently credible* in all circumstances to deter

¹⁸ In 1974, Secretary of Defense James Schlesinger observed that all previous planned US options involved "literally thousands of weapons" and emphasized the deterrence need for limited nuclear response options. He announced publicly that the United States would introduce limited nuclear threat options to provide greater credibility for the deterrence of limited threats. He said this was made necessary because increased Soviet nuclear capabilities had rendered the credibility of large-scale US response options to limited attacks "close to zero." See, James Schlesinger, *U.S./U.S.S.R. Strategic Policies*, Testimony in, US Senate, Committee on Foreign Relations, 93rd Congress, 2nd Session, March 4, 1974, p. 9, see also, pp. 7, 12-13, 55. See also, James Schlesinger, *Annual Defense Department Report, FY 1976 and FY 1977* (Washington, D.C.: USGPO, February 5, 1975), p. II-3-II-4; and, James Schlesinger, *Annual Defense Report FY 1975* (Washington, D.C.: USGPO, March 4, 1974), pp. 32, 38-39, 42.

¹⁷ See the detailed discussion of these two alternative approaches to deterrence and their respective assumptions and logic in, Keith B. Payne, *Shadows on the Wall: Deterrence and Disarmament* (Fairfax, VA: National Institute Press, 2020), Chapters 2 and 3.

the full range of actions we seek to prevent. Effective deterrence requires forces of sufficient size and flexibility to attack selectively *a range of military and other targets,* yet enable us to hold back a significant and enduring reserve. *The ability to provide measured retaliation is essential to credible deterrence.*"¹⁹

By the mid-1980s, the United States openly discarded its earlier declarations that its strategic deterrent was based on a threat to destroy Soviet society, i.e., population and industry.²⁰ As US deterrence policy evolved on a bipartisan basis, such "countervalue" deterrent threats were generally deemed to be insufficiently credible for deterrence purposes and immoral (i.e., the intentional threat to focus enormous destruction on civilian targets). That important fact, however, often is dismissed or ignored in much popular Western commentary, and the force typology based on the

¹⁹ Harold Brown in, The Department of Defense Statement on Strategic Military Balance: Military Assessment, before the U.S. Senate, Committee on Foreign Relations, Hearings, 96th Congress, 1st Session, July 11, 1979, p. 3. (Emphasis added). See also, Harold Brown, U.S. Senate, Committee on Armed Services, MX Missile Basing System and Related Issues, Hearings, 98th Congress, 1st Session (Washington, D.C.: USGPO, 1983); Edward C. Keefer, Harold Brown: Offsetting the Soviet Military Challenge 1977-1980, Vol. IX (Washington, D.C.: Historical Office, Office of the Secretary of Defense, 2017), pp. 139-145, 604-605. See also, the testimony by Secretary of Defense Harold Brown in, U.S. Senate, Committee on Foreign Relations, Nuclear War Strategy, Hearings, 96th Congress, 2nd Session (Top Secret hearing held on September 16, 1980; sanitized and printed on February 18, 1981), (Washington, D.C.: USGPO, 1981), p. 10. See, in the same Senate report the "Administration's Responses to Questions Submitted Before the Hearing," pp. 10, 16, 25, 29-30. See also, William E. Odom, "The Origins and Design of Presidential Decision-59: A Memoir" in, Henry D. Sokolski, ed., Getting MAD: Nuclear Mutual Assured Destruction, Its Origins, and Practice (Carlisle, PA: Strategic Studies Institute, U.S Army War College, November 2004), pp. 182-184.

²⁰ Caspar Weinberger, "U.S. Defense Strategy," *Foreign Affairs*, Vol. 64, No. 4 (Spring 1986), p. 682. More recently, see, the 2013 *Report on Nuclear Employment Strategy of the United States*, op. cit., pp. 4, 5.

notion that stable deterrence should rest on large-scale threats to society continues to be a prominent and enduring feature in popular discourse—particularly as the basis of contemporary arguments to constrain US strategic capabilities per Cold War stability guidelines.

In short, despite the evolution of declared US nuclear policy away from the 1960s Cold War stability paradigm, it has continued to dominate public debate about US policy.²¹ Its confident presumption that the combination of a largescale US threat to an opponent's society and the opponent's rationality will provide stable deterrence was and remains the basis for most commonly expressed critiques of US deterrence policies and programs. Many commentators continue to express this confidence: "Since the Cold War, stability – and thus peace – has been preserved through the macabre reality of mutual assured destruction, or MAD. No nation will launch a first strike if it expects immediate retaliation in kind."²²

For six decades, every declared US strategic policy/force structure evolution that has veered away from the Cold War stability paradigm and force typology—whether advanced by a Democratic or Republican administration—has had to fight through harsh domestic and foreign public criticism based on that sanguine paradigm.²³ It remains the source of much popularly

²¹ See Thomas Scheber, "Strategic Stability: Time for a Reality Check," *International Journal* (Autumn 2008), pp. 893-915.

²² Kluth, "A Successful U.S. Missile Intercept Ends the Era of Stability," op. cit.

²³ There are literally hundreds of examples of this point. Cold War examples include Herbert Scoville, "Flexible Madness?," *Foreign Policy*, Vol. XIV (Spring 1974), pp. 164-177; Seymour Melman, "Limits of Military Power," *The New York Times*, October 17, 1980, p. A-31; and, Jeremy Stone, "Two Paths to Nuclear Strategy," *Washington Post*, September 16, 1980, p. A-17. For more recent examples see also, Perry and Collina, *The Button*, op. cit., pp. 106, 128; and Erik Gartzke, "Why, in Nuclear Weapons Policy, Sometimes Fewer Options Are Better,"

expressed: jargon used to discuss deterrence and nuclear forces; understanding of what constitutes a condition of deterrence "stability" and the characterization of US strategic forces as "stabilizing" or "destabilizing"; and, commentary on strategic arms control (i.e., to establish and codify stable deterrence).²⁴ Most prominently, despite the evolutionary shifts in open US policy statements, the Cold War stability paradigm continues to underlie most criticism that the contemporary US nuclear policy and force developments initiated by President Obama and President

²⁴ See for example, Bruce G. Blair, Jessica Sleight and Emma Claire Foley, The End of Nuclear Warfighting: Moving to a Deterrence-Only Posture (Washington, D.C.: Global Zero, September 2018), p. 6; Sharon Squassoni, "Why Biden Should Abandon the Great Power Competition Narrative," Bulletin of the Atomic Scientists, January 12, 2021, at https://thebulletin.org/premium/2021-01/why-biden-shouldabandon-the-great-power-competition-narrative/. Henry D. Sokolski, Underestimated: Our Not So Peaceful Nuclear Future (Carlisle Barracks, PA: U.S. Army War College Press, 2016), p. 11; Robert Norris and Hans Kristensen, "A Presidential Policy Directive for a New Nuclear Path," Bulletin of the Atomic Scientists, August 10, 2011, at http://thebulletin.org//node/8823; and, Gareth Evans and Yoriko Kawaguchi, Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers, Report of the International Commission on Nuclear Nonproliferation and Disarmament (Canberra: International Commission on Nuclear Non-proliferation and Disarmament, 2009), p. 194. See also, Union of Concerned Scientists, The Obama Administration's New Nuclear Policy: An Assessment of the "Nuclear Posture Review," (Washington, D.C.: Union of Concerned Scientists, April 8, 2010), available at http://www.ucusa.org/nuclear_weapons_and_global_ security/nuclear_weapons/policy_issues/Obama-administrationnpr.html.

Bulletin of the Atomic Scientists, June 18, 2020, at

https://thebulletin.org/2020/06/why-in-nuclear-weapons-policy-sometimes-fewer-options-are-better/.

Trump are unnecessary or "destabilizing."²⁵ Little wonder that the Commander of US Strategic Command, ADM Charles Richard, observed in October 2020 that it seems as if the United States has not seriously reconsidered nuclear matters for more than 25 years,²⁶ and that, "We must reinvigorate the national conversation on the importance of

http://www.nytimes.com/2016/09/30/opinion/why-its-safe-to-scrapamericas-icbms.html?_r=(); and Aaron Mehta, "Former SecDef Perry: US on 'Brink' of Nuclear Arms Race," *Defense News*, December 3, 2015, at https://www.defensenews.com/pentagon/2015/12/03/formersecdef-perry-us-on-brink-of-new-nuclear-arms-race/. See also, Kris Osborn, "Low-Yield Nuclear Missiles Are Here: But Is That a Good Thing? There are Many Arguments on Both Sides about These Deadly Weapons," *National Interest Online*, December 31, 2020, at, https://nationalinterest.org/blog/buzz/low-yield-nuclear-missilesare-here-good-thing-175578; Rebecca Hersman and Joseph Rogers, "U.S. Nuclear Warhead Modernization and 'New' Nuclear Weapons," *CSIS Briefs*, December 10, 2020, at https://www.csis.org/analysis/usnuclear-warhead-modernization-and-new-nuclear-weapons; Philip Coyle and James McKeon, "The Huge Risk of Small Nukes," *Politico*, March 10, 2017, at

http://www.politico.com/agenda/story/2017/huge-risk-smallnuclear-weapons-000350; and, Hans M. Kristensen, Matthew McKinzie, Theodore A. Postol, "How US Nuclear force Modernization is Undermining Strategic Stability: The Burst-Height Compensating Super-Fuze," *Bulletin of the Atomic Scientists*, March 1, 2017, at https://thebulletin.org/2017/03/how-us-nuclear-force-modernizationis-undermining-strategic-stability-the-burst-height-compensatingsuper-fuze/.

²⁶ Terri Moon Cronk, "DOD Must Rethink, Prioritize Strategic Deterrence," DOD News, October 21, 2020, at

https://www.defense.gov/Explore/News/Article/Article/2389931/d od-must-rethink-prioritize-strategic-deterrence/.

²⁵ See for example, the discussion in, Amy Wolf, *A Low-Yield, Submarine-Launched, Nuclear Warhead: Overview of the Debate*, Congressional Research Service, Updated January 5, 2021, p. 1, at

https://fas.org/sgp/crs/nuke/IF11143.pdf; William Perry, "Why It's Safe to Scrap America's ICBMs," *The New York Times*, September 10, 2016, available at

strategic deterrence."²⁷ The Cold War stability paradigm's continuing prominence in popular critical commentary keeps much of the public debate firmly anchored in the 1960s and a Cold War threat context that has little relationship to contemporary geopolitical realities.

This is a theoretical and historical study that examines several macro post-Cold War developments in international relations and describes why, in light of these developments, the powerful stability paradigm inherited from the Cold War and its force typology are not an adequate basis for public debate of Western deterrence policy. Finally, this study begins the discussion of an alternative approach to conceptualizing deterrence stability that is more suitable given the emerging geopolitical realities of the post-Cold War era.

Why is a more informed popular understanding of nuclear deterrence so important? The history of the 20th Century provides the answer: the failure of conventional deterrence led to two world wars that inflicted horrific suffering and misery upon the world, with as many as 100 million fatalities; and, the emergence and unbridled authoritarian, anti-democratic expansion regimes of inflicted similarly horrific suffering and misery upon the afflicted nations.²⁸ Until the day that international relations become reliably cooperative and peaceful, sustained public support for credible Western nuclear deterrence will likely be critical to preventing a repeat of these two earlier scourges that inflicted so much suffering globally.

²⁷ Quoted in, Byun Duk-kun, "North Korean Nukes Highlight Importance of Strategic Deterrence – U.S. Commander," *Yonhap News Agency* (South Korea), October 21, 2020, at

http://www.koreaherald.com/view.php?ud=20201022000150.

²⁸ See for example, Stephane Courtois et al., *The Black Book of Communism: Crimes, Terror, Repression* (Cambridge: Harvard University Press, 1999).

The Cold War Stability Paradigm and Post-Cold War Geopolitical Realities

By 2013, one of the most prominent contributors to the Cold War stability paradigm, Nobel Laureate Thomas Schelling, had identified its inadequacies given emerging post-Cold War realities. This was an extremely important but little noted observation—acknowledging how post-Cold War realities had upended the earlier accepted wisdom regarding deterrence stability:

Now we are in a different world, a world so much more complex than the world of the East-West Cold War. It took 12 years to begin to comprehend the "stability" issue after 1945, but once we got it we thought we understood it. Now the world is so much changed, so much more complicated, so multivariate, so unpredictable, involving so many nations and cultures and languages in nuclear relationships, many of them asymmetric, that it is even difficult to know how many meanings there are for "strategic stability," or how many different kinds of such stability there may be among so many different international relationships, or what "stable deterrence" is supposed to deter in a world of proliferated weapons.²⁹

Despite Schelling's recognition of a new strategic environment and its implications for established notions of deterrence stability, with few exceptions, public commentary about stability and related forces – often citing Schelling's *earlier* work – continues to be dominated by the

²⁹ Thomas Schelling, "Foreword," in, Elbridge Colby and Michael Gerson, eds., *Strategic Stability: Contending Interpretations*, op. cit., p. vii-viii.

Cold War paradigm's language and concepts.³⁰ There are even some academic suggestions that the Cold War paradigm's definition of deterrence stability now be extended to North Korea.³¹ Correspondingly, criticism of US initiatives, based on the Cold War concept of stability and its associated force typology, often continues to dominate the contemporary public debate about US nuclear programs.³²

The tendency has been to try to squeeze revisions in policies and programs into the jargon of the Cold War stability paradigm rather than acknowledge that while the goal of deterring war remains critical, the familiar Cold War stability paradigm and force typology are archaic. Their enduring influence is why, after all these years, many commentators continue to assert that most US strategic armament programs—whether strategic missile defense, graduated response options, low-yield weapons, or any "new" capability—assuredly are unnecessary and/or

³⁰ See for example, Daniel Post, "Deterring North Korea," op. cit.

³¹ See for example, Ibid; also, KYODO, "North Korea Sought Mutual Assured Destruction Relationship with U.S. in 2016: U.S. Official," *The Japan Times*, September 25, 2017, p. 1, at japantimes.co.jp. "The same logic that kept nuclear war from breaking out between the United States and former Soviet Union is the best strategy to now pursue with North Korea, several scholars said..." See, Stanford University, Center for International Security and Cooperation, "Why Nuclear Deterrence Can Work on North Korea," November 14, 2017, at

cisac.fsi.stanford.edu/news/why-nuclear-deterrence-can-work-north-korea.

³² "Now is the time to announce that the United States will reduce its strategic nuclear force to 1,000 (or fewer) strategic deployed warheads, invite Russia to do the same, and propose that the two sides agree to resume formal talks to regulate all types of strategic offensive and defensive weapons systems (nuclear and nonnuclear) *that could affect strategic stability.*" See, Daryl G. Kimball and Kingston Reif, "It's time to cut America's nuclear arsenal," *Bulletin of the Atomic Scientists*, September 30, 2016, (emphasis added), available at http://thebulletin.org/it%E2%80%99s-time-cut-america%E2%80%99s-nuclear-arsenal9942.

"destabilizing." This is the critique from the familiar Cold War stability paradigm and associated force typology expressed in a new and radically different threat environment that renders that paradigm archaic.

The inherited Cold War stability paradigm and its familiar guidelines were developed for a geopolitical context that no longer exists. As the late French scholar Therese Delpech observed in 2012: "Public statements are still made on the necessity to preserve or even strengthen 'strategic stability' (generally to reassure Russia and China), but the meaning of these two words is increasingly unclear."33 New geopolitical realities call for a renewed understanding of both the conditions that constitute deterrence stability and associated guidelines for US and allied policies and capabilities that are more compatible with preventing war given post-Cold War realities. The most obvious of these new realities are: 1) the reported development, increasing sophistication and potential expansion of rogue state nuclear missile capabilities;³⁴ 2) great power and rogue state coercive nuclear threats, including nuclear escalation threats apparently intended to help advance their revanchist goals of changing the established liberal post-Cold War order by military force if necessary;³⁵ and, 3) the emergence of a multidimensional

³³ Therese Delpech, *Nuclear Deterrence in the* 21st *Century: Lessons From the Cold War for a New Era of Strategic Piracy* (Santa Monica, CA: RAND Corp., 2012), p. 37.

³⁴ See for example, "CRS: 'North Korea's Ballistic Missile Tests Aimed to Evade US Missile Defense," *KBS World* (South Korea), July 16, 2020, at, http://world.kbs.co.kr/service/news_view.htm?lang=e&Seq_Code=15 4904.

³⁵ See for example, Mark Schneider, "Russian Nuclear 'De-Escalation' of Future War," *Comparative Strategy*, Vol. 37, No. 5 (March 2019), pp. 361-372; Mark Schneider, "Escalate to De-escalate," U.S. Naval Institute Proceedings, February 2017,

http://www.usni.org/magazines/proceedings/2017-02/escalate-deescalate; and, Dave Johnson, *Russia's Conventional Precision Strike*

international threat context, including adversaries with diverse *Weltanschauungen* (worldviews) and advanced military capabilities.

Continuing to base commentary on US policy and forces on the Cold War stability paradigm and its force typology risk: 1) assessing US forces according to an outdated metric that excludes key considerations with regard to deterrence, the assurance of allies, and non-proliferation; 2) missing US allied deterrence needs that are and driven by contemporary geopolitical realities much different from those of the Cold War; and, 3) expecting strategic stability to prevent attack when the basis for such a sanguine expectation may no longer exist and deterrence may be more fragile than expected.

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.

Stability and Geopolitical Developments in the Contemporary Era: Rogue Missile Threats to the United States, Strategic Defense and Stability

North Korea apparently has deployed nuclear weapons and ICBMs and now has the capability to threaten US cities with strategic nuclear attack.³⁶ It appears to be "determined to *stay capable* of putting the United States and its allies at risk," and to have an "expansive vision of how to use [its] nuclear and missile programs" beyond "the mere ability to deter rivals," including "to advance offensive objectives" such as political coercion to foster "the reunification of the Korean Peninsula on terms favorable to [Kim Jong Un's] regime."³⁷ Future proliferation could place similar capabilities in the

³⁶ Department of Defense, 2019 Missile Defense Review, January 2019, p. 10 at https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.PDF. Assistant Secretary of Defense Victorino Mercado has observed that, "North Korea has worked aggressively to develop nuclear-capable long-range ballistic missiles able to threaten the homeland, allies and partners," and that "North Korea continues to expand its ballistic missile capabilities..." in, Oh Seok-min, "North Korea Pursues Long-Range Nuclear Missiles Through 'Deliberate Testing Program' - Pentagon Official," Yonhap News Agency (South Korea), August 6, 2020, at https://en.yna.co.kr/view/AEN20200806006600325/. See also, Maj. Gen. Howard N. Thompson (Ret.), "Congress Holds the Key to Outpacing North Korea's Nuclear Capabilities," The Hill Online, October 21, 2020, at https://thehill.com/opinion/national-security/521700congress-holds-the-key-to-outpacing-north-koreas-nuclear. ³⁷ Jung H. Pak, "What Kim Wants," Foreign Affairs (May/June 2020), at https://www.foreignaffairs.com/articles/north-korea/2020-04-13/what-kim-wants?utm_medium=newsletters, (emphasis added). See also Shane Smith, "Reviewing US Extended Deterrence Commitments

Against North Korea," 38North.org, May 13, 2020, at

https://www.38north.org/2020/05/ssmith051320/. (Emphasis added).

hands of additional states, such as Iran,³⁸ with similar revisionist geopolitical goals and potential use for nuclear coercion.³⁹ This development alone calls into question the Cold War stability paradigm and force typology as the continuing guide for contemporary US policy and forces.

How so? Because the most fundamental Cold War stability axiom is that mutual vulnerability to nuclear retaliation is synonymous with deterrence stability, the United States must correspondingly accept the opponent's capabilities needed to threaten nuclear retaliation against US society. The United States ultimately did so vis-à-vis the Soviet Union during the Cold War. This view constituted much of the argument in favor of the 1972 ABM Treaty limiting strategic missile defense.⁴⁰ ACDA described the

³⁸ Some reports indicate that Iran continues to seek nuclear weapons. See, Benjamin Weinthal, "German Intel Report Lays Bare Iran's

Attempts to Obtain Nuclear Proliferation Technology," *FoxNews.com*, June 16, 2020, at https://www.foxnews.com/world/iran-weaponsmass-destruction-germany; and, Peter Suciu, "German Intelligence Suggest Iran's Nuclear Weapon Ambitions May Not Be Over," *The National Interest*, October 3, 2020, at

https://nationalinterest.org/blog/reboot/german-intelligencesuggests-irans-nuclear-weapon-ambitions-may-not-be-over-170054.

³⁹ See Richard Sisk, "U.S. More Concerned About Rocket Than New Satellite, General Says," *Military.com*, April 23, 2020, available at https://www.military.com/daily-news/2020/04/23/us-more-concerned-about-iranian-rocket-new-satellite-general-says.html. See also, Robert Burns, Darlene Superville and Jon Gambrell, "Iran-U.S. tensions rise on Trump threat, Iran satellite launch," *Associated Press*, April 22, 2020, available at

https://apnews.com/1420524aced220ec659dcf0f260b6576.

⁴⁰ Indeed, Henry Kissinger described the great value of the ABM Treaty in terms of its contribution to sustaining mutual vulnerability: "As long as it lasts, offensive missiles have, in effect, a free ride to their targets." Statement by Henry Kissinger in, U.S. Senate, Committee on Armed Services, *Military Implications of the Treaty on the Limitation of Anti-Ballistic Missile Systems and the Interim Agreement on Limitation of Strategic Offensive Arms*, Hearings, 92nd Congress, 2nd Session (Washington, D.C.: USGPO, 1972), p. 121.

great value of the ABM Treaty as codifying stability via mutual vulnerability to missile attack.⁴¹

The United States, however, has since decided to actively defend against a North Korean nuclear missile attack and withdrew from the ABM Treaty in 2002 for the stated purpose of finding protection against rogue state missile threats.⁴² Today's strategic missile defense system exists for the purpose of defending against such threats.⁴³ US policy appears to promote defending against rogue state missile threats, but – per the Cold War stability paradigm – *not* against great power strategic missiles as a matter of fact and policy.⁴⁴ There is, however, one contemporary and one

 ⁴¹ "Each country thus leaves unchallenged the penetration capability of the other's retaliatory missile forces." United States Arms Control and Disarmament Agency, Arms Control and Disarmament Agreements: Texts and Histories of Negotiations (Washington, D.C.: USGPO, 1982), p. 137.
⁴² See, President George W. Bush, Text of President Bush's Speech at the National Defense University, May 1, 2002, The New York Times on the Web, Associated Press, available at

http://www.nytimes.com/aponline/national/01WIRE-BUSH-TEXT.html?pagewanted+print. See also, Department of Defense, *Nuclear Posture Review: Report to the Congress in Response to Sections 1041 (as Amended) and 1042 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, PL 106-398, December 2001, pp. iii,* 7. (Declassified).

⁴³ Robert Soofer, "The case for a layered missile defense of the US homeland," *The Hill Online*, June 4, 2020, at

https://thehill.com/blogs/congress-blog/politics/501231-the-case-fora-layered-missile-defense-of-the-us-homeland. In 2010 the Obama Administration listed as first priority defending "the homeland against the threat of limited ballistic missile attack." Department of Defense, Office of Public Affairs, 2010 Ballistic Missile Defense Review (BMDR) Fact Sheet, March 3, 2010, p. 2.

⁴⁴ The 2013 DOD public report on US nuclear strategy states, "The United States seeks to improve strategic stability by demonstrating that it is not our intent to negate Russia's strategic nuclear deterrent." Department of Defense, *Report on Nuclear Employment Strategy of the United States*, op. cit., p. 3. As Obama Administration senior DOD Policy official, Brad Roberts, has stated, "In the name of strategic stability, the administration committed to maintaining a homeland

prospective problem with an apparent policy of deploying strategic defenses against the rogue missile threat to the US homeland but not against great powers as prescribed by the Cold War stability requirements.

First, much domestic and foreign criticism against *any* US strategic missile defense continues to be based on the Cold War stability paradigm and jargon. The desired US strategic defenses needed to protect against a rogue state's missiles must continually contend with the long-familiar charge that they are destabilizing because they violate the old stability paradigm's stricture against strategic defenses. Continuing US expressions of commitment to "strategic stability" invite this well-rehearsed opposition and appear to validate its veracity.

missile-defense posture that would not affect the strategic balance with Russia or China by jeopardizing the credibility of their strategic deterrents. At the same time, it committed to ensuring that the American homeland would not be vulnerable to attacks from nucleararming regional challengers like North Korea." Brad Roberts, "Strategic Stability Under Obama and Trump," op. cit., p. 52. In some cases, reliance on mutual deterrence stability appears to be identified as a matter of fact; in others, as a matter of fact and policy. See *Nuclear Posture Review Report* (2010), op. cit., pp. 28-29; Department of Defense, Ballistic Missile Defense Review, February 2010, p. 13, available at https://archive.defense.gov/bmdr/docs/BMDR%20as%20of%2026JA N10%200630_for%20web.pdf; Department of Defense, *Report on Nuclear Employment Strategy of the United States Specified in Section 491 of 10 U.S.C.*, June 2013, p. 3. See also, Department of Defense, 2019 Missile Defense Review, January 2019, p. V, IX, at

https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.pdf; Department of Defense, *Layered Homeland Missile Defense: A Strategy for Defending the United States*, June 2020, at https://media.defense.gov/2020/Jun/22/2002319425/-1/-1/1/LAYERED-HOMELAND-MISSILE-DEFENSE-FINAL.pdf; James M. Inhofe, "S.1790 - 116th Congress (2019-2020): National Defense Authorization Act for Fiscal Year 2020," webpage, December 20, 2019, available at https://www.congress.gov/bill/116th-congress/senatebill/1790. See also the discussion in, Michaela Dodge, "The Backward Step on Missile Defense," *Information Series*, No. 455 (March 4, 2020), p. 1.

Second, while there seems to be a general consensus that US strategic defenses can now protect the United States against rogue state missile threats,45 an apparent policy of defending against rogue missiles while adhering to traditional stability concerns regarding defenses against great powers might not long be an option. One recent commentary on the subject asserts that, "Our current system of ground-based interceptors is aging and fast becoming incapable of countering the threat posed by North Korea's limited arsenal."46 Kim Jong Un reportedly has said that North Korea is developing nuclear weapons intended to penetrate missile defense systems.⁴⁷ The retired Chief of Staff at North American Aerospace Command and Command, Major General US Northern Howard Thompson, has observed with regard to North Korean ICBM progress: "The North Koreans recently paraded out their largest ICBM we have seen to date. All of these

⁴⁵ Numerous U.S. government statements observe that U.S. strategic missile defense capabilities are effective against the prospect of limited missile attacks against the United States: Gen. John Hyten, Vice Chairman of the Joint Chiefs of Staff, said recently, "I don't say 100 percent very often. I have 100 percent confidence in those capabilities [U.S. missile defense] against North Korea," quoted in, Lee Haye-ah, "U.S. Military Leader Expresses Full Confidence in Ability to Defend Against New North Korean Missiles," *Yonhap News Agency*, January 18, 2020, available at https://en.yna.co.kr/view/AEN20200118000400325.

⁴⁶ John Rossomando, "Missile Defense Deserves Top Priority," *RealClearDefense.com*, July 21, 2020, at

https://www.realcleardefense.com/articles/2020/07/21/missile_defense-deserves-top-priority-11548.ht. See also, Michael Evans, "New Defence Secretary Must Overhaul Aging Missile Defence System," *The Times* (UK), January 11, 2021, p. 33, at

https://www.thetimes.co.uk/article/new-us-defence-secretary-lloydaustin-must-overhaul-ageing-missile-defence-system-5b58fhbnj.

⁴⁷ Joshua Berlinger and Yoonjung Seo, *CNN*, "Kim Jong Un Says North Korea is Developing Tactical Nukes, New Warheads and a Nuclear-Powered Submarine," January 9, 2021, at

https://www.cnn.com/2021/01/09/asia/north-korea-nuclear-development-intl-hnk/index.html.

developments, taken together, threaten to overwhelm the existing Ground-based Midcourse Defense system, which was not designed or built to defeat this threat."⁴⁸

As North Korean and possibly other rogue state missile capabilities reportedly mature,⁴⁹ if US defenses keep pace, a manifest distinction between defending against rogue and great power strategic ballistic missile threats may no longer be practicable. The point at which such a possible distinction between defending against rogue and defending against great power missile threats could become so blurred is not clear. Some suggest it may be if rogue states are able to master technology such as multiple re-entry vehicles (MRVs) on strategic ballistic missiles.⁵⁰

If continuing to defend against maturing rogue state missile threats were to blur the distinction between defending against rogue state and great power missile threats, the United States could be forced to choose between: continuing to expand its supposedly "destabilizing" strategic defenses to keep pace with growing rogue missile capabilities, *or* continuing to adhere to the traditional stability paradigm's demand for mutual vulnerability vis-à-vis great powers. It might no longer be

⁴⁸ Thompson, "Congress Holds the Key to Outpacing North Korea's Nuclear Capabilities," op. cit.

⁴⁹ See for example, Bill Gertz, "North Korea Shows Off New ICBM," *The Washington Times*, October 10, 2020, at

https://www.washingtontimes.com/news/2020/oct/10/north-koreashows-new-icbm/; and, Mark Episkopos, "North Korea's New ICBM Lacks MIRV Capability, Has 15,000 km Range," *The National Interest Online*, October 20, 2020, at https://nationalinterest.org/blog/koreawatch/north-koreas-new-icbm-lacks-mirv-capability-has-15000-kmrange-report-171043.

⁵⁰ As suggested in Michael Unbehauen, "The Case for Missile Defense and an Efficient Defense of the Homeland," *Wild Blue Yonder*, Maxwell AFB, June 8, 2020, at

https://www.airuniversity.af.edu/DesktopModules/ArticleCS/Print.a spx?PortalId=10&ModuleId=25611&Article=2210755.

possible to thread this needle by pursuing a missile defense system intended to protect against the rogue nuclear missile threat without also purportedly destabilizing great power mutual deterrence. If so, the question the United States will face is whether to expand its strategic missile defense capabilities to keep pace with maturing rogue threats, or to limit its strategic missile defense in deference to the Cold War stability paradigm.⁵¹

The answer to this question could have enormous consequences. Deferring to the Cold War paradigm by intentionally conceding a condition of mutual vulnerability to states such as North Korea, as some already suggest,⁵² would obviously expand the list of opponents able to attack US society via nuclear missile strike. Doing so could also increase the prospects for rogue state coercive threats and attacks against US allies. If the United States is vulnerable to a rogue state's nuclear missile attack, the reported questioning of US extended deterrence *credibility* likely would increase:⁵³ How could the United States credibly

⁵² "The new reality of North Korea's capabilities — including the threat to the continental United States — demands careful thought about how Washington might influence nuclear decision-making in Pyongyang. A stable deterrence relationship requires making Kim feel secure about his arsenal, not insecure." Ankit Panda, "The Right Way to Manage a Nuclear North Korea," *Foreign Affairs*, November 19, 2018, available online at https://www.foreignaffairs.com/articles/north-korea/2018-11-19/right-way-manage-nuclear-north-korea.

⁵¹ See the discussion in Brad Roberts, "Anticipating the 2021 Missile Defense Review," *RealClear Defense*, January 7, 2021, at

https://www.realcleardefense.com/articles/2021/01/07/anticipating_the_2021_missile_defense_review_655612.html.

⁵³ Such concerns already appear to exist according to some pertinent commentators. See for example, Michael Peck, "Why Does South Korea Want Ballistic Missiles? Because it Can't Rely on America," *Forbes Online*, August 11, 2020, at

https://www.forbes.com/sites/michaelpeck/2020/08/11/why-doessouth-korea-want-ballistic-missiles-because-it-cant-rely-onamerica/#2e0a0b8749db.

extend nuclear deterrence to allies who are threatened by a rogue state *if the US homeland itself were vulnerable to that rogue's nuclear threat*?⁵⁴

Given post-Cold War developments, allies already reportedly question anew the credibility of US extended deterrence. A former US Ambassador to NATO now observes: "In Europe, allies wonder whether the United States would be willing to defend Poland or the Baltics if Russia were to threaten them with nuclear attack. In Asia, China's growing military might and North Korea's acquisition of long-range missiles have raised similar concerns about Washington's nuclear commitments."⁵⁵

It is hard to conceive of a greater motivation for some allies to acquire their own nuclear capabilities than the undermining of US security assurances likely caused by US homeland vulnerability to rogue states—with a potential cascade of nuclear proliferation that could follow.⁵⁶ South Korea's reported short-lived pursuit of nuclear weapons during the Cold War apparently was driven by a decline in

⁵⁴ During the Cold War, Colin Gray asked this same rhetorical question regarding the credibility of US extended deterrence threats when the United States itself is vulnerable to the opponent's nuclear retaliation: "Why would not an American president be deterred from inflicting 'unacceptable damage' by the certain knowledge of the unacceptable character of the anticipated Soviet response?" See, "Targeting Problems for Central War," in, *Strategic Nuclear Targeting*, Desmond Ball and Jeffrey Richelson, eds. (Ithaca, NY: Cornell University Press, 1986), p. 172.

⁵⁵ Ivo H. Daalder, "Does the U.S. Nuclear Umbrella Still Protect America's Allies? The next president should move swiftly to reassure allies that the U.S. nuclear guarantee remains credible – or risk rapid nuclear proliferation," *ForeignPolicy.com*, Oct. 27, 2020, at https://foreignpolicy.com/2020/10/27/u-s-nuclear-umbrellaproliferation/.

⁵⁶ Pete McKenzie , "America's Allies are Becoming a Nuclear-Proliferation Threat," *Defense One*, March 25, 2020, available at https://www.defenseone.com/threats/2020/03/americas-allies-arebecoming-nuclear-proliferation-threat/164057/.

"South Korean confidence in the U.S. security commitment."⁵⁷ Post-Cold War developments may already be fanning those flames again. For example, according to a 2016 poll, 68 percent of South Koreans already "say that their nation should develop its own nuclear weapons."⁵⁸

In short, unintended consequences of unalloyed obeisance to the Cold War stability formula regarding strategic defense now may be significant US societal vulnerability to rogue missiles (and to accidental/limited missile launches from any quarter), the loss of US extended deterrence credibility vis-à-vis rogue threats, and greatly increased pressure for nuclear proliferation among allies who see their security as tied to credible US extended nuclear deterrence. In contrast, constantly improving US homeland defenses may be essential if US goals continue to include defending American society against rogue missiles, extending credible deterrence and assurance to allies confronted by rogue states, and supporting nuclear nonproliferation. Given this post-Cold War geopolitical reality, advancing US strategic defenses to keep pace with rogue missile threats may properly be deemed stabilizingcontrary to the continuing frequent public criticism derived from the Cold War stability formula. Given post-Cold War developments, missile defense can no longer be dismissed reflexively as "destabilizing." Doing so reflects archaic Cold War thinking; missile defense may now be critical for deterrence stability in some cases.

DefenseOne.com, October 1, 2020, at

⁵⁷ Eric Brewer, "Why Trump's Retreat from U.S. Allies Could Have Nuclear Consequences for Decades, America Gave Allies and Partners Good Reason to Shelve Their Nuclear-Weapons Efforts,"

https://www.defenseone.com/ideas/2020/10/why-trumps-retreat-us-allies-could-have-nuclear-consequences/168896/.

⁵⁸ "Poll Du Jour," *The Washington Times*, February 16, 2016, p. A-2.

Stability and Geopolitical Developments in the Contemporary Era: Revanchist Goals and Coercive Limited Nuclear First-Use Threats

The Cold War stability paradigm presumed an opponent remarkably like the United States in its calculations, goals and decision making. The thinking on nuclear issues prominent in the United States was considered the standard for all rationality. The presumptions of rational decision making and that US patterns of thinking defined rationality were so prevalent that in many public studies of deterrence stability the contending parties were identified simply as comparable "Countries A and B,"⁵⁹ with American-type values and calculations assumed for both.

If some Soviet nuclear views seemed exceptional or "primitive,"⁶⁰ they were expected to advance naturally and "converge" with US views via exposure to the more sophisticated US thinking and as Soviet technology caught up with US technology: "...technology determines to a large extent the kind of strategic doctrines and policies that will be adopted by the superpowers. Thus, technology seems to have a leveling effect which subsumes political, ideological and social differences in various political systems."⁶¹ In short, even if Russia's 1960s nuclear thought seemed to focus on nuclear war-fighting vice mutual deterrence,

⁵⁹ Cold War deterrence analyses frequently used the non-descript Country A and Country B construct as a basis for their studies. See for example, Glenn Kent, Randall DeValk, David Thaler, *A Calculus of First-Strike Stability (A Criterion for Evaluating Strategic Forces),* A RAND Note, N-2526-AF (Santa Monica, CA: RAND Corp., June 1988).

⁶⁰ As described by Paul Warnke in, "The Real Paul Warnke," *New Republic*, March 26, 1977, pp. 22-23.

⁶¹ See Roman Kolkowicz, et al., *The Soviet Union and Arms Control – A Superpower Dilemma* (Baltimore: Johns Hopkins University Press, 1970), pp. 35-37. See also, Colin S. Gray, *Nuclear Strategy and National Style* (Lanham, MD: Hamilton Press, 1986), pp. 137-139.

Russian leaders could soon be expected to act and think like American leaders – a very comforting and convenient conclusion.

With this "mirror imaging" presumption, the Cold War paradigm is a reflection of a US worldview, but not necessarily that of any opponent. The difficulties involved in seeking to understand the characteristics of any country's unique decision-making process as part of deterrence considerations could be avoided entirely: there is no need for the challenging work required to understand an opponent's particular goals and motivations, or to comment on the motivations and perceptions underlying its threatening geopolitical goals. Mirror imaging alleviates any such need, and the restraints of a stable deterrence balance are assumed to overshadow the possible effects of all such factors on the opponent's decision making and the functioning of deterrence. Academic Cold War deterrence stability studies frequently ignored these potentially critical distinctions among parties; quantitative stability studies were particularly explicit in doing so.

Mirror imaging and disregard of the possible idiosyncrasies of Soviet perceptions and decision making allowed profound predictions to be made easily about how deterrence would function and mutual deterrence stability—without regard for how Soviet domestic and foreign behaviors and calculations differed considerably from those of the United States. To be rational was defined according to familiar American thought patterns and thus the mutual stability formula could be above and beyond all such considerations vis-à-vis any rational opponent.

This assumption of key similarities between the parties included most prominently the expectation that the rational fear of nuclear retaliation would reliably deter the opponent's employment of nuclear weapons: Adversaries will not attack the United States, the thinking goes, because they know the United States would retaliate with overwhelming force, potentially involving nuclear weapons. The concept of deterrence assumes both sides are rational actors who ultimately desire survival above all else.⁶²

The presumed mutual deterrence threat of a stable balance of terror is: "if you strike me, I will retaliate massively." This assumed implicit mutual understanding is expected to prevent either party from undertaking extreme provocations and thereby tends to serve the purposes of status quo powers seeking to preserve the established order. The presumption at the heart of the Cold War stability paradigm, that if states are not manifestly "irrational" they are reliably deterrable, remains prevalent in public discourse. The comforting expectation that follows from this enduring presumption is that deterrence stability functions reliably vis-à-vis all rational or "sensible" states.⁶³

However, a wholly pertinent post-Cold War geopolitical development in this regard is that some contemporary great powers and rogue states seem *not* to acknowledge as self-evidently decisive the restraints that a stable balance of terror is expected to place on them. Russia, China, and North Korea all appear to see the existing

⁶² Peter K. Hatemi and Rose McDermott, "Revenge is Best Served Nuclear. US Deterrence Depends on It," *Bulletin of the Atomic Scientists*, December 4, 2020, available at,

https://thebulletin.org/2020/12/revenge-is-a-dish-best-served-nuclear-us-deterrence-depends-on-it/.

⁶³ See for example, Kenneth N. Waltz, "Nuclear Myths and Political Realities," *The American Political Science Review*, Vol. 84, No. 3 (September 1990), pp. 737-738; James Lebovic, *Deterring International Terrorism and Rogue States* (New York: Routledge, 2007), p. 29; James Wood Forsyth Jr., "Nuclear Weapons and Political Behavior," *Strategic Studies Quarterly*, Vol. 11, No. 3 (Fall 2017), pp. 116, 120; and Robert Jervis, "The Political Effects of Nuclear Weapons: A Comment," *International Security*, Vol. 13, No. 2 (Fall 1988), p. 81.

international order as intolerably unfair to them and to have revisionist goals in opposition to the existing international order. They also appear to see the United States and allies as the impediments to their respective goals of recovering or attaining their desired positions in the sun-positions denied them by the supposedly malevolent West-and nuclear weapons as a coercive tool to help them change the system. Their apparent coercive use of nuclear threats to challenge the established order goes well beyond the assumed Cold War's implicit stable deterrence agreement that, "if you strike me, I will retaliate massively." Instead, appears to be, "if you dare to it resist mv encroachment/provocation, I will strike you." This type of threat presents an unprecedented challenge to the defense of an existing order. It is a coercive tool of a revisionist power.⁶⁴ Iran also appears to be a non-status quo power seeking hegemony in the Middle East and may similarly see nuclear weapons as such a potential coercive tool.

Cognitive studies show that decision makers often are willing to accept greater risk to recover that which they believe rightly should be theirs and has been lost.⁶⁵ This is not simply an academic point. NATO now includes countries that were either captive nations within the Soviet Union or members of its alliance, and several of these new NATO members have significant Russian-speaking

⁶⁴ Russia appears to use nuclear threats for purposes well below defensive goals involving national existence. Russia reportedly has, for example, said that "Danish warships will be targets for Russian nuclear missiles" if Denmark joins NATO's missile defense system. See,

"Russia Threatens to Aim Nuclear Missiles at Denmark Ships if it Joins NATO Shield," *Reuters*, March 22, 2015, at

https://www.reuters.com/article/us-denmark-russia/russia-threatensto-aim-nuclear-missiles-at-denmark-ships-if-it-joins-nato-shieldidUSKBN0MI0ML20150322.

⁶⁵ See the discussion in Thomas Scheber, "Evolutionary Psychology, Cognitive Function, and Deterrence," in *Understanding Deterrence*, Keith Payne, ed. (London: Routledge, 2013), pp. 83-84.

minority populations. The desire to recover that which the West has, in its view, unfairly taken, i.e., revanchism, appears to be a powerful dynamic now underlying Russian aspirations; it is a new dynamic beyond the ideology and naked power politics that inspired Soviet Cold War expansionism.⁶⁶ The 2017 *National Security Strategy* states that, "Russia seeks to restore its great power status and establish spheres of influence near its borders" in an attempt "to shape a world antithetical to U.S. values and interests."⁶⁷ Britain's well-regarded International Institute for Strategic Studies describes the situation concisely: "Russia's armed forces are today a capable military tool that Moscow has demonstrated a willingness to use or to threaten the use of," and, Russia is "increasingly trying to exert control in neighbouring states."⁶⁸

The prospect for Russia moving in this disturbing direction was described well in 1992 by Walter Slocombe, a senior DOD official in the Carter and subsequently Clinton Administrations: "For a long time there will be a danger of a Russian relapse that could bring to power a nationalistic, militarized, and possibly adventurist regime in

⁶⁶A 2020 study by the US State Department captures this contemporary Russian dynamic: "Russia seeks to restore its sphere of influence, both in the countries of its so-called 'near-abroad' (e.g., Ukraine and Georgia) and by acquiring client states farther afield (e.g., Syria) through the use of blatant military aggression, proxy forces, political and military subversion....The Kremlin is also notably risk-tolerant in its policy choices, not shying away from reckless gambles and extravagant provocations..." US Department of State, "Competitive Strategy vis-àvis Russia and China," *Arms Control and International Security Papers*, Vol. 1, No. 6 (May 2020), p. 3.

⁶⁷ The White House, *National Security Strategy of the United States of America*, December 2017, op. cit., pp. 25-26.

⁶⁸ Quoted in Edward Brown, "Russian Military Strongest Since COLD WAR - Experts Issue Worrying Nuclear Weapons Warning," UK Express, October 2, 2020, at,

https://www.express.co.uk/news/world/1342668/Russia-news-Vladimir-Putin-cold-war-military-nuclear-weapons-poisoning.

Moscow....such a regime would have vast military—and particular nuclear—forces at its disposal.... Military, including nuclear, threats would surely be part of such a regime's bullying diplomacy."⁶⁹ The Russian relapse anticipated by Slocombe certainly appears to have taken place.

Russia's apparent revanchist drive to reintegrate the political order in Europe under its hegemony, including by military force, is reflected in its illegal territory-grabbing operations against Georgia in 2008 and Ukraine since 2014. In neighboring Lithuania, Russia's foreign and security policies are now considered "the main threat to Lithuania's national security" and to the country's territorial integrity.⁷⁰

It is critical to understand, as a recent State Department report observes: "Russia is working to expand the capabilities of its armed forces, *including its nuclear forces*, in order to give it more tools with which to accomplish these objectives."⁷¹ Russia's nuclear doctrine appears to include coercive limited nuclear first-use threats intended to paralyze prospective NATO military opposition in the event conflict erupts from its expansionist drive, i.e., "If you dare to resist my encroachment/provocation, I will strike you." In Russian parlance this apparently is euphemistically referred to as de-escalating a conflict because the West stands down.⁷² It may be thought of as one of Russia's

⁶⁹ Walter Slocombe, "The Future of U.S. Nuclear Weapons in a Restructured World," in, Patrick Garrity and Steven Maaranen, eds. *Nuclear Weapons in the Changing World* (New York: Plenum Press, 1992), pp. 54-55.

⁷⁰"National Threat Assessment 2020" (Second Investigation Department under the Ministry of National Defence and State Security Department of the Republic of Lithuania, 2020), p. 4, https://www.vsd.lt/wpcontent/uploads/2020/02/2020-Gresmes-En.pdf.

⁷¹ US Department of State, "Competitive Strategy vis-à-vis Russia and China," op. cit., p. 3. (Emphasis added).

⁷² See the sources cited in footnote 35 above. See also, Michael Kofman, et al., *Russian Strategy for Escalation Management: Evolution of Key*

possible chosen means, i.e., nuclear coercion, to work around US stable deterrence constraints expected to limit Russia's use of force in support of its expansionist goals.

This appears to be more than just talk. US Ambassador Marshall Billingslea observes that, "Russia continues to behave as though there's some sort of distinction between the use of strategic versus tactical nuclear weapons. This likely is because their war plans for invading NATO territory contemplate scenarios where they would employ a battlefield [nuclear] strike, believing NATO would capitulate, rather than retaliate.... we know that Putin

Concepts, DRM-2019-U-022455-Rev (Arlington, VA: Center for Naval Analysis, April 13, 2020), pp. i-ii, 7, 10, 26, 34, 44, 79; Jacob W. Kipp, "Russia's Nonstrategic Nuclear Weapons," *Military Review* (May-June 2001), at

http//fmso.leavenworth.army.mil/documents/russiasnukes/russias_n ukes.htm; Robert Work and James Winnefeld, Testimony before the Committee on Armed Services, US House of Representatives, June 25, 2015, p. 4, at

http://docs.house.gov/meetings/AS/AS00/20150625/103669 /HHRG-114-AS00-Wstate-WorkR-20150625.pdf; Robert Scher, Statement of Robert Scher, Assistant Secretary of Defense for Strategy, Plans, and Capabilities before the House Armed Services Subcommittee on Strategic Forces, March 2, 2016, p. 3, at

http://docs.house.gov/Meetings/AS/AS29/20160302/104619/HHRG-114-AS29 -Wstate-ScherR-20160302.pdf; *Statement of Robert Work, Deputy Secretary of Defense and Admiral James Winnefeld, Vice Chairman of the Joint Chiefs of Staff, Before the House Committee on Armed Services,* op. cit., p. 4 ; Mark B. Schneider, "Putin's New Nuclear Doctrine," *RealClearDefense,* June 23, 2020, at

https://www.realcleardefense.com/articles/2020/06/23/putins_new_ nuclear_doctrine_115405.html; Brig. Gen. Kevin Ryan, "Is 'Escalate to Deescalate' Part of Russia's Nuclear Toolbox?," *Russia Matters*, Harvard Kennedy School's Belfer Center for Science and International Affairs, January 8, 2020, available at

https://www.russiamatters.org/analysis/escalate-deescalate-partrussias-nuclear-toolbox; and, Gerald Brown, "Deterrence, Norms, and Uncomfortable Realities of a New Nuclear Age," *War On The Rocks*, April 20, 2020, available at

https://warontherocks.com/2020/04/deterrence-norms-and-the-uncomfortable-realities-of-a-new-nuclear-age/.

thinks that a nuclear war can be won, and his people are constantly wargaming and planning on how to fight one."⁷³ Russia reportedly put its nuclear forces on alert during the 2008 war with Georgia⁷⁴ and, after seizing Ukrainian territory, Russian military leaders reportedly raised the issue of limited Russian nuclear escalation should NATO intervene in response to Russian aggression in the Crimea.⁷⁵ Correspondingly, senior Ministry of Defense officials in Latvia, a NATO ally bordering Russia, reportedly fear "as the most dangerous scenario" a Russian blitzkrieg attack under the cover of nuclear weapons: "If you should look at Russian exercises, then you would see that they are exercising for such a scenario."⁷⁶

https://www.stratcom.mil/speeches/2015/137/Keynote_2015_USSTR ATCOM_Deterrence_Symposium/.

⁷⁵ Damien Sharkov, "Russia Has Threatened Nuclear Attack, Says Ukraine Defence Minister," *Newsweek*, September 1, 2014, available at http://www.newsweek.com/russia-has-threatened-nuclear-attacksays-ukraine-defence-minister-267842; Ben Hoyle, "Putin: Try to Take Crimea Away and There'll be a Nuclear War: Secret Meeting of Kremlin Elite and US Top Brass Reveals Russian Threat to West," *The Times (London)*, April 2, 2015, available at

http://search.proquest.com/professional/login; and, Zachary Keck, "Russia Threatens Nuclear Strikes Over Crimea," *The Diplomat*, July 11, 2014, available at http://thediplomat.com/2014/07/russia-threatensnuclear-strikes-over-crimea/.

⁷⁶ Latvian Defense Ministry official Janis Garrisons quoted in, Joel Gehrke, "'Nuclear 'Blitzkeieg': NATO Ally Latvia Fears Russia will Stage Swift Invasion Using Small Nukes," *Washington Examiner Online*, March 5, 2020, at

⁷³ Marshall Billingslea, "Arms Control and the New START Treaty," Information Series, No. 472 (December 8, 2020), p. 2, available at https://www.nipp.org/2020/12/08/billingslea-marshall-arms-controland-the-new-start-treaty/.

⁷⁴ Robert Joseph, "Commentary," speech at National Defense University, Washington, D.C., *Deterrence Imperatives: Capabilities and Education*, October 8, 2015. See also Frank Miller, "Keynote Address," U.S. Strategic Command Deterrence Symposium, July 29, 2015, available at

https://www.washingtonexaminer.com/policy/defense-national-

Russia appears to leave open the option of threatening limited nuclear first use and to see this coercive strategy as part of its "theory of victory."77 How does this development cast doubt on the established Cold War deterrence stability paradigm? Strategic stability, of course, is expected to preclude any such coercive employment of nuclear weapons; it is assumed to be outside the conceivable behavior of any rational leadership. The apparent post-Cold War development of Russian nuclear doctrine, however, suggests that such an "irrational" approach to nuclear weapons is indeed possible. US Strategic Command's ADM Charles Richard has observed that, "The fact that Russia has several thousand non-treaty accountable [nuclear] weapons is evidence that they at least perceive a deterrence gap where they think they have an advantage and that we would not be able to respond."78 This development alone demands questioning the Cold War stability paradigm's assumptions of status quo, defensive deterrence goals and that no geopolitical goal could lead a rational opponent to risk initiating nuclear war.

In short, the sanguine expectation that no rational leadership would risk the employment of nuclear weapons now appears questionable in light of Russia's revanchist goals and apparent notions of limited nuclear threats and employment. It must now be asked: how do new post-Cold

⁷⁷ Brad Roberts, *On Theories of Victory, Red and Blue*, Livermore Papers of Global Security, No. 7 (June 2020), pp. 42-57; Brad Roberts, *The Case for U.S. Nuclear Weapons in the 21st Century* (Stanford, CA: Stanford University Press, 2016), pp. 35, 99, 103-104, 192-194, 260-262, 268-271; Mark Schneider, "Russian Nuclear 'De-Escalation' of Future War," *Comparative Strategy*, op. cit., p. 362.

security/nuclear-blitzkrieg-nato-ally-latvia-fears-russia-will-stageswift-invasion-using-small-nukes.

⁷⁸ Mallory Shelbourne, "STRATCOM: U.S. Needs 'Broader-Base of Strategic Review' To Assess Threats," *USNI News*, January 5, 2021, at https://news.usni.org/2021/01/05/stratcom-u-s-needs-broader-basedstrategic-review-to-assess-threats, p. 2.

War realities affect the calculations assumed in the Cold War paradigm? For example, what nuclear risks are Moscow's leaders now willing to accept to restore Russia's past position, and how *credible against Russian limited* nuclear first-use threats (that may avoid US territory entirely) can be large-scale US balance of terror-oriented retaliatory threats to Russia when the consequence of executing such a threat for the United States would likely be its own destruction?

It should be noted that this discussion focuses on Russia, but there appear to be some parallels to China's ruling Communist Party goals and threats in Asia.⁷⁹ The Director of the State Department's Policy Planning Staff, Peter Berkowitz, observes that, "Beijing's long-term goal is to fundamentally revise world order, placing the People's Republic of China (PRC)...at the center and serving Beijing's authoritarian goals and imperial ambitions." And, "China's ambitions for global supremacy flow from the CCP's overarching sensibility. That sensibility is authoritarian, collectivist, and imperial."80 Japan's Defense of Japan 2020 report describes China's actions and goals in Asia in stark terms: "China has relentlessly continued unilateral attempts to change the status quo by coercion in

Nuclear Risks: The Supplemental Low-Yield U.S. Submarine-Launched Warhead," Arms Control and International Security Papers, US Department of State, Office of the Under Secretary of State for Arms Control and International Security, Vol. 1, No. 4 (April 24, 2020), p. 2. And, Bradley Thayer, "Get Ready for a New Arms Race," *The National Interest*, May 21, 2020, at https://nationalinterest.org/feature/getready-new-arms-race-why-nuclear-strategic-stability-won%E2%80%99twork-china-156676.

⁷⁹ See Roberts, *On Theories of Victory, Red and Blue*, op. cit., pp. 42-57. See also, Christopher Ford, "Strengthening Deterrence and Reducing

⁸⁰ Peter Berkowitz, "The Pattern and Purpose of China's Actions," *RealClearPolitics*, Oct. 25, 2020, at

https://www.realclearpolitics.com/articles/2020/10/25/the_pattern_a nd_purpose_of_chinas_actions_144522.html.

the sea area around the Senkaku Islands, leading to a grave matter of concern.... In the South China Sea, China is moving forward with militarization, as well as expanding and intensifying its activities in the maritime and aerial domains, thereby continuing unilateral attempts to change the status quo by coercion and to create a fait accompli."⁸¹

According to Secretary of State Michael Pompeo, China has "the world's fastest-growing nuclear arsenal."⁸² ADM Richard has indicated that China is a growing threat, and is "on a trajectory to be a strategic peer and should not be mistaken as a 'lesser included' case."⁸³ He also has observed that "They always go faster than we think they will, and we must pay attention to what they do and not necessarily what they say."⁸⁴ While China's declared nuclear "no first use policy" may seem to suggest that nuclear threats are not part of China's coercive tool kit, senior US military officials reportedly have said that China's "no first-use policy" is

⁸¹ Ministry of Defense, *The Defense of Japan 2020 (Digest)*, Part I, Chapter 2, at https://www.mod.go.jp>publ>w_paper.

⁸² Michael Pompeo and Marshall Billingslea, "Why China's Nuclear Build-Up Should Worry the West," *Newsweek*, January 4, 2021, at https://www.newsweek.com/chinas-nuclear-madness-opinion-1558342.

⁸³ Admiral Charles A. Richard, "Forging 21st-Century Strategic Deterrence," *Proceedings*, Vol. 147/2/1046 (February 2021), available at https://www.usni.org/magazines/proceedings/2021/february/forgin g-21st-century-strategic-deterrence.

⁸⁴ Quoted in, Amy McCullough, "Russia, China Push STRATCOM to Reconsider Strategic Deterrence," *Air Force Magazine Online*, October 21, 2021, at https://www.airforcemag.com/russia-china-push-stratcom-toreconsider-strategic

deterrence/#:~:text=Russia%2C%20China%20Push%20STRATCOM%2 0to%20Reconsider%20Strategic%20Deterrence,Oct.&text=That%20shift %20in%20thinking%20is,into%20all%2Dout%20nuclear%20war.

"ambiguous."⁸⁵ Senior DOD official, Robert Soofer, has stated explicitly "I don't believe China when they say they have a no first use policy,"⁸⁶ and ADM Richard reportedly has said that, "I see China developing a stack of capabilities that would be inconsistent with a no first use policy,"⁸⁷ and that one could "drive a truck through" the loopholes in the Chinese declared no first-use policy.⁸⁸

In September 2020, China's Air Force apparently released a video of a simulated Chinese attack against America's Anderson Air Force Base on Guam by a reportedly nuclear-capable Chinese H-6 heavy bomber.⁸⁹

⁸⁵ Rachel Cohen, "USAF Rethinks Relationship Between Conventional, Nuclear Weapons," *Air Force Magazine Online*, August 19, 2020, at https://www.airforcemag.com/usaf-rethinks-relationship-betweenconventional-nuclear-weapons/.

⁸⁶ Quoted in Paul McLeary, "I Don't Believe China 'is Serious About Nuke No First Use' – DASD Nukes Soofer," *Breakingdefense.com*, September 2, 2020, at https://breakingdefense.com/2020/09/i-dontbelieve-china-is-serious-about-nuke-no-first-use-dasd-nukes-soofer/.

⁸⁷ Quoted in, Bill Gertz, "China's 'No First Use' Policy In Doubt," Washington Times (Inside the Ring), Sept. 17, p. A9. See also, Billingslea, "Arms Control and the New START Treaty," op. cit., pp. 5-6.

⁸⁸ See, US Strategic Command and US Northern Command SASC Testimony, As Delivered, Washington, D.C., February 13, 2020, available at https://www.armed-

services.senate.gov/imo/media/doc/20-24_02-13-2020.pdf. Senior Chinese General, Li Zuocheng recently stated that "we do not promise to abandon the use of force," and that "the people's armed forces" will "take all necessary steps" and "all necessary measures" to control the situation in the Taiwan Strait." See, Yew Lun tian, "Attack on Taiwan an Option to Stop Independence, Top China General Says," *Reuters*, May 29, 2020, at https://www.reuters.com/article/us-china-taiwansecurity/attack-on-taiwan-an-option-to-stop-independence-top-chinageneral-says-idUSKBN2350AD.

⁸⁹ Yew Lun Tian, "China air force video appears to show simulated attack on U.S. base on Guam," *Reuters*, September 21, 2020, at https://www.reuters.com/article/china-usa-security/china-air-force-video-appears-to-show-simulated-attack-on-us-air-base-on-guam-idUSL3N2GI0J2.

The video apparently was released as China carried out military drills near Taiwan. US officials described the video as an example of China's efforts intended to coerce others in the region.⁹⁰ Collin Koh, a research fellow at Singapore's Institute of Defence and Strategic Studies, commented that, "The video is meant to warn the Americans that even supposedly safe, rearward positions such as Guam may come under threat when conflicts over regional flashpoints, be it Taiwan or South China Sea, erupt."⁹¹

While not considered a great power, North Korea too appears to have revisionist/revanchist geopolitical goals and to see its growing nuclear capabilities as a tool for coercive diplomacy. A recent US Army assessment reportedly concludes that North Korea's advanced capabilities are intended to enable "the regime to conduct coercive diplomacy through the potential threat of nuclear weapons and computer warfare."⁹²

The Cold War stability paradigm is largely silent regarding such threats and offers no useful guidance. It understandably does not address Russian (or any other) limited coercive nuclear threats motivated by revanchist/expansionist goals, extreme nationalism, and the perception of an enduring zero-sum game with a

September 23, 2020, at https://www.newsweek.com/us-call-videoshow-china-bombing-air-base-coerce-intimidate-1533894. See also, Ben Blanchard, "U.S. base commander calls Chinese Guam attack video 'propaganda,'" *Reuters*, September 15, 2020, at

⁹⁰ Tom O'Connor, "U.S. Calls Video Showing China Bombing U.S. Air Force Base 'Attempt to Coerce, Intimidate," *Newsweek Online*,

https://www.reuters.com/article/us-usa-security-guam/u-s-basecommander-calls-chinese-guam-attack-video-propagandaidUSKCN26G01Z.

⁹¹ Quoted in, Yew Lun Tian, "China air force video appears to show simulated attack on U.S. base on Guam," op. cit.

⁹² See "North Korea's Nuclear, Chemical Arsenals Are Growing: U.S. Army," *Korea JoongAng Daily*, August 20, 2020, at koreajoongangdaily.joins.com.

malevolent West.⁹³ The paradigm essentially dismisses the possibility of such an employment of nuclear weapons as irrational. Yet, US opponents appear to have added to the classic implicit deterrence agreement, "if you strike me, I will retaliate massively," the new order of coercive nuclear threat – one that supposedly is precluded by a condition of strategic stability: "if you dare to resist my encroachment/ provocation, I will strike you." The stability paradigm and its typology for judging US forces as "stabilizing" or "destabilizing" simply do not address the West's possible post-Cold War need to provide credible deterrence threat options against such coercive limited nuclear threats serving revanchist goals.

The old forces typology associated with the stability paradigm misses these new realities. If expanding Russian nuclear capabilities and beliefs contribute to Russian confidence in its expansionist agenda and so encourage its aggressive behaviors, they very likely increase the risk of war in Europe, including nuclear war, and should be deemed destabilizing – regardless of how they fit into the Cold War stability typology of forces. There is no reason to assume that nuclear war can be limited following first use.⁹⁴ But whether or not anyone in the West concurs is *irrelevant* to the challenge to deterrence stability emanating from Moscow's apparent belief that it *can* be limited to Russia's advantage. Correspondingly, Western nuclear policies and capabilities that deny/discourage Russia, China, and North Korea from believing that they can pursue coercive and

⁹³ According to prominent Russian commentator Alexi Arbatov, such a view is a common belief in Moscow. See Pavel Felgenhauer, "Russia Prepares for War with the US and NATO," *Eurasia Daily Monitor*, Vol. 10, Issue 48, March 14, 2013, at

https://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news&5D=40592.

⁹⁴ Colin Gray, for example, had no confidence that nuclear employment, once initiated, would remain limited. Colin S. Gray, *Theory of Strategy* (Oxford: Oxford University Press, 2018), pp. 122-123.

militarily aggressive agendas may be stabilizing—again, regardless of the Cold War's force typology.

Yet, predictably, US efforts to help address this problem via deterrent options that provide greater flexibility and discrimination are routinely opposed in public debate as being destabilizing.⁹⁵ They simply do not fit the Cold War's typology of stabilizing forces. But that does not mean that they now are incompatible with deterrence or are destabilizing given post-Cold War threat realities. When now considering what constitutes a condition of stability and the categorization of forces as stabilizing or destabilizing, the many possible departures from the Cold War stability paradigm's mirror-imaging presumptions must be considered, including the seeming geopolitical reality of Russian (Chinese, North Korean, or other) revanchism and related purpose of Russia's nuclear firstuse threats.

Indeed, the deterrence requirement for flexible and discriminate US threat options has long been accepted on a bipartisan basis.⁹⁶ Air Force Lt. Gen. Richard Clark, the Deputy Chief of Staff for Strategic Deterrence, reportedly observed recently that the US requirement for "a wide range of nuclear weapons" follows from the need to deter opponents from believing that they could secure an advantage via the employment of nuclear weapons in the

⁹⁵ See for example, the discussion in David Lawler, "Nuclear Free-For-All: The Arms Control Era May be Ending," *Axios.com*, August 6, 2020, at https://www.axios.com/nuclear-arms-control-75-years-hiroshima-50d3fe4b-16ce-4d9d-aef0-53a496446271.html. See also the discussion in, Kris Osborn, "Why the U.S. Military Needs Both 'Tactical' Nuclear Weapons and ICBMs," *National Interest Online*, August 21, 2020, at https://nationalinterest.org/blog/buzz/why-us-military-needs-bothtactical-nuclear-weapons-and-icbms-167389.

⁹⁶ See for example, President's Commission on Strategic Forces, *Report of the President's Commission on Strategic Forces* (April 1983), op. cit. See also, Slocombe, "The Future of U.S. Nuclear Weapons in a Restructured World," op. cit., pp. 58-59.

first place: "What we're trying to prepare ourselves to do is to respond with whatever force is necessary in a nuclear environment. It's not so much to fight tactically. *Really, the ultimate goal here is to deter. We want to raise the threshold of using nuclear weapons, whether strategic or non-strategic...to the highest level possible.*"⁹⁷ This deterrence goal and related flexibility of US threat options should no longer be castigated reflexively as destabilizing, regardless of the enduring prominence in US public debate of the nowantiquated Cold War force typology.

In short, a revised understanding of what constitutes a condition of stable deterrence and the labeling of forces as stabilizing or destabilizing must take into consideration the prospect of opponents' revisionist/revanchist geopolitical goals and coercive uses for nuclear weapons. The Cold War stability paradigm's mirror-imaging presumption that opponents perceive and calculate similarly along familiar Western lines, and thus see nuclear weapons as unusable save for defensive deterrence purposes, is convenient and comforting. But it leads to problematic and potentially dangerous expectations and conclusions.

⁹⁷ Quoted in, Cohen, "USAF Rethinks Relationship Between

Conventional, Nuclear Weapons," op. cit. (Emphasis added). See also the comments by ADM Richard in, Shelbourne, "U.S. Needs 'Broader-Based Strategic Review' To Assess Threats," op. cit., p. 2; and, Osborn, "Why the U.S. Military Needs Both 'Tactical' Nuclear Weapons and ICBMs," op. cit.

Stability and Geopolitical Developments in the Contemporary Era: Deterrence Stability in a Multidimensional Threat Environment

The Cold War strategic deterrence "balance" was bipolar and, as noted, the stability paradigm was built on the presumption of a Soviet leadership that was similar to – indeed the "mirror image" of – the US leadership in ways pertinent to deterrence. And, for deterrence purposes the United States reportedly considered other powers to be subsets of the Soviet Union.⁹⁸ If other countries could be considered a "subset" of the Soviet Union for deterrence purposes, then US deterrence policy and capabilities able to deter the Soviet Union reasonably could be deemed more than capable of deterring the threats posed by lesser "subset" nuclear powers.

This bipolar approach to stability considerations simplified the deterrence problem enormously: if all opponents could be subsumed under the Soviet Union, and Soviet deterrence calculations were assumed to be the mirror image of US calculations, the functioning of deterrence could be deemed easily predictable. The common rational fear of US nuclear retaliation would reliably deter all opponents save the irrational. Those assumptions, however, were problematic even during the bipolar Cold War; they are manifestly absurd in the contemporary multidimensional threat environment.

⁹⁸ Anderson, "China's Arms Buildup Threatens the Nuclear Balance," op. cit. See also, Rachel Cohen, "USAF Rethinks Relationship Between Conventional, Nuclear Weapons," *Air Force Magazine Online*, August 19, 2020, at https://www.airforcemag.com/usaf-rethinks-relationshipbetween-conventional-nuclear-weapons/.

US strategic deterrence goals now include preventing Russian, Chinese, and North Korean nuclear attack,99 and the requirements for deterrence may vary significantly. Additional opponents and types of threats may well join this list if the geopolitical environment continues to shift and countries, including Iran, continue to pursue advanced military capabilities.¹⁰⁰ The expanded set of opponents in the future may include a de jure or de facto alliance of great powers in opposition to the United States. China's Foreign Minister Wang Yi reportedly has emphasized the need to China-Russia comprehensive "deepen strategic cooperation...so as to build a Sino-Russian pillar for world peace and security and global strategic stability."¹⁰¹ The notion that a single US deterrence strategy can cover the gamut of potential deterrence challenges is convenient and comforting, but heroically imprudent.

The expanded set of opponents has been paralleled by an equally significant expansion of the types of threats those opponents may pose. This contemporary international threat environment is not simply "multipolar" in the sense of multiple great powers in competition. "Multipolar" and "competition" do not capture the diversity of the actual international threat environment. It is, instead, characterized by a diversity of new opponents, cultural norms and worldviews, including great powers, in various

⁹⁹ The 2018 Department of Defense *Nuclear Posture Review* focuses deterrence attention on these prospective opponents. See, pp. 6-13, 29-33.

¹⁰⁰ See for example, Tom O'Connor, "Iran Shows Off New Long-Range Missile System That Will 'Shake' Enemy When Fired," *Newsweek Online*, November 4, 2020 at https://www.newsweek.com/iran-long-range-missile-system-shake-enemy-fire-1544902.

¹⁰¹ Quoted in, Joel Gehrke, "China and Russian Plan to 'Deepen' Cooperation Against U.S.," *Washington Examiner Online*, December 11, 2020, available at,

https://www.washingtonexaminer.com/policy/defense-nationalsecurity/china-and-russia-plan-to-deepen-cooperation-against-us.

levels of hostile and armed with engagement unprecedented types of capabilities. Calling this post-Cold War context a "competition" substitutes a benign euphemism drawn from sports-as if US relations with Russia, China, North Korea and Iran are reliably rulesbased and refereed by impartial officials with authority and power. In fact, there are no reliably enforced rules, few norms, and no such referees. Instead, there is a range of serious conflicts of interest, conflicting perceptions and goals, with the potential for great violence, possibly including a spectrum of weapons of mass destruction (WMD).¹⁰²

Several implications of this shift to a multidimensional global threat environment may now be seen. Perhaps most basically, given contemporary post-Cold War realities, a condition of great power mutual societal vulnerability at the strategic level, i.e., "stability," cannot prudently be assumed to ensure the absence of opponents' nuclear employment at the regional level. The prospects for great power nuclear war cannot be isolated or insulated from the potential for war at the regional level. Our understanding of stability and the forces compatible with stability must catch up to this reality. Stabilizing forces in this post-Cold War environment must now be recognized as including those regional and strategic capabilities needed to help deter Russian, Chinese, North Korean or Iranian aggression against US allies – aggression that could easily escalate to a much wider conflict. The Cold War paradigm's typology is far too narrow and rigid; it often leads to US and allied forces being tarred with the usual "destabilizing" label when, in reality, some level of those forces may now be essential for credible, resilient deterrence and the absence of war. For example, as already discussed, allied theater and

¹⁰² See John Mark Mattox, "Weapons of Mass Destruction and the Interagency," *InterAgency Journal, Special Edition: Weapons of Mass Destruction*, Vol. 6, Issue 2 (Spring 2015), pp. 3-7.

homeland missile defenses often continue to be criticized as destabilizing because they do not fit the Cold War paradigm's definition of stabilizing forces.

In addition, as noted, the Cold War stability paradigm presumes key similarities in US and opponent decision making and behavior. This presumption typically is reflected by the expressed expectation of "rational" or "sensible" behavior (as those qualities are defined by Western observers). This understanding of sensible behavior in a stable balance essentially denies the possibility of an opponents' employment of nuclear weapons or highly provocative behavior that could easily escalate to nuclear war. But, the expectation of stability – based on this presumption and definition of rationality – can be upset by a variety of factors that can affect an opponent's decision making—none of which necessarily involve irrationality.

Opponents need not be irrational for deterrence *not* to function according to the presumptions of the Cold War paradigm. The Western understanding of what constitutes rational, sensible deterrence behavior can be challenged by the enormous variation in diverse opponents' beliefs, perceptions, goals, values, tolerances, cultural definitions of reasonable behavior, and modes of decision making and communication.¹⁰³ Variations in these characteristics can be the dynamic for decision making that is not irrational but falls outside the boundaries of the definition of rational central to the Cold War stability paradigm. These types of factors can be seen in past decision making that led to actions or behavior that was inexplicable, or judged irrational at the time by outside observers.¹⁰⁴ US deterrence

¹⁰³ See the lengthy discussion of this point with numerous historical illustrations in Keith B. Payne, ed., *Understanding Deterrence* (London: Routledge, 2013).

¹⁰⁴ See Keith Payne, *Deterrence in the Second Nuclear Age* (Lexington, KY: University Press of Kentucky, 1996), pp. 79-119; and, Keith Payne, *The*

policies and forces must be resilient to these diverse factors affecting opponents' decision making.

By positing a common, narrow and familiar definition of what constitutes rational behavior, the Cold War stability paradigm assumes away the effect that the diversity of a multidimensional threat environment introduces to the functioning of deterrence and establishes expectations that deterrence will function reliably-even mechanisticallybased on a particular formula-as if it can be understood according to physical laws. But the functioning of deterrence, unlike physics, is not predictable in detail because it is subject to the vicissitudes of human perceptions, opinion and decision making. Long-range prediction regarding geopolitics "is 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?"105 Some opponents may perceive and calculate risks and costs in ways wholly outside the rational boundaries presumed by the stable deterrence paradigm. The ease and convenience of the stability paradigm are comforting – which is one of its great attractions. But, it is wholly inadequate for the real world of deterring war in a multidimensional threat environment.

The character of what constitutes a stable deterrence relationship may shift significantly depending on the opponent's goals, worldview and unique calculation of cost, risk and benefit. Movement from a bipolar deterrence context to one involving multiple and diverse opponents, including opaque rogue states, increases the chances that opponent decision making will be outside the mirrorimaging expectations of the Cold War stability paradigm.

Fallacies of Cold War Deterrence and a New Direction (Lexington, KY: University Press of Kentucky, 2001), pp. 1-77.

¹⁰⁵ Newt Gingrich, "Newt Gingrich: My Predictions for the Next 10 Years," *FoxNews.com*, January 3, 2021, at

https://www.foxnews.com/opinion/future-predictions-for-2020s-newt-gingrich.

Increasingly diverse opponents and threats expand the prospects that unexpected/unpredictable factors outside of the presumed Western definition of "rational" will drive or contribute to an opponent's decision making. The convenient assumption of comparably rational, predictable decision making underlying the stable deterrence paradigm is likely to prove increasingly mistaken, as correspondingly will its expectations of how deterrence should function and its typology of forces as stabilizing or destabilizing. Yet, deterrence must now serve to protect the United States and allies against a very diverse set of players and threats.

The Cold War stability paradigm and typology of stabilizing and destabilizing forces hardly capture the range of policies and capabilities that may be necessary for deterrence and stability in a threat environment that contains "a bewildering variety of poisonous snakes,"¹⁰⁶ some of which are far from transparent in their decision making. An understanding of stability revised for the post-Cold War threat environment must take into account the reality that diverse opponents are likely to have differing definitions of what constitutes sensible calculations and behaviors—including those that are contrary to the calculations and behaviors presumed in the parochial Cold War stability paradigm. Indeed, some opponents appear not to want stability as commonly understood in the West, but rather to promote instability.

It is apparent that, in an increasingly diverse threat context, deterrence is increasingly unlikely to function predictably as expected per the Cold War stability paradigm. The policy and force posture requirements for deterrence may now be as varied as the opponents and contexts within which deterrence must function. The diversity of opponents suggests the need for a spectrum of

¹⁰⁶ As described by President Clinton's Director of Central Intelligence, R. James Woolsey in, *Statement Before the Senate Select Committee on Intelligence*, February 2, 1993, (Mimeographed prepared statement), p. 2.

deterrence threats and supporting capabilities that differ from the Cold War paradigm's narrow focus on mutual, massive societal threats. Those Cold War guidelines reject a broader range of offensive options and defensive capabilities as destabilizing,¹⁰⁷ and by doing so may well entail a force posture that is too narrow to meet credible deterrence needs given post-Cold War realities. In some cases, perhaps the Cold War paradigm's assumptions about behavior and associated typology of forces as stabilizing or destabilizing will be suited to the opponent and context. In other cases, however, the opponent may follow very different patterns of decision making and behavior, and the needed US deterrence policy and force posture may be wholly different from those compatible with the aged stability paradigm.

A range of US deterrent threat options may be necessary for at least two basic reasons. Different opponents will: 1) likely value a variety of types of assets, and a range of US nuclear (and other) capabilities may be necessary to hold those assets at risk for deterrence purposes; and, 2) likely perceive and calculate risk and value differently, and a range of graduated threat options, including very limited nuclear options, may be necessary if US deterrent threats are *to be sufficiently credible and resilient*. The deterrence policy and force posture consistent with the Cold War stability paradigm is far from flexible in this sense; it mandates a very narrow set of capabilities and its credibility may be particularly suspect in the limited nuclear threat scenarios that now appear prominent.

In short, a prudent requirement that follows from an increasingly multidimensional threat environment is a broad range of deterrent options—some of which will fall outside the Cold War paradigm's definition of stabilizing.

¹⁰⁷ See, Kahan, *Security in the Nuclear Age*, op. cit., pp. 272-273. More recently, see Gartzke, "Why, in Nuclear Weapons Policy, Sometimes Fewer Options Are Better," op. cit.

This credible deterrence requirement for flexibility, i.e., a spectrum of options, is not new¹⁰⁸ - but it likely is magnified</sup> greatly by the post-Cold War multiplication of opponents and threats. Given the uncertainties involved in opponents' perceptions, calculations and decision making, nothing can reliably "ensure" deterrence. But a broader and more diverse range of threat options than is accepted under the Cold War stability paradigm may usefully help to expand the parameters for deterrence to apply to opponents who require other than a potentially incredible threat of massive societal destruction to be deterred. A spectrum of deterrence threat options seems only prudent in the post-Cold War threat environment given the diversity of opponents and threats and the potential variability of their decision making. As already discussed, on a wholly bipartisan basis the United States has long concluded that the narrow capabilities of the Cold War stability paradigm are inadequate to maintain credible deterrence. Yet, for many commentators the Cold War paradigm remains the basis for their criticism of US policies and nuclear programs, particularly their criticism of the Obama and Trump Administrations' nuclear programs.

For example, the stability paradigm's underlying assumption that leaderships are essentially alike and *predictably deterred by a known level and type of threat* is the basis for claims such as: "The submarine force alone is sufficient to deter our enemies and will be for the foreseeable future;"¹⁰⁹ "Why do we need the new LRSO [long range standoff cruise missile]? We don't, unless you think America should be prepared for a protracted, all-out

¹⁰⁸ See, Harold Brown, *The Department of Defense Statement on Strategic Military Balance: Military Assessment*, before the U.S. Senate, Committee on Foreign Relations, op. cit., p. 3.

¹⁰⁹ Perry, "Why It's Safe to Scrap America's ICBMs," op. cit.

war with the old Soviet Union;"¹¹⁰ "The reality is that ICBMs are not needed to deter Russia or any other nation from attacking the United States with nuclear weapons;"¹¹¹ and finally, "Washington and Moscow...could maintain viable nuclear deterrents with just 100 nuclear weapons on each side."¹¹²

Such definitive and precise claims about the US force posture adequate for deterrence, now and in the future, are wholly speculative. They lay claim to knowledge that does not exist by assuming that opponents' perceptions and calculations are predictable, the future functioning of deterrence is predictable and, correspondingly, the future requirements for deterrence are predictable in detail. But, in a multidimensional threat environment the functioning of deterrence is not so conveniently mechanistic or predictable. Prudence demands that the potential range of requirements necessary for deterrence stability be considered more broadly than the Cold War stability typology mandates because deterrence resilient requirements can vary greatly in a threat environment that is so diverse and dynamic. ADM Richard reportedly presented precisely this point in contrast to assertions that

¹¹⁰ Tom Nichols, "The 1980s Called. They Don't Need Their Cruise Missiles Back," *National Interest*, November 3, 2015, at

http://nationalinterest.org/feature/the-198s-called-theydon%E2%80%99t-need-their-cruise-missiles-back-1426?page=show.

¹¹¹ William D. Hartung, "ICBMs Are Obsolete and Dangerous, And Should Be Eliminated: America would actually be more secure if it on

Should Be Eliminated: America would actually be more secure if it only had nuclear submarines and nuclear bombers," *National Interest Online*, October 14, 2020, at https://nationalinterest.org/blog/buzz/icbms-are-obsolete-and-dangerous-and-should-be-eliminated-170666.

¹¹² Perry and Collina, *The Button*, op. cit., p. 128. See also, Tom Collina and William Perry, "How the Biden Administration Could Create a Win-Win Situation for Nuclear Policy, *Washington Post Online*, November 17, 2021, at

https://www.washingtonpost.com/opinions/2020/11/17/how-biden-administration-could-create-win-win-situation-nuclear-policy/.

one or more "legs" of the US strategic nuclear triad of forces can be eliminated without endangering deterrence: "If you take away the ICBM leg, in fact, if you take away any leg, you just took away a stack of attributes that we have found useful [for deterrence] in the past and see being useful in the future...which means you just narrowed the range of situations that we were able to effectively deter."¹¹³

Some tenets of the Cold War paradigm remain reasonable, including that nuclear systems should be: 1) as survivable as possible so as not to tempt attacks on them; 2) safely and securely maintained; 3) under constant control; and, 4) sufficient to hold at risk opponents' valued assets. These requirements seem critical so long as the United States sustains nuclear weapons, and to pertain regardless of the broader deterrence requirements that follow from the reality of multiple, diverse opponents with varying perceptions and decision calculi.

The critical question now posed is: how expansive/flexible must Western deterrence capabilities be to support stable deterrence in a multidimensional threat environment? In theory, many forms and types of nuclear capability *could* contribute to deterrence. In practice, however, resources are always limited, as likely are the actual force requirements to maintain deterrence as well as possible. The need for flexibility and resilience to support deterrence stability is obvious, but cannot be a "blank check" for any and all types of nuclear capabilities: an openended requirement cannot be met and provides no basis for discernment. The question, therefore, is what capabilities are needed and how much risk is prudently acceptable to

¹¹³ Quoted in, Dave Deptula, "Five Persistent Misconceptions About Modernizing The U.S. ICBM Force," *Forbes*, December 22, 2020, at https://www.forbes.com/sites/davedeptula/2020/12/22/five-persistent-misconceptions-about-modernizing-the-us-icbm-force/?sh=e20f0353ba78.

not have the full range of deterrent capabilities that *could* contribute to deterrence in the future?

Unfortunately, there is no methodology that allows a definitive, granular answer to this question "how much is enough?" for deterrence - as convenient and comforting as it would be to have such an answer. However, clear-eyed and ongoing assessments of opponents and potential opponents to better understand how best to approach strategies of deterrence in practice, given their various perceptions, goals, values, capabilities and channels of communication, can help establish general parameters and priorities for the range of forces actually needed to support deterrence. Certainly enough already is known to get past the narrow, fixed and parochial guidelines of the Cold War paradigm-a primary goal of which reportedly was to simplify and minimize the definition of deterrence Those guidelines and their associated requirements.114 finely tuned measure of "how much is enough," and typology of forces as stabilizing or destabilizing, once barely plausible, are now far from prudent given the extreme importance of deterring nuclear war as well as possible, and the inherent uncertainties involved. They leave little room for capabilities outside the archaic Cold War typology-some of which now may be necessary for deterrence stability or for hedging against the inherent uncertainties regarding requirements.

In summary, the threat context assumed in the Cold War stability paradigm, understandably, is bipolar and also presumes an opponent whose decision making is governed by a familiar American worldview. Other opponents are relegated to "subset" consideration. The paradigm's logic and typology of forces are coherent only in this simplified threat context. This assumed context renders consideration

¹¹⁴ See for example, Rowen, "Formulating Strategic Doctrine," op. cit., p. 227. See also, Enthoven and Smith, *How Much Is Enough?*, op. cit., pp. 23-24, 170-171, 179, 194-195.

of deterrence and stability extremely convenient and facilitates comforting conclusions: the functioning of deterrence is reliably predictable and, correspondingly, the necessary stabilizing deterrent force posture required is known and very limited. These are the reasons why that stability paradigm is so attractive.

It is, however, difficult to understate the degree to which the reductionist simplicity of this stability paradigm now misses the real-world realities of the international threat environment. The assessments of deterrence and stability deemed prudent in much public commentary must finally take into account the transition from a bipolar to a multidimensional threat context. They must recognize the implications for deterrence stability of a much greater diversity of opponents and threats than is assumed in the archaic Cold War stability paradigm and its force typology.

Contemporary Realities and Resilient Deterrence: Rethinking the Cold War Stability Paradigm and its Force Typology

It is critical, of course, to continue to seek to reduce, to the extent possible, the prospects for nuclear war or major conflict that would likely escalate to nuclear war, i.e., stability. Toward that goal, a renewed popular understanding of deterrence stability must take into account the wide range of perceptions, values and goals among opponents. The Cold War paradigm's presumed universal definition of rational behavior and its narrow force typology simply cannot be considered adequate given the diverse threats and opponents the United States now confronts in a multidimensional international threat context. In the post-Cold War era, deterrence stability may require very different policies and underlying US forces. This is an obvious, if inconvenient truth given the variability in leadership decision making and deterrence contexts.

There is a correspondingly obvious need for a new popular understanding of stability that recognizes how contemporary realities must shape deterrence strategies to prevent war. Moving popular understanding to a revised concept of stability that is more cognizant of contemporary realities, however, will be a significant challenge given how deeply ingrained in Western strategic thought and language is the old Cold War formula.

Bipartisan declared US policy has long since departed from some basic parameters of the Cold War stability paradigm. Yet, as already noted, language from that paradigm continues to be expressed in some official US public documents, and its force typology is a primary basis for public criticism of the Obama and Trump Administrations' strategic modernization programs. The thinking behind that criticism is a continuing vestige of the Cold War—although the authors of that criticism seem not to recognize its Cold War lineage. That stability paradigm established: the jargon we use to discuss the subject; an extremely convenient and comforting understanding of what constitutes stability; and, the typology for the associated force requirements. Despite its inadequacy for today's deterrence considerations, it continues to provide the framework for commentators' repetition of old arguments against any US policy or force element that falls outside its conceptual boundaries.

Russian and Chinese officials certainly appear to understand the continuing political power of the word "destabilizing" in the US domestic debate. They routinely describe virtually all US programs they dislike as "destabilizing,"¹¹⁵ emphasizing while their own commitment to "strategic stability."116 These claims, although vapid and self-serving, advance an easy intervention into the US domestic debate by seemingly confirming domestic criticism that US systems are indeed "destabilizing." Russia claims to be a "consistent proponent of reinforcing and improving strategic stability,"117 but certainly appears to interpret stability as demanding new

¹¹⁵ See for example, "US Midrange Missiles in Asia to Destabilize

Regional, Global Security – Moscow," Sputnik News (Russia), August 20, 2020, at https://www.urdupoint.com/en/world/us-midrangemissiles-in-asia-to-destabilize-1007038.html. See also, Reito Kaneko and Munehisa Tokunaga, "Japan's Additional Aegis Ships Could Encourage Further Arms Buildup," Kyodo News (Japan), December 18, 2020, at https://www.japantimes.co.jp/news/2020/12/18/national/japansaegis-encourage-arms-buildup/.

¹¹⁶ See, Office of the Secretary of State, Policy Planning Staff, *The Elements of the China Challenge*, November 2020, p. 20.

¹¹⁷ See the speech by President Putin at, "Meeting With Senior Defence Ministry Officials, Heads of Federal Agencies and Defence Industry Executives," November 10, 2020, at

http://en.kremlin.ru/events/president/news/64396.

and expansive Russian nuclear capabilities that are wholly incompatible with America's Cold War stability paradigm. Indeed, President Putin has presented Russia's continuing, dramatic build-up of strategic nuclear weapons as fully consistent with stability, including new nuclear forces that are "years or even decades ahead of similar foreign systems."¹¹⁸

Deterrence stability rightly is a critical and enduring goal, but the route to stability is not the enduring, fixed path developed during the Cold War. Risking repetition, it must be concluded that assessing US policies and forces according to the stability paradigm inherited from the Cold War poses the great risks of: 1) judging US forces per an outdated "stabilizing-destabilizing" typology that excludes key considerations with regard to deterrence, assurance of allies, and nonproliferation; 2) missing US and allied deterrence needs that are driven by contemporary geopolitical realities much different from those of the Cold War; and, 3) expecting strategic stability to prevent attack when the basis for such a sanguine expectation may no longer exist and deterrence may be fragile.

Expressed US geopolitical goals include a "stable" international order.¹¹⁹ Needed now is a corresponding popular understanding of deterrence stability and associated force metrics that can better serve to strengthen deterrence against nuclear war or major conflict given post-Cold War geopolitical realities. For example, prudence suggests that strategic defensive capabilities, to the extent feasible, must keep pace with rogue missile threats if credible extended deterrence, the assurance of allies, and nonproliferation remain priority goals. And because it seems particularly uncertain how deterrence will operate

¹¹⁸ Ibid.

¹¹⁹ The goal of safeguarding and advancing geopolitical "stability" is a prevalent theme of US national security strategy. See, *The National Security Strategy of the United States of America*, op cit.

against rogue states such as North Korea or Iran in the future,¹²⁰ expanding strategic defenses as needed to continue to help protect society against rogue state missile capabilities also seems only prudent, as does some protection against accidental/limited nuclear threats from any quarter. In contrast to the Cold War paradigm's guidance, stability and prudence must now be recognized as including at least some level of homeland protection. Moscow certainly should not deem this unreasonable or destabilizing. Russia has for decades deployed, maintained and modernized a nuclear-armed strategic missile defense system that reportedly is considerably larger than the US system—presumably to defend against limited or third-country threats.¹²¹

Finally, a deterrence condition cannot be considered stable if it allows opponents with revanchist, expansionist goals to believe that mutual deterrence at the strategic level—enforced by a "stable" balance of terror—enables them to envisage a "theory of victory" via limited regional nuclear threats or employment. US capabilities limited to the Cold War paradigm's definition of stabilizing forces cannot prudently be considered adequate. They must also

Future Missiles," TASS (Russia), January 22, 2021, at

https://tass.com/defense/1247777.

¹²⁰ See Delpech, Nuclear Deterrence in the 21st Century: Lessons From the Cold War for a New Era of Strategic Piracy, op. cit., pp. 1, 12, 16, 27, 38, 111-112.

¹²¹ Jim Garamone, "Missile Defense Becomes Part of Great Power Competition," DOD News, July 28, 2020, at

https://www.defense.gov/Explore/News/Article/Article/2291331/m issile-defense-becomes-part-of-great-power-competition/. See also, Tim Morrison, "How the National Security Team Affects Nuclear Weapons Policy," *The Hill*, January 15, 2021, at

https://thehill.com/opinion/national-security/534405-how-thenational-security-team-affects-nuclear-weapons-policy. See also, "Moscow's Missile Defense Provides Protection From Any Current,

provide a credible deterrent response to the new limited nuclear threats posed by revanchist powers: "if you dare to resist my encroachment/provocation, I will strike you." The countries pursuing such national goals and policies are not the United States or its nuclear-armed Western allies Britain and France – these are the states that appear committed to preserving a stable order. The central point here is simply nuclear capabilities the potential for to be that "destabilizing" lies not only in their technical characteristics, but in the particular national goals they are intended to serve.

In short, nuclear capabilities may be stabilizing or destabilizing depending on their owners' goals and purposes for nuclear weapons – not simply their technical parameters. This reality, essentially ignored by the Cold War stability paradigm's force typology and Countries A and B reductionism, must now be included in any serious post-Cold War public debate regarding what constitutes the condition of stability and the forces that contribute to or undermine that condition.

Most basically, to revise our understanding of stability, the metaphor of a balance of terror must be recast. Metaphors can be powerful in shaping perceptions, expectations and actions. The Cold War paradigm is based on the metaphor of balance and an equal distribution of weight which allows an object to remain upright or steady, i.e., in equilibrium. The line of gravity can be maintained with slight movements of the center of gravity if necessary. For deterrence stability to be preserved per the Cold War paradigm, both parties understand and seek equilibrium, often referred to as a "parity" in capabilities "to inflict massive 'assured destruction' [on the opponent] after suffering a surprise first strike."¹²² They are expected to act

¹²² Andrew Krepinevich, "The Decline of Deterrence," *Center for a New American Security*, September 14, 2020, p. 2, at

in a calculated way to maintain this equilibrium, including via self-restraint to a narrow range of acceptably stabilizing adjustments to their strategic capabilities. The parties to this deterrence interaction do not need to be consciously cooperative or have amicable relations for stability. Their rationality and mutual retaliatory capabilities are all that is needed to orchestrate deterrence stability.

The expectations generated by this metaphor of balance and equilibrium are profound: 1) Rational opponents are very unlikely to seek to upset a stable balance by seeking advantage and asymmetrical capabilities, i.e., move beyond "parity," because doing so is unnecessary for deterrence, technically improbable, and risky;¹²³ 2) any actual employment of nuclear weapons would be so mutually destructive that no rational opponent would resort to nuclear employment unless its very existence was threatened, and; 3) so long as the United States maintains its side of the balance of terror and refrains from moves deemed destabilizing, mutual deterrence will reliably, mechanistically prevent opponents' severe aggression, i.e., the preservation of stability is within our power/control vis-à-vis all rational opponents. These expectations are extremely convenient and comforting.

Six decades of public debate in the United States reveal the prevalence of these expectations that follow from the Cold War stability paradigm. They have been and continue to be the basis for arguments seeking to limit US policies and capabilities to the narrow confines of that paradigm. If, however, these expectations are based on antiquated

https://www.cnas.org/publications/commentary/the-decline-of-deterrence.

¹²³ In 1965, Defense Secretary McNamara confidently said along these lines that the Soviet Union *would not even seek* nuclear capabilities equal to those of the United States. Quoted in Van Cleave, "The US Strategic Triad," op. cit., p. 64. The same comforting assertion is now often made about China in public discourse.

assumptions about opponents and context, then they are a potentially dangerous basis for judging US policy and requirements.

The expectations generated by a metaphor which suggests that stability follows reliably from rationality and a symmetry of societal threat capabilities - an easily orchestrated balance-do not recognize the possibility of great variability in opponents. That variation could include their differing interpretations of rational goals, intentions, risk and gain – and ultimately behavior – all of which create the potential demand for a spectrum of counteracting weights or forces to preserve deterrence stability. As discussed, the national drive of multiple great and rogue opponents is to alter the existing geopolitical order, and those revisionist powers appear to see regional nuclear coercion, and possibly even employment, as acceptable means to advance their goals. Consequently, a more apt stability metaphor is the blocking and channeling of rising torrents of water in diverse rivers and streams that will expand beyond their established banks where and when there is an opportunity and nothing to prevent flooding. The necessary system of resilient levees and dams must prevent flooding in the context of good weather and hurricanes.124

This metaphor of controlling multiple rising torrents of water in wide-ranging conditions suggests very different deterrence requirements than the Cold War paradigm's metaphor of a self-orchestrating bilateral strategic balance

¹²⁴ Herman Kahn suggested the metaphor of building a structure that can stand "under stress, under hurricane, earthquake, snow load, fire, flood, thieves, fools and vandals.... Deterrence is at least as important as a building, and we should have the same attitude toward our deterrent systems...there will be loads of unexpected or implausible severity." Herman Kahn, *On Thermonuclear War* (Princeton, NJ: Princeton University Press, 1960), pp. 137-138. I find this metaphor now to be inadequate because no fixed structure, however sturdy, is likely to be sufficiently adaptable in a highly dynamic threat environment.

that is in equilibrium – sustained reliably by the opponents' comparably sensible calculations and caution. That paradigm does not recognize the significance of the uncertainty of where and how the torrents of water will move or the variety of different capabilities that may be necessary to block them. It is based on set and narrow expectations of opponents, contexts and instruments that do not comport with post-Cold War realities. To extend the metaphor of containing flood waters, minimum deterrence requirements can now vary and change because weather and water flow can and will shift in unexpected ways. Consequently, a substantial hedge against uncertainty and constant attention to changing conditions may be critical. The convenient policies and force requirements mandated by the Cold War stability paradigm are unlikely to encompass the range of actual requirements needed to stability. deterrence provide for this Its narrow. ethnocentric assumptions about opponent and context, and associated narrow boundaries for defining "stabilizing" forces and policies allow little room for the enormous variation and uncertainties in all of these matters in a multidimensional threat environment.

Is this an explicit or implicit argument for US nuclear "superiority" as opposed to "parity" (whatever those terms mean)? No. Positing the requirement for any such general standards of force adequacy suffers from their elastic meanings as the basis for determining "how much is enough?" for deterrence. More importantly, however, longfamiliar standards such as "superiority" or "parity" – even if well-defined – suggest that a single standard for effective deterrence is adequate. "Parity" suggests that this standard should be based on some measure of symmetry in nuclear forces. But US deterrence force requirements may have little relationship to any single standard, including a calculation of "parity" in force levels and types with whatever opponent is deemed the greatest threat.

In some cases, parity may well be adequate for deterrence. In other cases, effective deterrence strategies may demand underlying capabilities, local and strategic, that are very different from the opponent's capabilities in size and type-perhaps far less capability will suffice, perhaps comparable or even greater capability will be needed. The point here is that the Cold War paradigm's standard of adequacy that ties stability to parity and an equal balance of forces suffers from the underlying presumption that a symmetry of capabilities creating parity and balance somehow is a useful measure for deterrence requirements when, in fact, a spectrum of measures of adequacy may be needed, depending on the opponent and context. Again, the Cold War stability metaphor, deterrence requirement metric and force typology simply do not fit the diversity of the contemporary threat environment and should be recognized as an archaic basis for commentary on US deterrence capabilities.

Rather than suggesting a new general force adequacy standard, this is an argument for revising how we think about stability and its requirements. In contrast to the Cold War stability formula, it is reasonable to conclude that deterrence policies and capabilities in pursuit of stability must now be sufficiently flexible and tailored to support credible deterrence policies vis-à-vis a range of plausible nuclear threats, particularly including those apparent limited nuclear first-use threats posed by revisionist powers that appear to expect that stability at the strategic level provides them with some freedom to use nuclear weapons at the regional level. Western strategies and capabilities, nuclear and non-nuclear, should be structured to credibly deter this "theory of victory." Doing so is a new deterrence requirement and Western policies/capabilities that help to deter such threats must be recognized as stabilizingwhether or not they fit with the Cold War typology; our

understanding of balance, stability and the adequacy of capabilities must catch up to this geopolitical reality.

A renewed understanding of deterrence stability must also include the need to assure opponents, to the extent that their peaceful behavior will ensure possible, comparably peaceful US behavior. Doing so may provide a basis for ultimately improving political relations diplomatically and thereby reducing the prospects for crises and conflicts that bring nuclear deterrence considerations to the forefront. Until international relations are transformed to be reliably cooperative and peaceful, this combination of diplomacy and deterrence-as opposed to global nuclear disarmament-remains the only realistically plausible route to security in the continuing nuclear age. As the final report of the bipartisan Congressional Commission on the Strategic Posture of the United States (the "Perry-Schlesinger Commission") concluded: "The conditions that might make possible the global elimination of nuclear weapons are not present today and their creation would require a fundamental transformation of the world political order."125

¹²⁵ William Perry, James Schlesinger, et al., *America's Strategic Posture*, op. cit., p. xvi.

Conclusion

A very particular Cold War concept of strategic stability is an enduring legacy of Cold War deterrence thought and jargon. How to achieve and sustain this form of stability has been the subject of innumerable books, articles and reports for decades, and examples abound illustrating how this particular definition of stability has shaped US policy and forces. This policy embrace is manifest in numerous open policy documents from the Cold War and since.

Despite the long history and elegant logic of this Cold War stability paradigm and its supposedly objective method of classifying US strategic force as stabilizing or destabilizing, it is an outmoded and inadequate guide for deterrence strategies today.

A major problem with continued advocacy from this Cold War stability concept and measure of forces follows generally from the fact that it is very narrowly conceived. It is predicated on a set of ethnocentric assumptions, originally about the US-Soviet relationship. In addition, it was bilateral, i.e., the role and potential effect of third parties on the stable balance were not part of the equation. And, in many ways, it assumed the parties' similar perceptions and calculations in a stable balance of terror.

For example, it assumed that both US and Soviet motivations and goals pertinent to nuclear weapons were largely defensive and that decision making would be comparably "sensible": the two parties were assumed to be driven by the overwhelming desire to avoid any sort of nuclear provocation to safeguard national survival—as opposed to being willing to accept nuclear risk, if necessary, to pursue desired expansionist goals. In addition, the needed mutual deterrence threats were assumed to be roughly symmetrical for both the United States and Soviet Union, i.e., threats to *societal* assets such as cities and industry—as opposed to a possible deterrence need for some capability to threaten an opponent's hardened military-political assets (such as forces and bunkers). Indeed, these latter "counterforce" capabilities were categorized as unnecessary for deterrence, destabilizing and for "war-fighting" purposes vice stable deterrence.

Given these simplifying assumptions of similarities, particularly including mirror imaging regarding the character of the opponents, strategic capabilities could be categorized as stabilizing or destabilizing according to formula, i.e., based on their compatibility with a stable balance of nuclear terror, as defined. But because the mirror imaging of opponents in the post-Cold War era is nearly certain to lead to mistaken expectations regarding opponents and the functioning of deterrence, the venerable Cold War stability paradigm and typology of forces may often be more misleading than enlightening.

The problem with this stability concept and approach to deterrence policy is its narrowness of perspective: its simplifying assumptions ignore or dismiss numerous geopolitical factors that may affect incentives to employ nuclear weapons, including the antagonists' differing worldviews, conflicting goals, geographic positions, vulnerabilities and alliance relations. Only by ignoring their possible effect on the functioning of deterrence can the Cold War stability concept be deemed the appropriate guide for US policy and can US strategic forces be judged according to their compatibility with it.

The narrowness of the stability paradigm rendered it a problematic basis for US policy during the Cold War and declared policy eventually departed from it in key ways; those problems have been magnified greatly by post-Cold War geopolitical developments. Nevertheless, it remains an enduring basis for much continuing popular commentary on US deterrence policy and force posture – typically criticism. Despite the fact that, as senior DOD official Ellen Lord states, "well-intentioned directive policy changes and de-emphasis of our nuclear deterrent resulted in decades of deferred investments in nuclear warheads, delivery systems, platforms, nuclear command, control, and communications and supporting infrastructure,"¹²⁶ there continues to be vocal opposition to contemporary US deterrence policy and rebuilding programs based largely on this increasingly problematic Cold War stability paradigm and its typology of forces. Whether one believes that the current US missile defense and nuclear programs are necessary for deterrence or not, it must now be recognized that the Cold War stability paradigm is inadequate for considering the question.

During the most challenging period in US history, President Abraham Lincoln offered words of wisdom: "The dogmas of the quiet past are inadequate to the stormy present.... As our case is new, so must we think anew and act anew."¹²⁷ The Cold War stability paradigm is increasingly inadequate for US and allied security. Its dogmas emerged decades past, and a revised popular understanding of stability and deterrence requirements is needed – the goal being to provide a more informed basis for commentary regarding stability and the most effective deterrent to war possible in the context of new realities. Hopefully, an open, public discussion of this can begin—a discussion that is no longer burdened by the conceptual dogmas of the Cold War.

¹²⁶ Quoted in, C. Todd Lope, "'Tipping Point' Is Here for Nuclear Modernization, Defense Official Says," DOD News, September 17, 2020, at https://www.defense.gov/Explore/News/Article/Article/ 2351959/tipping-point-is-here-for-nuclear-modernization-defenseofficial-says/.

¹²⁷ Abraham Lincoln's address to Congress, December 1, 1862. Quoted in, Scheber, "Strategic Stability: Time for a Reality Check," op. cit., p. 915.

About the Author

Keith Payne is a co-founder of the National Institute for Public Policy, a nonprofit research center located in Fairfax, Virginia, and Professor Emeritus, Graduate Department of Defense and Strategic Studies, Missouri State University. In 2005, he was awarded the Vicennial Medal from Georgetown University for his many years on the faculty of the graduate National Security Studies Program.

Dr. Payne has served in the Department of Defense as the Deputy Assistant Secretary of Defense for Forces Policy and as a Senior Advisor to the Office of the Secretary of Defense (OSD). He has received the Distinguished Public Service Medal and the OSD Award for Outstanding Achievement.

Dr. Payne also served as a Commissioner on the bipartisan Congressional Commission on the Strategic Posture of the United States, as a member of the Secretary of State's International Security Advisory Board, and as a member of U.S. Strategic Command's Senior Advisory Group. He is an award-winning author, co-author, or editor of over 200 published articles and 40 books and monographs. His most recent book is *Shadows on the Wall: Deterrence and Disarmament* (2020).

Dr. Payne received an A.B. (honors) in political science from the University of California at Berkeley, studied in Heidelberg, Germany, and received a Ph.D. (with distinction) in international relations from the University of Southern California.

Recently published by the National Institute Press:

Books

Michaela Dodge, U.S.-Czech Missile Defense Cooperation: Alliance Politics in Action, 2020

David Trachtenberg, *The Lawgivers' Struggle: How Congress Wields Power in National Security Decision Making*, 2020

Keith B. Payne, Shadows on the Wall: Deterrence and Disarmament, 2020

Monographs

Steven J. Lambakis, *The Final Warfighting Domain: Reshaping Policy to Execute 21st Century Space Power*, forthcoming, 2021

David J. Trachtenberg (study director), Michaela Dodge and Keith B. Payne, *Drivers of U.S. Policies and Programs and Their Relationship to the "U.S.-Led Action-Reaction Arms Race" Narrative*, forthcoming, 2021

Information Series Articles

Jennifer Bradley, "Twenty-First Century Deterrence – Moving Beyond the Balance of Power," No. 474, December 2020

Marshall Billingslea, "Arms Control and the New START Treaty," No. 472, December 2020

Christopher M. Stone, "Deterrence in Space: Requirements for Credibility," No. 471, November 2020

Mark N. Katz, "Russian-American Relations: From Trump to Biden," No. 470, November 2020

Patrick Garrity, "Colin Gray's Geopolitics – Then and Now," No. 469, October 2020

Wendell B. Leimbach and Susan D. LeVine, "Winning the Gray Zone: The Importance of Intermediate Force Capabilities in Implementing the National Defense Strategy," No. 468, October 2020

Michael Rühle, "U.S. Strategic Culture and Ballistic Missile Defense," No. 466, September 2020

Michaela Dodge, "Missile Defense Reckoning is Coming. Will the United States Choose to be Vulnerable to All Long-Range Missiles?" No. 465, August 2020

David J. Trachtenberg, "Is There A (New) Strategic Arms Race? No," 464, August 2020

Bryan Smith, "Verification After the New START Treaty: Back to the Future," No. 463, July 2020

Gary L. Geipel, "National Security Implications of COVID-19: A Framework," No. 462, July 2020

Keith B. Payne, "On Deterrence, Defense and Arm Control: In Honor of Colin S. Gray," No. 461, June 2020