

BRIEFER

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The Benefits of Further Declarations of Restraint from the Use of Nuclear Weapons

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INTRODUCTION

An important component of reducing risk among nuclear-armed states is greater understanding of others' policies, plans, and intentions regarding their arsenals. Such understanding serves to reduce significantly the risk of misunderstanding and miscalculation that could precipitate the use of nuclear weapons.

While the greatest contributions to mutual reassurance and restraint are concrete (for example, the extensions of weapons readiness, the retirement and decommissioning of systems), affirmation and reaffirmation of restraint remain important. This briefer proposes several such affirmations of restraint and reassurance that nuclear weapon-possessing states could make. It is possible that universal adoption of some of these suggested lines could lead to more concrete steps, but even without them they have value in nuclear risk reduction.

While it is true that nearly all nuclear-armed states include language in their declaratory policy statements which place use of their nuclear weapons "in extremis," there are four main types of these declarations of restraint which should be considered distinct from the policy generalities:

- A statement of implicit futility of first use
- Further statements of last resort
- Restrained decision protocols
- Ambiguity clarification and resolution

To reinforce these, the provision of a multilateral nuclear hotline would meet the crisis communications needed in a multipolar nuclear world.

What each of these types of affirmations have in common is that they do not rely on (though they are strengthened by) reciprocity or universalism. They can exist solely as national statements of restraint, but if they are afforded the proper respect by both nuclear-armed states and non-nuclear armed states, they are more likely to become multilateral.

Since these would be statements of intent, they are of course not provable in themselves, and their veracity will depend on others' perceptions of the state making them. Despite this potential flaw, the mere making of such statements reduces temperature and adds a sense of restraint to nuclear weapon ownership. As a corollary, states left as outliers when such statements are made will have the opposite judgements made on their intent and levels of restraint.

A STATEMENT OF IMPLICIT FUTILITY OF FIRST USE

A statement of implicit futility of first use is essentially what it describes: that the first use of nuclear weapons is futile due to the unwinnability of a nuclear war. The most famous of these was the “Reagan-Gorbachev Principle” included as part of the summit statement from a meeting in Geneva in November 1985 in which the U.S. and Soviet presidents “agreed that a nuclear war cannot be won and must never be fought.”¹ As a result of this simple agreement the statement went further to agree mutual security responsibilities necessary to avoid the unwinnable war.

Many have called and continue to call for a simple reiteration of the Reagan-Gorbachev Principle, but until recently, nuclear-armed nations have resisted. This is partially because there is no 21st century bed of trust between the United States and Russia but mostly because the Reagan-Gorbachev declaration was a product of the geopolitics of the early 1980s. Both the United States and the Soviet Union had separately and jointly judged that the Cold War arms race was no longer sustainable nor in their security interests. The Reagan-Gorbachev declaration was simply a precursor to a tranche of arms control and reduction agreements which were breathtaking in their scope and urgency. Almost all of these are now moribund.

On June 21, 2021, President Putin of the Russian Federation and U.S. President Biden issued a joint statement: “The recent extension of the New START Treaty exemplifies our commitment to nuclear arms control. Today, we reaffirm the principle that a nuclear war cannot be won and must never be fought.”² In that sense, the Reagan-Gorbachev declaration has been renewed. The statement went on to say, “Consistent with these goals, the United States and Russia will embark together on an integrated bilateral Strategic Stability Dialogue in the near future that will be deliberate and robust. Through this Dialogue, we seek to lay the groundwork for future arms control and risk reduction measures.”³

Time will tell whether this iteration of the declaration will produce as much fruit as the original, but at the very least the main protagonists should maintain momentum with continued rhetoric which builds reassurance and restraint.

STATEMENTS OF LAST RESORT

While almost all nuclear weapon-possessing states include language in their declaratory policies about the extreme circumstances that would be required for their use of nuclear weapons, other indicators

¹ Ronald Reagan Presidential Library and Museum, “[Joint Soviet-United States Statement on the Summit Meeting in Geneva.](#)” November 21, 1985.

² The White House, “[U.S.-Russia Presidential Joint Statement on Strategic Stability.](#)” June 16, 2021.

³ Ibid.

(capabilities, readiness, and rhetoric) by some such states lead an observer to doubt the veracity of these statements of last resort.

To strengthen these assurances, nuclear weapon possessing states should adhere to a global norm whereby they promise explicitly never to threaten nuclear use against states without nuclear weapons.

Nuclear weapon-possessing states already issue some form of negative security assurances (NSAs) or have a policy of no first use, but these are weakened considerably by the exceptions that accompany them.

Taking the United Kingdom as an example, it uses two factors releasing itself from such a blanket assurance. First, states that are judged to be in breach of their Nuclear Non-proliferation Treaty (NPT) obligations are denied the guarantees, even if they do not deploy nuclear weapons. This exception signals that nuclear weapons are a legitimate form of statecraft and geopolitical pressure. This is not only dangerous (as it can incentivize a state to acquire nuclear weapons) but could harm the legitimacy of the global order. In addition, this automatically excludes a state not a signatory of the NPT, whether it has nuclear weapons or not.

Second, the United Kingdom (in common with the United States and France) retains the right to deny this assurance to a future non-nuclear weapon possessing state which acquires a significant chemical or biological weapons capability. There has been a longstanding belief by nuclear-armed states that this implied deterrent effect of nuclear weapons deters acquisition of these capabilities, and even in extremis, their use. In the 21st century, however, the examples of the use of chemical weapons were neither deterred by a potential nuclear response, nor “punished” by an actual nuclear response.⁴ Those nations that have nuclear weapons should reexamine the cost (in nuclear non-proliferation terms) of such exceptions versus the clearly limited benefit in suppression of other weapons of mass destruction.

These simplifications will be challenging for most possessor states who have always considered their nuclear weapons to have a broader deterrence effect than simply against other nuclear weapons (i.e., those not having a sole purpose doctrine). Maintaining these caveats, however, weaken their declarations of “last resort.”

A simplification of the NSA by caveat removal would go a long way to show a state’s willingness to make progress towards NPT goals of progress toward disarmament and would come close to an effective “sole use” declaration.

RESTRAINED DECISION PROTOCOLS

According to the declared policies of nuclear weapon-possessing states, the decision to use nuclear weapons rests solely with political heads of state. Each country has protocols in place to both verify the legitimacy of any order to launch nuclear weapons and to guard against any attempt to decapitate the decision capacity. Additionally, the process at subordinate levels to assess whether a decision is required and to present briefs on options provides lower-level filters against precipitate use, but the political decision still rests with a single individual.

⁴ These uses of chemical weapons have included multiple attacks by the Syrian government during its civil war, and assassinations using chemical weapons carried out by Russia and North Korea. Mary Beth D. Nikitin, “[Resurgence of Chemical Weapons Use: Issues for Congress](#),” Congressional Research Service, March 5, 2021.

On the plus side, this concentration of the decision at the highest political level is a bulwark against militarization of the decision process in crisis.

It raises a concern, however, that the character or judgment of an individual politician might be the decisive factor in a decision to use a nuclear weapon, particularly in possessor states where the political head has some form of direct authority over the military.

Taking the United Kingdom as an example again, a public declaration of a restrained decision protocol wherein the Prime Minister agrees that they would only consider using a nuclear weapon if a triumvirate of (for example) the Prime Minister, the Foreign Secretary, and the Defence Secretary had agreed that the situation was one in which such a decision was necessary, would bolster restraint by maintaining the positive and diminishing the negative of one-person political decision-making. The ultimate decision would still rest with the Prime Minister, but a commitment to a multiple decision-maker protocol could serve to ease fears of heads of state potentially making rash nuclear decisions.

In the United States, a 2016 proposal by Congressman Ted Lieu and Senator Ed Markey to make a U.S. first-use decision contingent upon Congressional approval is another example of such a unilateral measure of restraint, should it ever be adopted.⁵

While additional protocols would be needed to prevent a simpler “decapitation” preemption, policies of this nature would add considerable extra restraint in a developing crisis and add reassurance to other states.

There is one historical precedent for such a “broadening” of the plinth upon which nuclear decision making rests and although it is at the tactical level, it is still germane: the Soviet submarine B-59 in the Cuban Missile Crisis. The USSR’s launch of the single nuclear-armed torpedo was contingent on the unanimous agreement of the Captain, the Zampolit (Political Officer) and the Executive Officer (who rather uniquely in this circumstance was also the Flotilla Commodore, thus he was at once subordinate to and superior to the Captain). At the critical moment, under great stress and mock attack (which they considered real) the wisdom and restraint of Executive Officer Vasily Arkhipov tempered the inclination of both the Captain and Zampolit and the weapon was not fired. No circumstance of contemplation of nuclear weapon launch is alike, but this example demonstrates the likely restraining effect of empowering multiple decision makers.

AMBIGUITY CLARIFICATION AND RESOLUTION

Since their policies and doctrine were first formulated, most nuclear-armed states which do not have a no first use policy have deemed ambiguity an essential component of nuclear deterrence. Ambiguity both in the scale and location of a nation’s nuclear capabilities, and in when and how a nation would use its nuclear weapons, have been considered an important contribution to initial stability by complicating any calculus by a potential first-user. This has been perceived as necessary for several reasons, including that it:

- Preserves freedom of action in unforeseen circumstances;
- Conveys comfort to adversaries to operate below a ‘red line’ known to trigger a nuclear attack, or even to test resolve by calling bluff; and

⁵ U.S. Congress, “[H.R.6179 - Restricting First Use of Nuclear Weapons Act of 2016](#),” September 27, 2016, and “[S.3400 - Restricting First Use of Nuclear Weapons Act of 2016](#),” September 27, 2016.

- Sets the stage for irreversibility when options are taken off the table.

On the other hand, too much ambiguity can weaken deterrence effects as it can:

- Confuse the signalling at the heart of deterrence;
- Weaken the assurance of allies and of non-nuclear weapon possessing states; and
- Weaken the declaratory policy itself if it is interpreted as resistance to restraint.

It should be clear, therefore, that ambiguity has its limitations, that there is no static, perfect “sweet spot” that is truly stable, and that it requires regular reassessment. Thus, there are some areas where self-imposed restrictions could increase confidence and add to stability, if declared by a more progressive nuclear weapon-possessing state. Other nations may follow suit when they see the positive effects which come with no significant impact on the security benefits of strategic deterrence.

CATALINK: A MODERN MULTILATERAL HOTLINE

In June 1963, the United States and Soviet Union famously entered into a nuclear hotline agreement months after the world came to the brink of nuclear war in the Cuban Missile Crisis. This technology is regarded to have significantly reduced conflict escalation during the Cold War by facilitating direct communication between the two state leaders, preempting threat miscalculation.

The ability of the leaders of nuclear-armed states to communicate personally, unambiguously, and with certainty in all conditions has eroded as their number and cultural and linguistic diversity has increased. While there are 10-11 existing nuclear “hotline” links in areas of direct bilateral tension, they are often inhibited by technical issues and are neither universal nor interoperable. Further, they do not allow for the multilateral communication needed in a crisis in a multipolar nuclear world where the actions of all nuclear-armed states will be inextricably linked regardless of the location of the crisis tension. Add to these physical shortcomings, the fracture of national communications in the 21st century between statements to the media, social media comments, and official announcements and documents, and no rational observer or potential participant can claim that there exists a framework (either physical or conceptual) to carry vital messages which could turn the world away from the brink of nuclear conflict. Without a physical framework, no one can begin to determine how such communications might work, or to even discuss protocols, nevermind exercise them.

With nuclear risks rising and emerging technologies in constant evolution, the need for a crisis communications technology among state leaders is acute. Yet no secure, trusted, and dependable capability exists today for conflict de-escalation in the face of nuclear crises.

Achieving a secure, trusted and dependable nuclear crisis communications technology for a rapidly-evolving security environment would represent a tangible risk reduction measure and one which brings no immediate downside to any nuclear-armed state; one which each of them could support without an iota of change in their national security perceptions.

One group of experts (including this author) has proposed a system that has initially been called CATALINK (CATAstrophe LINK) and examined the political aspects of its genesis and adoption.⁶ In a world of nine nuclear-armed states, such a system must be a multipolar technology with an open-source design process so that it can be built in collaboration and with integrity from the outset. Much work on

⁶ [Institute for Security and Technology CATALINK Project](#)

this concept has been done in academic and technology circles over the last 2 years but to take it forward, the concept requires scrutiny and adoption by governments.

The P5 has made some headway on nuclear risk reduction, yet the current high state of risk is fueled by the following four shortcomings of current hotline technologies:

Lack of Trust and Cooperation. The contemporary security environment has not facilitated the development and implementation of secure hotlines as a security and diplomatic priority. A lack of confidence in the intentions of other states has decreased desire to cooperate and communicate, at a time when the opposite is required to mitigate risks of nuclear war.

Ineffective History. The current technologies, networks, and systems that hotlines rely on have not been sufficient to lessen threats of conflict escalation. The performance of existing systems is often unreliable and not all nuclear states have access to the technology and technical expertise which could increase technological performance.

Insufficient Focus. Broad definitions of hotlines have undermined their implementation. Referring to unencrypted communications as “hotlines” ignores that in order to reduce nuclear risks a hotline needs to be a secure and unbreakable network.

Insufficient Breadth. The presence of nine nuclear-armed states (not to mention their allies and adversaries that would undoubtedly be pulled into a potential nuclear crisis) complicates the logistics and technical requirements of designing an effective hotline, and has prevented the implementation of global nuclear communication.

There are several advantages of a single system over current systems, namely that it can be designed to address these flaws. A modern multipolar nuclear communications system, which states trust to use, would represent a significant, tangible additive to existing progress. To be effective, such a system would need to have three main characteristics:

- **Remaining secure** through encryption;
- **Being trusted** by states knowing the technology has been built without back doors; and
- **Being dependable** as the technology and the networks such a system relies on would need to be resilient in the face of environmental, nuclear, and conventional crises.

Achieving a hotline which can operate at a level and with security approved by each of the nine nuclear-armed states has not yet been possible, nor even realistically attempted. Realizing this goal is central to nuclear risk reduction, however. CATALINK represents an achievable, operable, and sustainable solution.

CONCLUSION

The overt indicators and practices of restraint discussed in this briefer have in the past increased confidence that the policies of nuclear-armed states were centered on restraint first without diminishing deterrence.

Looking forward, however, they become an urgent necessity as the nuclear decision space will increasingly find itself disrupted, compressed and transformed by the advent of novel technologies (particularly artificial intelligence and machine learning), the increasing ubiquity of social media with

their attendant spoofing and deepfake capacity, the rise in autonomous systems, drones and cyber weapons, close over the horizon, quantum computing, and systemic environmental disruptions.

Nuclear conflict is no longer most likely as a result of a predatory first strike by an aggressive superpower. Today and in the near future, it is most likely through escalation after an initial nuclear weapon use from miscalculation and misinterpretation. Through overt protocols of restraint and reassurance, the accelerating risk of these inadvertent triggers would be mitigated and perhaps neutralized.

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