



INFORMATION SERIES

Issue No. 647

January 5, 2026

U.S. Nuclear Weapon Testing? First Ask the Right Questions

Dr. Keith B. Payne

Dr. Keith B. Payne is a co-founder of the National Institute for Public Policy, Professor Emeritus and former Department Head at the Graduate School of Defense and Strategic Studies, Missouri State University, a former Deputy Assistant Secretary of Defense, and former Senior Advisor to the Office of the Secretary of Defense. He is the author of over 225 published articles and 50 books and monographs on international security issues.

Introduction

President Trump appears to have directed the United States to begin the same nuclear testing in which others are engaged.¹ The United States has not conducted a yield-producing, explosive nuclear test since 1992—having chosen to observe a moratorium since then. Following Trump’s initial announcement, Chris Wright, U.S. Secretary of Energy, explained that the President meant the testing of nuclear delivery systems, not explosive testing of the nuclear weapons themselves.²

However, Trump has repeated his apparent meaning that the United States would resume nuclear weapon testing in response to Russian and Chinese nuclear testing, saying, “They test way underground where people don’t know what’s happening with the test....You feel a little bit of a vibration. They test and we don’t test.”³ Trump certainly appears to be referring to Russian and Chinese explosive nuclear weapon testing which the United States does not do. This may involve ultralow-yield explosive testing, referred to as “hydronuclear” testing.⁴ North Korea, Pakistan and India have overtly conducted high-yield nuclear tests.



Ideology and the Question of Testing

The debate about whether or not to resume explosive nuclear testing may seem to involve arcane, objective analyses by nuclear experts. But, for many arms control activists, here and abroad, opposition to U.S. nuclear testing is part and parcel of an ideological dogma: nuclear weapons are an unalloyed evil and immoral, and thus opposition to U.S. nuclear testing is a moral and political imperative. These types of arguments are most vocally aimed at the United States with regard to virtually anything nuclear; Russia and China tend to get a pass while the United States typically is called out for leading a destabilizing “action-reaction” process: If the United States takes a step, it will compel opponents to aggressive responses that they otherwise would never pursue. Opponents act aggressively because they are provoked by Washington; they are pushed to respond to exaggerated U.S. moves that are unnecessary and compel opponents to defensive reactions that exacerbate already overblown U.S. security fears. This is the vicious action-reaction arms race cycle supposedly driven by the United States—a part of the “blame America first” mode of analysis.⁵

For decades, this “action-reaction” argument has been cast in opposition to almost every U.S. nuclear step, but it is particularly obvious in much of the opposition to U.S. nuclear testing. The usual claim is that U.S. adherence to a nuclear test moratorium is essential to preclude arms racing and nuclear proliferation. Specifically, it is argued that, if the United States resumes explosive testing, others will likely follow suit and a nuclear arms race and proliferation will ensue, all triggered by the United States.⁶ In this way, a U.S. move to engage in nuclear weapons testing would contribute to the expansion of nuclear threats and instability globally.

However, this venerable “action-reaction” charge against the United States is largely bogus in general, and particularly so as applied to the question of nuclear testing. For decades, multiple serious studies have shown definitively that ubiquitous claims that the United States is guilty of so promoting arms racing via this action-reaction dynamic are highly problematic;⁷ rather, countries typically follow their own unique, self-directed arms requirements and behavior patterns to serve their own purposes. Their armament decisions are much more than, and often much different than, reactions to prior U.S. moves. Upon closer examination, it is obvious that opponents actually have their own agendas, some of which are indeed malevolent, and they pursue forces corresponding to those agendas.

With reference to the specific question of nuclear testing, the popular “action-reaction” argument against U.S. nuclear testing is a convenient fabrication given the explosive testing Russia and China apparently already have conducted.⁸ The original, bipartisan Congressional Strategic Posture Commission indicated this about Russia back in its 2009 final public report;⁹ it was confirmed in more recent reports by the Trump and Biden Administrations.¹⁰ The United States cannot now trigger testing that Russia and China apparently already are engaged in. In fact, the 2009 Commission report explicitly refused to endorse the codification of the U.S. test moratorium via ratification of the Comprehensive Test Ban Treaty given the different national definitions of the testing to be prohibited¹¹—differences that Russia apparently



exploits to engage in some form of low-yield, explosive nuclear testing, but that prohibit the United States from doing likewise. Codifying unequal limits in this regard certainly seemed like folly to much of that bipartisan Commission in 2009, and it still is. The apparent reality of Russian and Chinese explosive testing destroys the usual action-reaction arguments against the United States engaging in comparable behavior.

Unfortunately, the fully-warranted retirement of the action-reaction theory of U.S.-driven arms racing is unlikely. It is too ingrained in U.S. thought and too useful to vocal political communities, here and abroad, that perpetually oppose U.S. nuclear armaments.¹²

Stockpile Certification and the Question of Testing

A second oft-heard rationale against the U.S. resumption of explosive nuclear testing is the claim that explosive testing is unnecessary. U.S. Stockpile Stewardship Program (SSP) computer simulations of nuclear weapons' behavior is said to be so mature that explosive testing is unnecessary; the United States simply does not need to engage in explosive nuclear testing given the SSP.

The evidence for this important claim typically is the annual certification process by which the existing U.S. nuclear stockpile is deemed safe, reliable and effective without explosive nuclear testing.¹³ This annual certification process is important and undoubtedly done with great care and integrity by the directors of the U.S. nuclear laboratories and the Commander of U.S. Strategic Command. However, accepting its complete validity does *not* lead to the conclusion that explosive testing is unnecessary. That certification process essentially includes only part of the question set necessary to address before a final conclusion regarding testing can be reached – and not the most critical elements of that question set.

The Additional Needed Assessment and the Question of Nuclear Testing

Holding aside the potentially important questions of SSP costs, time burden and the possible need to calibrate computer simulations with empirical test evidence,¹⁴ the question of testing is not only about whether the *existing* U.S. nuclear stockpile is safe, reliable and effective, as crucial as is that certification. Further answers needed in this regard follow from two additional fundamental questions that appear yet to be asked and answered, at least publicly: What U.S. nuclear capabilities are needed *for the future* to deter and hedge against *emerging threats*, and what are the implications for testing? Addressing these additional questions may have been deemed unnecessary for this purpose in the past, but they are now critical to the issue of testing.

The current U.S. nuclear modernization plans were largely set 16 years ago – when Russian and Chinese capabilities were much more modest and most of Washington considered enemy nuclear threats to be things of the past. Talk of enemies and nuclear threats was dubbed archaic Cold War thinking. The overriding theme in Washington was to reduce the number and role of nuclear weapons en route to their elimination.¹⁵ Recall President Barack Obama's celebrated



INFORMATION SERIES

Issue No. 647 | January 5, 2026

quip in response to Republican candidate Mitt Romney's expressed security concerns about Russia during a 2012 presidential debate: "The 1980s are now calling to ask for their foreign policy back."¹⁶ Obviously, Romney's concern about Russia was considered laughably old fashioned, as generally was the notion that new U.S. nuclear capabilities might ever be needed for deterrence; they were moving to history's dustbin.

However, history has instead proceeded in a very different, harsh direction. Given the contemporary and emerging serious nuclear threat realities, key questions regarding the potential need for nuclear testing *not* addressed by arms control ideology or certification of the existing stockpile are: What capabilities will be needed to tailor deterrence in the future, and is testing needed to develop those capabilities? Of course, identifying future deterrence requirements is an imprecise and speculative undertaking. But the United States cannot wait until the future arrives to consider then how best to deter; that is a sure way to be found wanting at the time. Speculating on this matter carries risk; failure to do so wisely is a rearward-looking policy process that likely increases the risk of deterrence failure and war.

In short, a question that must be asked and answered now, as the United States and allies face an increasingly severe threat context, is whether explosive testing is helpful or essential for any new U.S. nuclear capabilities likely to be needed to tailor deterrence given the direction of emerging threats, including the very real prospect of coordinated Russian, Chinese and North Korean aggression?¹⁷ This issue of emerging U.S. tailored deterrence requirements, and how best to deter and hedge against future threats and uncertainties, should now be a decisive factor in consideration of the question of explosive nuclear testing. Unfortunately, it is not obvious if that question set, which is at the intersection of U.S. deterrence policy development and testing practice, has been answered or even asked.

A U.S. Need to Test?

So, does the United States need to test? The short answer per this limited discussion is, "it depends." That answer may not be satisfying, but it is honest and far from the confident "no" that characterizes so many of the commentaries that have followed Trump's recent initiative on the subject.

Given emerging Chinese, Russian, and North Korean regional and strategic nuclear threats, many responsible studies, including the 2023 Strategic Posture Commission Report, point to the need for U.S. nuclear capabilities beyond the existing program of record for nuclear modernization:¹⁸ Is some form of explosive testing necessary to develop new capabilities that will be needed to tailor deterrence?

For example, is some form of ultralow-yield explosive testing, such as hydronuclear testing, needed or helpful for new, ultralow-yield warheads which may be key to extending nuclear deterrence to allies, or for specialized warheads capable of holding at risk highly-protected bunkers? The late Johnny Foster, long the most renowned U.S. nuclear weapons expert, consistently said very low-yield, explosive testing would be particularly helpful for the former.¹⁹ *If* U.S. testing is needed to so support extended deterrence capabilities, it may well



INFORMATION SERIES

Issue No. 647 | January 5, 2026

be a key to stopping nuclear proliferation as multiple allies confront increasing nuclear threats and consider their alternatives.

Ironically, numerous officials and commentators have instead long linked non-proliferation success to U.S. nuclear reductions and steps towards nuclear disarmament, including eschewing nuclear testing.²⁰ Yet, non-proliferation success now appears highly dependent on U.S. extended deterrence that continues to be credible, not a retreat from nuclear deterrence. Are there prospective new U.S. capabilities likely to be necessary for future tailored deterrence purposes, including extended deterrence, that necessitate some form of explosive testing or preparing for explosive testing? The answer is hardly self-evident.

These are material questions that need to be seriously asked and answered, rather than relying on the usual tropes driven by an outdated arms control ideology. However, such serious analysis is not evident by those arguing against resumed nuclear testing – preferring instead to repeat asinine action-reaction predictions that have not aged well and/or relying on a certification process that appears not to include all the necessary questions. Regarding the former, dedicated opponents of U.S. explosive nuclear testing are likely never to conclude that a U.S. nuclear capability that requires testing is needed. Instead, the presumption is that U.S. deterrence “does not require developing new types of weapons that might require testing.”²¹ Such assertions hardly appear to be the result of a deterrence requirements assessment for a future that has turned much darker than expected. And, of course, if nuclear weapons are deemed inherently and only evil, a continuing test moratorium is an imperative without caveat – an unalloyed good. However, that approach to a decision on testing, i.e., starting with a supposedly unquestionable political imperative not to test, confuses the independent and dependent variables. It reflects ideological dogma over needed deterrence analyses.

Such serious analyses could easily affect many stakeholders with deeply vested interests on the line. Nevertheless, whether to test or not must be determined by the need to deter war now *and in the future*, with the types of capabilities deemed necessary for continued deterrence. A conclusion of whether to test or not must follow from that determination, not lead it.

At this point, unless already underway, experienced deterrence experts and practitioners should be assembled to address the first part of this question set: What nuclear capabilities will likely be needed for continued credible deterrence and extended deterrence in the future? Subsequently, experienced technical/testing experts and practitioners should be assembled to address the second part of this question set: Does the development of the capabilities identified as needed for continued credible tailored deterrence require some form of explosive testing? Of course, seriously asking the key questions means being willing to deal with potentially inconvenient answers.

Conclusion

We cannot wait until future crises are upon us to consider the types of deterrence capabilities most likely to be needed to preserve peace, *and whether their development does, or does not, indicate the need for some form of explosive testing.* Of course, this is a speculative exercise. All



INFORMATION SERIES

Issue No. 647 | January 5, 2026

considerations of deterrence looking forward are inherently speculative regarding whom we will need to deter and how; that is the nature of this most serious subject. Nevertheless, such analysis is necessary if we are to prioritize the continuing deterrence of war over arms control ideology and/or incomplete answers.

The author would like to thank Frank Miller, Tom Scheber, Mark Schneider, and Michaela Dodge for their helpful comments on this analysis.

¹ Trevor Hunnicutt, Isail Shakil, Kaniska Singh, “Trump tells Pentagon to resume testing US nuclear weapons,” *Reuters*, October 30, 2025, <https://www.reuters.com/world/china/trump-asks-pentagon-immediately-start-testing-us-nuclear-weapons-2025-10-30/>.

² “US not planning nuclear explosions at this time, energy secretary says,” *Reuters*, November 3, 2025, <https://www.reuters.com/world/us/us-not-planning-nuclear-explosions-this-time-energy-secretary-says-2025-11-02/>.

³ “Read the full transcript of Norah O’Donnell’s interview with President Trump here,” *CBS News*, November 2, 2025, <https://www.cbsnews.com/news/read-full-transcript-norah-odonnell-60-minutes-interview-with-president-trump/>.

⁴ Siegfried Hecker, “America Has the Most to Lose From Restarting Nuclear Testing,” *Foreign Affairs Online*, November 26, 2025, <https://www.foreignaffairs.com/united-states/lessons-alamos>.

⁵ A phrase made famous by U.S. Representative to the United Nations, Jeane Kirkpatrick in, “‘Blame America First’ - Remarks at the 1984 Republican National Convention-August 20, 1984,” Iowa State University Archives of Women’s Political Communication, <https://awpc.cattcenter.iastate.edu/2017/03/09/remarks-at-the-1984-rnc-aug-20-1984/>.

⁶ See Hecker, “America Has the Most to Lose From Restarting Nuclear Testing,” *op. cit.*; and, Steven Pifer, “Resumed U.S. Nuclear Testing? Unnecessary and Unwise,” *All CISAC News*, November 3, 2025, <https://cisac.fsi.stanford.edu/news>.

⁷ See, *History of the Strategic Arms Competition: 1945-1972, Part II*, Alfred Goldberg, ed., with contributions by Ernest R. May, John D. Steinbruner, and Thomas W. Wolfe (Washington, D.C.: Historical Office, Office of the Secretary of Defense, March 1981), p. 811; Colin S. Gray, *The Soviet-American Arms Race* (Farnborough, Hants, England: Saxon House, 1976), pp. 12-57; Jean-Christian Lambelet, Urs Luterbacher, and Pierre Allan, “Dynamics of Arms Races: Mutual Stimulation vs. Self-Stimulation,” *Journal of Peace Science*, Vol. 4, No. 1 (1979), p. 64; and, David Trachtenberg, Michaela Dodge, and Keith Payne, *The “Action-Reaction” Arms Race Narrative vs. Historical Realities* (Fairfax, VA: National Institute Press, 2021), *passim*, <https://nipp.org/wp-content/uploads/2021/04/Action-Reaction-pub.pdf>.

⁸ See Mark B. Schneider, “President Trump is Correct About Adversary Nuclear Testing,” *Information Series*, No. 645, December 3, 2025, https://nipp.org/information_series/mark-b-schneider-president-trump-is-correct-about-adversary-nuclear-testing-no-645-december-3-2025/.

⁹ William J. Perry and James R. Schlesinger, et al., *America’s Strategic Posture* (Washington, D.C.: United States Institute of Peace Press, 2009), p. 83.

¹⁰ See U.S. Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Washington, D.C.: Department of State, June 2020), p. 46, <https://www.state.gov/wp-content/uploads/2020/06/2020-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferationand-Disarmament-Agreements-and-Commitments-Compliance-Report-1.pdf>; and, U.S. Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Washington, D.C.: Department of State, April 2022), pp. 29-30, <https://www.state.gov/wp-content/uploads/2022/04/2022-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments-1.pdf>.



INFORMATION SERIES

Issue No. 647 | January 5, 2026

¹¹ Perry Schlesinger, et al., *America's Strategic Posture*, op. cit., pp. 81-83.

¹² See, for example, Walter Pincus, "The First Law of Nuclear Politics: Every Action Brings Reaction," *The Washington Post*, November 28, 1999, p. B-2; Bruce G. Blair, Jessica Sleight and Emma Claire Foley, *The End of Nuclear Warfighting: Moving to a Deterrence-Only Posture* (Washington, D.C.: September 2018), pp. 9, 33; Michael T. Klare, "Now Is Not the Time to Start an Arms Race," *The Nation*, March 31, 2020, available at <https://www.thenation.com/article/world/coronavirus-cold-war-race/>; Tytti Erästö, "Reducing The Role Of Nuclear Weapons In Military Alliances," *SIPR Insights on Peace and Security*, No. 2024/01, (June 2024), passim; Benjamin Giltner, "A Third Continental Missile Interceptor Site?" *RealClearDefense.com*, July 8, 2024, available at https://www.realcleardefense.com/articles/2024/07/08/a_third_continental_missile_interceptor_site_1042908.html; and, Joe Cirincione, "Trump Has a strategic Plan for the Country: Gearing Up For Nuclear War," *Bulletin of the Atomic Scientists*, July 2, 2024, available at <https://thebulletin.org/2024/07/trump-has-a-strategic-plan-for-the-country-gearing-up-for-nuclear-war/#post-heading>.

¹³ See for example, Perry and Schlesinger, et al., *America's Strategic Posture*, op. cit., p. 81; Department of State, Archived Content, Fact Sheet, BUREAU OF ARMS CONTROL, VERIFICATION, AND COMPLIANCE, *Annual Assessment of the U.S. Nuclear Weapons Stockpile*, <https://2009-2017.state.gov/t/avc/rls/202013.htm>; Hecker, "America Has the Most to Lose From Restarting Nuclear Testing," op. cit.; and, Steven Pifer, "Resumed U.S. Nuclear Testing? Unnecessary and Unwise, op. cit.

¹⁴ See the discussion in, Mark B. Schneider, *The Case for Resumed Nuclear Testing*, *Occasional Paper* (Fairfax, VA: National Institute Press, September 2025), <https://nipp.org/papers/the-case-for-resumed-nuclear-testing>.

¹⁵ "As a critical element of our effort to move toward a world free of nuclear weapons, the United States will lead expanded international efforts to rebuild and strengthen the global nuclear non-proliferation regime – and for the first time, the 2010 NPR places this priority atop the U.S. nuclear policy agenda." See, U.S. Department of Defense, *Nuclear Posture Review Report*, April 2010, p. vi.

¹⁶ Quoted in, Versha Sharma, "Obama to Romney: 'The 1980's are now calling to ask for their foreign policy back,'" *MS NOW*, October 22, 2012, <https://www.ms.now/msnbc/obama-romney-the-1980s-are-now-calling-msna15158>.

¹⁷ See Matthew Costlow, *Deterring the New Pacing Threats: Opportunistic and Coordinated Aggression*, *Occasional Paper* (Fairfax, VA: National Institute Press, March 2025), <https://nipp.org/papers/matthew-r-costlow-deterring-the-new-pacing-threats-opportunistic-and-coordinated-aggression/>.

¹⁸ See, Madelyn Creedon and Jon Kyl, et al., *America's Strategic Posture* (Alexandria, VA: Institute for Defense Analyses, 2023), <https://www.ida.org/research-and-publications/publications/all/a/am/americas-strategic-posture>. See also, Keith Payne, Gen. Kevin Chilton (Ret.), Amb. Robert Joseph, Mitch Kugler, Franklin Miller, ADM Charles Richard (Ret.), Thomas Scheber, Mark Schneider, and David Trachtenberg, *A New Strategic Review for a New Age: 2025* (Fairfax, VA: National Institute Press, 2025), <https://nipp.org/wp-content/uploads/2025/07/2025-A-New-Strategic-Review.pdf>.

¹⁹ Dr. John S. Foster Jr., "Future Possible Paths for the Nuclear Weapons Complex," January 22, 2016, mimeo, p. 9. See Schneider, "President Trump is Correct About Adversary Nuclear Testing," op. cit., p. 6.

²⁰ For example, this supposed linkage is asserted explicitly in, The White House, *National Security Strategy*, February 2015, p. 11, https://obamawhitehouse.archives.gov/sites/default/files/docs/2015_national_security_strategy_2.pdf.

²¹ From the "no" side of the debate in, Perry and Schlesinger, et al., *America's Strategic Posture*, op. cit., p. 81.

The National Institute for Public Policy's *Information Series* is a periodic publication focusing on contemporary strategic issues affecting U.S. foreign and defense policy. It is a forum for promoting critical thinking on the evolving international security environment and how the dynamic geostrategic landscape affects U.S. national security. Contributors are recognized experts in the field of national security. National Institute for Public Policy would like to thank the Sarah Scaife Foundation for the generous support that made this *Information Series* possible.



INFORMATION SERIES

Issue No. 647 | January 5, 2026

The views in this *Information Series* are those of the author(s) and should not be construed as official U.S. Government policy, the official policy of the National Institute for Public Policy, or any of its sponsors. For additional information about this publication or other publications by the National Institute Press, contact: Editor, National Institute Press, 12150 Monument Dr., Suite 125, Fairfax, VA 22033, (703) 293- 9181, www.nipp.org. For access to previous issues of the National Institute Press *Information Series*, please visit <http://www.nipp.org/national-institutepress/informationseries/>.

© National Institute Press, 2026