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Russia, NATO, and Nuclear First
Use

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Until recently the main concerns relating to possible nuclear war were associated with regional contingencies in South Asia, East Asia or the Middle East, implying a possibility of first use of nuclear arms by Pakistan, North Korea or Israel.

However, since 2014 the possibility of nuclear first use has once again returned to US-Russia and Russia-NATO strategic interactions, and has increased because of the standoff over Syria. That seemed unthinkable only a few years ago, to say nothing of the decades since the late 1980s, when Europe looked to be at its most secure since the Roman period.

This paper will look at the modern doctrines and weapon systems of nuclear armed states, the strategic paradoxes of the present time which are increasing the risk of nuclear war, and then suggest ways to stop sleepwalking to the brink of the nuclear abyss.

Doctrines

All nine nuclear-armed-states (NAS), except one, in their nuclear doctrines, declarations, and in actual operational planning, have traditionally envisioned nuclear first use under certain circumstances. The single exception – China – has apparently been revising its no-first-use stance since 2013.

None of the nine nuclear states specifies the way its nuclear forces would be employed first in an otherwise conventional conflict or as an initial first strike. The US and Russia are no exception, as though they imply greater specificity, in line with their nuclear capabilities, status, ambitions and foreign commitments.

It is worthy of note that the latest versions of the Russian Military Doctrine of December 2014 and the U.S. Nuclear Posture of 2010 have only two principal differences. One is that the U.S. is apparently willing to defend its allies with the use of nuclear weapons, if they are attacked by overwhelming conventional forces, whereas Russia does not provide such assurance. The other is that Russia is ready to use nuclear arms if facing the prospect of defeat by large-scale conventional aggression, while the United States for obvious reasons does not envision such a contingency.

As for hypothetical NATO-Russia conflict, which at present should be of primary concern, there are three conceivable causes of nuclear first use:

1. The “traditional” scenario of using tactical nuclear weapons as an escalation from a conventional conflict to prevent one’s imminent defeat.
2. Nuclear use due to an accident or provocation.
3. Reaction to attacks by an enemy’s conventional weapons against one’s nuclear forces and their C3I systems (which may be defined by a term “entanglement”).

In today’s world, there are two trends aggravating the danger of first use. One is the tense standoff between Russian and U.S./NATO armed forces over Ukraine, and in the Baltic, Black Sea, and Arctic regions, as well as a lack of cooperation in parallel military operations in Syria. To some extent, similar conflict might erupt between China and the U.S. or its allies in the Western Pacific over Taiwan and disputed islands and the jurisdiction of territorial seas. The second trend is the development of new weaponry, C3I systems and operational concepts, which erode the traditional delineation between nuclear and conventional arms, between offensive and defensive systems, and between a local conflict and a regional—or even global—war.

Escalation of local conflict

One of the great paradoxes of today is that the level of armed forces concentrated on both sides of NATO-Russia common border is much lower than 25 years ago,¹ but the risk of armed conflict is much higher. This is due to several factors.

In the absence of mutually recognized dividing lines, “quasi-frozen” conflicts in Ukraine, Georgia, Azerbaijan, and Moldova could suddenly erupt and draw Poland, the Baltic states, Turkey, and Romania - together with the rest of NATO - into a military clash with Russia.

Discarding the fears of its weaker neighbors, Russia considers NATO expansion to its borders to be inherently unlawful and threatening. Although the present scale of the alliance deployment is modest, these forces are considered only a forward echelon of NATO’s altogether superior conventional military power, which may be promptly redeployed from the rest of Europe and across the Atlantic from the United States.

1 Suffice it to mention that by the end of the 1980s the NATO-Warsaw Pact balance in Central Europe was 10,000 – 20,000 tanks and 2,400 – 3,800 combat aircraft, while at present the balance between Russia (Western and Southern military districts) and NATO (Baltic states, Poland, Romania) is 1,100 – 1,700 tanks and 340 – 1,900 combat aircraft.

The next war might thus take place much closer to Russia's heartland than envisioned 40-50 years ago, which makes Moscow's fears and stakes in a potential conflict much higher. To demonstrate its resolve and toughness Russia is challenging NATO near its territory, where Russian conventional forces are naturally superior.

Even in peacetime, large-scale military exercises of Russian and NATO armed forces close to each other create a threat of collisions and accidents between ships and aircraft with an accompanying risk of escalation. Such a chain reaction might be hard to stop: the Kremlin is keen to prove that the weakness of the 1990s will never return, while the White House is determined to demonstrate that it remains the "toughest guy on the block".

In the present state of confrontation, a direct military conflict between Russia and NATO in Eastern Europe, the Baltic or the Black seas would provoke an early use of nuclear arms by any side which consider defeat otherwise unavoidable. This risk is exacerbated by the fact that tactical nuclear and conventional systems are co-located at the bases of general purpose forces and employ dual-purpose launchers and delivery vehicles of the Navy, Air Force, and ground forces.

Should the Intermediate Nuclear Forces Treaty (INF)² collapse, and deployment of new medium and shorter range missiles in Europe by either or both sides become a reality, the prospect of early nuclear use and a consequential prompt escalation of nuclear strikes from theater to strategic level would be much more probable.

The way to deal with the above-mentioned dangers requires making several moves:

The first is to apply a more concerted effort to peacefully settle Europe's ongoing conflicts, above all in Ukraine and Moldova. If the Minsk agreements are not implemented, two years since their conclusion, they should be supplemented with effective enforcement mechanisms.

Secondly, the INF Treaty must be preserved and mutual accusations of non-compliance should be addressed and removed through diplomacy.

Thirdly, the scale of military exercises of Russia and NATO should be reduced on a mutual basis and separated geographically. Confidence-building and transparency measures (Vienna Document, Open Skies Treaty) should be expanded and the U.S.-Soviet accident

² The Intermediate-Range Nuclear Forces (INF) Treaty is a nuclear arms control agreement signed in 1987 between the US and Soviet Union (multilateralized in 1991 to include 12 Soviet successor states, notably Russia, after the Soviet Union's dissolution) which eliminated nuclear and conventional ground-launched ballistic and cruise missiles with ranges of 500 to 5,500 kilometers.

avoidance conventions (of 1972 and 1989) should be enhanced and put on a NATO-Russia footing.

Finally, an agreement should be reached to halt the military buildup on both sides of the NATO-Russian border at the present level, with the intention to reduce force deployments in the future.

Accidents

As reliable as negative control systems are (e.g. the prevention of unauthorized nuclear use), accidents are possible, even between the U.S. and Russia.

A frightening example of things going terribly wrong was provided by the 1995 accident involving the launch of a Norwegian geodesic rocket, which was taken for a Trident 2 missile, triggering the Russian early warning system. The event was urgently reported to the president, the “Cheget” system was activated, and Boris Yeltsin, as he said later, for several minutes held his finger “on the nuclear button” – until the incident was settled. But what if the event had been in fact an unauthorized single launch of Trident-2, or a French SLBM? Would it have started a massive exchange of nuclear strikes and a global catastrophe?

To complicate the picture further, a growing number of nations will in the near and medium term acquire sea-based ballistic and cruise missiles and hypersonic boost-glide weapons with variable trajectories, which would make accidents or provocations more likely and the process of identifying an attacker less certain.

The avoidance of nuclear war by miscalculation or provocation should be the top priority for the U.S. and Russia in spite of the tensions in their relations, or rather precisely because of such tensions.

Air-space warfare

The end of the Cold War made large-scale nuclear war improbable, but oddly enough moved to the foreground the concept of large-scale conventional war, with the employment of the most advanced military technologies related to the revolution in command-control-information systems, long-range precision guided cruise and future hypersonic missiles, drones, artificial intelligence, etc.

While in the United States such operations have been planned or implemented against “rogue states” and terrorists (and, tacitly, planned probably against China), in Russia they were associated with a hypothetical conflict between Russia and the West.

Russia's current Military Doctrine states that the most important task of the military is "guaranteeing the air-space defence of key sites in the Russian Federation and [ensuring] readiness to repel an air-space attack."³ In all likelihood, the authors of the strategy imagine that over a relatively long period of time (days or weeks) the West would wage a campaign of "air-space" strikes against Russia without using nuclear weapons while Russia, in turn, would defend against such attacks and carry out retaliatory strikes with long-range conventional weapons. At the same time, a selective use of strategic nuclear systems is envisioned at a certain phase of the armed conflict.⁴

While conventional attacks on hardened targets would not be effective, most soft strategic forces' sites would be relatively easy to destroy. A strike against missile warning radars and satellite control sites would "blind" the leadership of Russia, but also entails a high probability of nuclear retaliation in accordance with Russia's Military Doctrine.⁵

Russian capacity to inflict non-nuclear strikes against U.S. strategic sites lags far behind America's capabilities due to access problems and smaller numbers of available platforms and weapons. Russia's potential strikes would primarily affect Washington's allies in Europe and Asia, and involve targets such as depots of U.S. tactical nuclear weapons, BMD radars and interceptor launchers, key industrial sites, and possibly British and French strategic bases (submarines in harbour and aircraft at airfields).

In addition, a serious threat of entanglement comes from the hypothetical use, during a local or large-scale conventional war, of non-nuclear anti-satellite weapons against satellites that are a crucial part of the other side's strategic forces' information and communication system.

The deterrence paradox and the folly of limited nuclear war

There is a great paradox in present-day nuclear deterrence: although the numbers of deployed nuclear weapons have been drastically reduced, the probability of their use in conflict between Russia and NATO is much higher than at the end of the Cold War a quarter century ago.

3 "Voennaya doktrina Rossiiskoi Federatsii" [Military Doctrine of the Russian Federation], President of Russia, 2014, <http://news.kremlin.ru/media/events/files/41d527556bec8deb3530.pdf>.

4 S. Sukhanov, Air-Space Defense is a Task, Not a System // Air-Space Defense, March 29, 2010. <http://www.vko.ru/koncepcii/vko-eto-zadacha-ne-sistema>; Meeting of the Valdai International Discussion Club // President of Russia, Oct. 22, 2015. <http://en.kremlin.ru/events/president/news/50548>

5 Military doctrine of the Russian Federation // President of Russia, 2014. <http://news.kremlin.ru/media/events/files/41d527556bec8deb3530.pdf>

One reason is that deep reductions in the nuclear arsenals of the two major powers since 1991 has turned mutually assured destruction from a horrendous reality into an abstract notion – an unavoidable process during the decades of unprecedented relaxation of tensions. Nowadays the tensions are high, but the strategic nuclear balance looks very stable and neither party is concerned about the possibility of a disarming nuclear attack.⁶ Yet, in fact, the balance is so stable that limited or selective nuclear strikes are again considered possible, and not necessarily leading to a massive exchange. Such concepts are encouraged by the upgrading of the accuracy, yield variability, and enhanced command-and-control flexibility of the new vintage of nuclear arms.

In 2003 Russia borrowed from U.S. strategies of limited and flexible employment of strategic arms, elaborated in the 1960-1980s. Moscow officially declared the possibility of the deployment and employment of strategic forces for “showing resolve” and “deescalating conflicts”.⁷ In 2003, these pronouncements were largely ignored: a NATO-Russian war seemed unthinkable. But in 2014-2015 in the environment of escalating political and military confrontation they were recalled as requiring close attention.

At present, limited strategic nuclear strikes are not publicly mentioned in official Russian or U.S. documents on this subject. Still, there are some leaks on this subject to the mass media in the form of the writings of representatives of the “think tanks” of the Russian Ministry of Defense.⁸ There are also reasons to believe that analogous thinking is being elaborated in the U.S. strategic community (and will be supported by the Republican administration) in the form of “tailored nuclear options for limited use.”⁹

Such concepts are as artificial as they are dangerous. If presented in a crisis to a cocky, inexperienced and strategically uneducated leader, they could turn into a recipe for disaster. Together with the revived concept of using nuclear arms for “de-escalation” in a regional or local conventional conflict between Russia and NATO, they are the most dangerous innovations in contemporary military strategies, with a high probability of a catastrophic nuclear escalation.

6 Russia is only concerned about U.S. CPGS and conventional BMD, and the U.S. about Russia’s tactical nuclear arms.

7 Ministerstvo Oborony. 2003. Aktual’nye zadachi razvitiya Vooruzhennykh Sil Rossiiskoi Federatsii [Critical Tasks of the Development of the Armed Forces of the Russian Federation] Moscow: Ministerstvo Oborony.

8 See: Akhmerov D., Akhmerov Ye., Valeev M., “Aerostat – Drug ‘Sarmata’” (“Balloon – a Friend of ‘Sarmat’”), *Voenno-Promyshlennyi Kur’er*, N 39, October 12-18, 2016, p.6. www.vpk.news.ru.

9 Daryl Kimball, *Into Uncharted Territory*. Inside the Arms Control Association. An e-newsletter for supporters. February 2016; Robert Legvold, *The Challenges of the New Nuclear Age in the 21st Century World* (Disorder) (forthcoming in “The Multipolar Nuclear World: Challenges and Opportunities”. Moscow Carnegie Center).

The threat of escalation

Contemporary Russian and American leaders have not stated that ‘nuclear war cannot be won and must never be fought’, as their predecessors proclaimed in the early 1970s and late 1980s. Neither have the present leaders of the other seven nuclear-armed states reaffirmed this philosophy.

Conceivably this is not because they believe in nuclear victory, but rather because they underestimate the danger of uncontrolled escalation and assume that, under some circumstances, the first use of nuclear arms could be a rational choice. This belief stems from a deeply rooted idea about the nature of war as the “continuation of politics by other means,” in keeping with the aphorism of General Carl von Clausewitz.¹⁰

Since the great powers would inevitably sustain devastating damage in a nuclear war, neither side would consciously start one, other than in a response to aggression. This conditionality is present in U.S. and Russian doctrines. But as the history of war has shown time and again, especially after 1945, conflicts can erupt not as a result of planned, large-scale aggression, but as a chain reaction of military operations by both sides that lead to an uncontrolled escalation of a military engagement. In such situations, each side believes that it is acting purely defensively, even if it carries out offensive actions, while it is the enemy that has aggressive intent and overreacts.

Looking at history, for example, who was the aggressor in the Cuban Missile Crisis of October 1962? It was sheer luck that saved the world several times from a nuclear catastrophe during this crisis, even though neither side wanted war. But the Cuban crisis was not an exception, although it was the most dangerous episode of the Cold War. Other crises and conflicts have also threatened to spiral out of control, and were linked to some degree with the likelihood of a nuclear war with the involvement of the Soviet Union and the United States: the Suez crisis (1956-57), the Berlin Crisis (1961), and the 1967 and 1973 wars in the Middle East are all clear examples.

Back then, the superpowers managed to stop before the precipice of a direct conflict. In today’s more complex world order, which can drag many autonomous (including non-governmental) players into conflicts, and with the development of new military technologies, this luck may one day run out. And this is true despite a stable mutual nuclear deterrence maintained with the drastically reduced nuclear stockpiles of the two leading powers.

Most worryingly of all, it is far from certain that today’s political and military leaders in Russia and the U.S. see this danger, for example, in developments in Ukraine, Moldova,

10 C. von Clausewitz, *On War*. M.: Eksmo, 2007.

or Syria - in particular after the U.S. missile strike against the Syrian airbase and the Russian response, which included suspending the agreement with the U.S. on avoidance of accidents in Syrian airspace. Consequently, both political leaderships should be informed about this danger and prepared for the scenarios outlined above. They need to understand the potentially destabilizing role of new weapons - and the military strategies linked to them - that create the threat of nuclear first use and may prompt escalation to the all-out war that their predecessors managed to avoid during the worst times of the Cold War.

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