The Return of Doomsday
The New Nuclear Arms Race—and How Washington and Moscow Can Stop It

By Ernest J. Moniz And Sam Nunn  September/October 2019

Russian roulette: a Russian ICBM launcher in Moscow, April 2017
Maksim Blinov / Sputnik / AP

The year is 2020. The Russian military is conducting a large exercise in Kaliningrad, a Russian exclave on the Baltic Sea that borders the NATO member states Lithuania and Poland. An observer aircraft from the Western alliance accidentally crosses into...
and combat vessels into the region. Both sides warn that they will consider using nuclear weapons if their vital interests are threatened.

Already on edge after the invasion of Crimea, rising tensions in the Middle East, the collapse of arms control agreements, and the deployment of new nuclear weapons, NATO and Russia are suddenly gearing up for conflict. In Washington, with the presidential campaign well under way, candidates are competing to take the hardest line on Russia. In Moscow, having learned that anti-Americanism pays off, the Russian leadership is escalating its harsh rhetoric against Washington.

With both sides on high alert, a cyberattack of unknown origin is launched against Russian early warning systems, simulating an incoming air attack by NATO against air and naval bases in Kaliningrad. With only minutes to confirm the authenticity of the attack and no ongoing NATO-Russian crisis-management dialogue, Moscow decides it must respond immediately and launches conventional cruise missiles from Kaliningrad bases at NATO’s Baltic airfields; NATO also responds immediately, with air strikes on Kaliningrad. Seeing NATO reinforcements arrive and fearing that a NATO ground invasion will follow, Moscow concludes that it must escalate to de-escalate—hoping to pause the conflict and open a pathway for a negotiated settlement on Moscow’s terms—and conducts a low-yield nuclear strike on nuclear storage bunkers at a NATO airfield. But the de-escalate calculus proves illusory, and a nuclear exchange begins.

This hypothetical may sound like the kind of catastrophic scenario that should have ended with the Cold War. But it has become disturbingly plausible once again. Its essential elements are already present today; all that is needed is a spark to light the tinder.
destroy the other, and the world, several times over. For a long time, both sides worked hard
to manage the threat these arsenals presented. In recent years, however, geopolitical tension
has undermined “strategic stability”—the processes, mechanisms, and agreements that
facilitate the peacetime management of strategic relationships and the avoidance of nuclear
conflict, combined with the deployment of military forces in ways that minimize any
incentive for nuclear first use. Arms control has withered, and communication channels have
closed, while outdated Cold War nuclear postures have persisted alongside new threats in
cyberspace and dangerous advances in military technology (soon to include hypersonic
weaponry, which will travel at more than five times the speed of sound).

The United States and Russia are now in a state of strategic instability; an accident or
mishap could set off a cataclysm. Not since the 1962 Cuban missile crisis has the risk of a
U.S.-Russian confrontation involving the use of nuclear weapons been as high as it is today.
Yet unlike during the Cold War, both sides seem willfully blind to the peril.

Washington and Moscow share a responsibility to prevent a nuclear catastrophe, even at a
time of mutual distrust and U.S. domestic divisions. The U.S. and Russian presidents must
begin by creating a climate for dialogue between their governments, managing their
differences and cooperating when they can—most of all when it comes to addressing the
common existential threat of nuclear war. Reviving and reinventing strategic stability will be
a long-term process, but in the United States, leaders from across the political spectrum
should put this at the top of the priority list and get to work on mitigating the short-term
dangers of confrontation. The risk of nuclear escalation is too high to wait.

MISSILES AND MISTRUST

Over much of the past two decades, clashing national interests and zero-sum security
policies in and around Europe have fueled tension and mistrust between Russia and the
West. Friction over the Balkans and the war in Kosovo in the 1990s was an early indicator
that the relationship would be contentious in the post-Soviet era. The ongoing process of
Russian President Vladimir Putin and U.S. President George W. Bush came to power, in 2000 and 2001, respectively, disputes over missile defense and the Iraq war helped spur Putin’s seminal speech at the Munich Security Conference in 2007, in which he criticized the United States’ “almost uncontained hyper use of force” and warned of a new arms race. The Russian invasion of Georgia followed in 2008, deepening mistrust between Moscow and the West, which carried into the Obama era despite efforts to “reset” relations. The 2011 NATO intervention and regime change in Libya fueled suspicions in the Kremlin that bordered on paranoia.
The situation gradually worsened until 2014, when Russia’s annexation of Crimea, its military intervention in eastern Ukraine, and the downing of a Malaysia Airlines flight reportedly by a Russian-made missile fired from territory controlled by Russian-backed separatists in Ukraine ruptured relations between Russia and the West. The United States and Europe responded with economic sanctions designed to isolate Russia and force a diplomatic resolution to the Ukraine crisis. Despite two negotiated agreements—the Minsk I and II deals of 2014 and 2015—the conflict has ground on. NATO and Russia have reinforced their military postures throughout the region. In the Baltics and around the Black Sea, NATO and Russian forces are operating in close proximity, increasing the risk that an accident or a miscalculation will lead to a catastrophic result.

Exacerbating this danger is the deliberate and accelerating breakdown of the arms control architecture that for decades provided restraint, transparency, and predictability for each side’s conventional and nuclear forces. In their absence, Russia and the West are assuming and planning for worst-case scenarios. The first crack appeared in 2002, when the United States withdrew from the Anti-Ballistic Missile (ABM) Treaty, signed three decades earlier to prevent Washington and Moscow from deploying nationwide defenses against long-range ballistic missiles. Five years later, Russia effectively suspended another landmark agreement, the 1990 Treaty on Conventional Armed Forces in Europe, and NATO followed suit.
The 1987 Intermediate-Range Nuclear Forces (INF) Treaty—which banned an entire class of destabilizing nuclear-capable missiles on European territory—has been dealt a likely fatal blow with this year’s decisions by Washington to withdraw from the treaty and by Moscow to suspend implementation of it. This followed U.S. concerns about Russian deployment of prohibited missiles and Russian allegations raised in response. The fate of the Comprehensive Nuclear Test Ban Treaty is also in doubt, with four Republican U.S. Senators writing to President Donald Trump this past spring asking if he would consider “unsigning” the treaty. The future of the 2010 New START treaty is also unclear. Unless both sides agree to extend it—a proposition Trump and his administration have consistently refused to embrace—the treaty will expire in 2021. In short, in less than two years, the last remaining agreement to limit and monitor the deployment of U.S. and Russian strategic nuclear forces could unravel completely. If it does, any remaining transparency of both sides’ nuclear arsenals, including on-site inspections by each country, will vanish with it.

At the same time as checks on existing weapons are falling away, new technologies threaten to further destabilize the military balance. Sophisticated cyberattacks could compromise early warning systems or nuclear command-and-control structures, increasing the risk of false alarms. Prompt-strike forces, including delivery systems that pair conventional or nuclear warheads with a hypersonic boost-glide vehicle or cruise missile, can travel at very high speeds, fly at low altitudes, and maneuver to elude defenses. If deployed, they would decrease a defender’s warning and decision time when under attack, increasing the fear of military planners on both sides that a potential first strike could deliver a decisive advantage to the attacker. Then there is the militarization of outer space, a domain that remains virtually unregulated by agreements or understandings: China, Russia, and, most recently, India have built up their antisatellite capabilities, and Washington is mulling a dedicated space force.

This toxic mix of decaying arms control and new advanced weaponry is made even more dangerous by the absence of dialogue between Russia and the West—in particular, between civilian and military professionals in the defense and foreign ministries. The current disconnect is unprecedented even when compared with the height of the Cold War. As tense
understood that engagement with the Soviet Union was essential to keeping Americans safe. U.S. and Soviet negotiators met regularly in Geneva, New York, and Vienna. U.S. military commanders spoke regularly in various forums, including arms control negotiations, with their Soviet counterparts, united by a sense of mutual obligation to prevent nuclear disasters.

**NATO disunity could undermine U.S. credibility and exacerbate the risk of military confrontation with Russia.**

This precautionary mindset has faded in the wake of Russian aggression in Ukraine and interference in U.S. and European elections. The United States and its NATO allies are now stuck in a retaliatory spiral of confrontation with Russia. The West in recent years has treated dialogue as a reward to be earned by good behavior rather than a diplomatic tool to be employed out of necessity. Insufficient communication only exacerbates acrimony and tension—further raising the barrier to dialogue. The NATO-Russia Council, for example—a forum set up in 2002 to ensure regular mutual consultation—has become dysfunctional; rather than turning to it in moments of crisis, such as during the Russian attack on Ukraine, NATO suspended all practical cooperation within the council for two years beginning in April 2014. Since then, it has met only 11 times in carefully orchestrated sessions, with officials below the level of NATO ambassadors. Routine exchanges between military professionals are still blocked.

Political fissures in the United States bear some of the responsibility for this communication breakdown. In Congress, distrust of Trump’s handling of relations with Moscow and justifiable outrage over Russia’s election interference and its actions in Ukraine are widespread. As a result, members of both political parties increasingly characterize all dialogue with Russia as suspect. Congress has passed, with overwhelming majorities, laws codifying existing sanctions against Russia and enacting new ones, making it extremely difficult for the president to alter or remove them on his own. More problematic, it has passed legislation prohibiting the U.S. military from cooperating with the Russian military.
(Dialogue for limited purposes is still permitted but discouraged.) This restrictive legislation has had a chilling effect on much-needed military-to-military interactions.

Fractures within NATO have also hampered clear communication with Russia. The Trump administration has undercut the United States’ European allies by publicly castigating them for failing to spend more on defense while also putting into question whether the United States will honor its defense commitments. Over the objections of NATO member states and the EU, the United States withdrew from the Iran nuclear deal and the Paris agreement on climate change. All this transatlantic discord has damaged the perception of NATO as a strong alliance. Moreover, NATO members are divided over how to balance engagement and confrontation with Russia. Because of its uncertain and unpredictable leadership, Washington is in a weak position to guide this debate and ensure that Western states stick to a common and coherent line when dealing with Russia. In a crisis, NATO disunity could undermine U.S. credibility and exacerbate the risk of military confrontation with Russia.

RUSSIA AS IT IS

For all of Russia’s internal problems—an economic and political structure whose overreliance on one commodity (energy) and one person (Putin) is by definition fragile—the country will remain a force to be reckoned with for a long time to come. By virtue of its vast geography, permanent membership in the UN Security Council, rebuilt military, and immense nuclear forces, Russia can disrupt geopolitical currents in areas vital to the interests of the United States, including Europe, the Middle East, Asia, and the Arctic. Further clashes and crises are not just possible but probable. Both sides need to start planning now to make sure that any such confrontations do not spiral out of control—or, better yet, to prevent them from occurring in the first place.
Strategic engagement with Moscow does not mean ignoring Russian aggression, be it intervention in Ukraine, interference in Western elections, a chemical attack on a former KGB agent in the United Kingdom, or violations of the INF Treaty. Even as it seeks to work with Russia on nuclear threat reduction, the West should continue seeking to deter unacceptable behavior. The United States and the EU should not, for example, lift their Ukraine-related sanctions on Russia without substantial movement on Ukraine. Nor should Washington remove the sanctions it imposed in response to Russian electoral interference until such interference has been reliably curtailed. At the same time, Congress must give Trump and his successors the flexibility to selectively lift sanctions if they have achieved their purpose; if the Russians conclude they will never get out of the penalty box, they will have very little incentive to change their aggressive behavior.

NATO should also maintain its enhanced military posture in Europe, including its temporary force rotations in the Baltic countries. Yet at the same time, it should honor its commitment—made in the 1997 NATO-Russia Founding Act, a road map for the normalization of relations after the Cold War—not to store or deploy nuclear weapons on the territory of new NATO members in eastern Europe.
Put simply, leaders in Washington and other NATO capitals should engage Russia with a clear-eyed understanding of their differences. But dialogue must rest on a recognition of the shared vital interest in preventing the use of nuclear weapons.

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**GETTING BACK TO JAW-JAW**

In Washington, the first step toward rebuilding a productive dialogue with Moscow is rebuilding a working relationship between the Trump administration and Congress on Russia policy. Even with the lack of trust between the president and congressional Democrats, especially in the run-up to the 2020 presidential election, bipartisan leadership from Congress is essential, and essential now: given the gravity of the risks, legislators simply cannot afford to wait for new leadership in the White House or in the Kremlin.

A new bipartisan liaison group—of House and Senate leaders and committee chairs, on one side, and relevant senior administration officials, on the other—focused on Russia policy, nuclear dangers, and NATO could kick-start and help sustain this process. House Speaker Nancy Pelosi, Democrat of California, and Senate Majority Leader Mitch McConnell, Republican of Kentucky, need not wait for a call from the White House to get such a group up and running. They should make this proposal to increase executive-legislative coordination directly to the president and the secretary of state. The forum would strengthen the United States’ hand in dealing with Russia by showing a bipartisan executive-legislative front. If the Trump administration objects or demurs, Congress should use its legislative and appropriations powers to establish the liaison group regardless and use committee hearings to call administration witnesses. (With the help of Pelosi and McConnell, the liaison group could also provide a foundation for dialogue with parliamentary counterparts and Russian leaders.)

The fact that Trump and Putin reportedly agreed to a new dialogue on strategic stability and nuclear dangers at a meeting in Helsinki in July 2018 was a step in the right direction. But their inability to follow through—including at the level of civilian and military professionals,
become. The talks on “strategic security” between U.S. and Russian diplomats that began following the June Trump-Putin meeting in Osaka, Japan, at the G-20 summit this year, should be expanded to include senior military and other officials from both governments—with a broader agenda and more frequent meetings. Congressional leaders should also give bipartisan—or, rather, nonpartisan—backing to this initiative.

Security removes a man before Trump and Putin hold a joint news conference in Helsinki, 2018

Reuters / Kevin Lamarque

To increase transparency and trust between their militaries and among militaries Europe-wide, the United States, NATO, and Russia should restart a crisis-management dialogue, one that includes their nuclear commanders. Previously, the NATO-Russia Council (buttressed by arms control compliance commissions) provided a forum for discussions along these lines, and ideally this dialogue could be resumed in the council, or as a separate working group. The United States, NATO, and Russia should also reopen channels of engagement between their respective nuclear scientific and expert communities on a variety
nuclear reactors, investigating solutions to the problem of nuclear waste, supporting beneficial innovations in civilian nuclear science, and strengthening the International Atomic Energy Agency.

With a modicum of cooperation restored, the United States and Russia could take more specific steps to reduce the likelihood of a new nuclear arms race—of vital importance for international security, particularly in light of the probable demise of the INF treaty. All nations have an interest in seeing the New START treaty fully implemented and extended through 2026, the maximum five-year extension permitted by the treaty. Here, too, Congress can provide support and make clear—as it did during the United States’ nuclear buildup in the 1980s—that funding for nuclear modernization comes with the expectation that Washington will work with Moscow to reduce nuclear risks and continue to impose verifiable limits on both sides’ arsenals.

BREAKING THE ESCALATION CYCLE

Another top priority is finding ways to give leaders of nuclear weapons states more time to reach a decision on whether to use their nuclear weapons in a moment of crisis—especially when they fear they may be under attack by nuclear weapons. Today, decision-makers in Washington and Moscow have only a precious few minutes to decide whether a warning of a possible nuclear attack is real and thus whether to retaliate with a nuclear attack of their own. New technologies, especially hypersonic weapons and cyberattacks, threaten to make that decision time even shorter. The fact that Russian troops are deployed, and routinely conduct military exercises, in Russia’s western regions close to NATO’s boundaries, and NATO troops are deployed, and have recently conducted military exercises, close to Russia’s borders further raises fears of a short-warning attack. Such shrinking decision time and heightened anxieties make the risk of a mistake all too real. Leaders in both Washington and Moscow should clearly direct their military leaders to work together on ways to minimize such fears and increase their decision time.
Although it may seem counterintuitive given the current political landscape and emphasis on deterrence, the United States, NATO, and Russia should consider that U.S. and Russian forward-deployed nuclear weapons in Europe may be more of a security risk than an asset. These weapons are potential targets in the early phases of a conflict and thus could trigger early nuclear use, an outcome that all sides must avoid. Despite speculation about Russian interest in escalating to de-escalate (that is, that Moscow would under certain circumstances deliberately escalate a conflict through limited nuclear use to create the conditions for a settlement on terms favorable to Russia—a complex proposition often denied by Russian officials and academics), any nuclear use would almost certainly trigger further escalation. Moreover, U.S. forward-deployed weapons are an attractive target for terrorists, as they are more vulnerable if located in areas where there is a heightened risk of terrorism or political instability (this is also true for Russian weapons). By the same token, Washington and Moscow must find a way to prevent the deployment of U.S. or Russian intermediate-range missiles systems in the Euro-Atlantic region, given that the constraints of the INF Treaty—designed to prevent such deployments—are likely to no longer be binding. Otherwise, leaders in Moscow, London, and Paris could once again become consumed with fears of a short-warning nuclear attack that could decapitate a nation’s leaders and its command and control, which would greatly increase the risk of false warnings.

Forward-deployed nuclear weapons in Europe may be more of a security risk than an asset.

Since the United States withdrew from the ABM Treaty, in 2002, long-range missile defense has been left out of any arms control framework, and Russian leaders worry that the U.S. missile defense program could at some point undermine the Russian nuclear deterrent. A new, legally binding agreement like the ABM Treaty is unlikely given the intense opposition to any constraints on missile defense in the U.S. Senate, which would have to approve any new treaty by a two-thirds vote. Nonetheless, it should be possible to negotiate soft guidelines on missile defense, including reciprocal transparency measures, such as on
missile defenses in ways or at levels that would threaten the other’s nuclear deterrent and fan first-strike concerns.

Exchanging more information about each side’s operations and capabilities could help ensure that prompt-strike systems, such as modern hypersonic missiles, do not further erode strategic stability. This is primarily a U.S.-Russian issue, but with China’s reported development of hypersonic missile capabilities, addressing it will ultimately require broader engagement. It would also help to offer more transparency on nonnuclear prompt-strike systems and commit to segregating these conventional capabilities from nuclear-weapons-related activities or deployments. Doing so could help ensure that early warning systems would not mistake a conventional attack for a nuclear one. New START or a successor agreement could also put restrictions on some long-range prompt-strike systems capable of delivering both conventional and nuclear weapons—since their unconstrained deployment would increase fears of a first strike.

Washington and Moscow should also work together to develop clear redlines in cyberspace and outer space. In both domains, which are largely unregulated, other nations, or third parties, could threaten U.S. and Russian interests—or even attempt to spark a war between the United States and Russia. Cyberattacks on nuclear facilities, nuclear command-and-control structures, or early warning systems could cause miscalculations or blunders, such as a false warning of a missile attack or a failure to prevent the theft of nuclear materials. As states continue to develop and refine their ability to attack satellites, the United States and Russia could be blinded in the early stages of a conflict. To ameliorate this problem, the United States and Russia could set up a pilot project focused on exchanging information on activities in outer space, which could help avoid collisions and conflicts in space. The pilot project would identify the information to be exchanged and a mechanism for exchanging it—both of which could lead the United States and Russia to adopt guidelines governing civil and defense space activities. Redlines and pilot projects could help build trust and set the stage for future confidence-building measures, or even legally binding agreements, on activities in cyberspace and outer space.
Finally, and perhaps most important, both sides should develop a set of core nuclear weapons principles, starting with the understanding, first articulated in 1985 by U.S. President Ronald Reagan and Soviet leader Mikhail Gorbachev, that “a nuclear war cannot be won and must never be fought.” Affirming this principle was an important building block to ending the Cold War. Today, it could pave the way for important practical steps, such as a renewed effort by the P5—the five permanent members of the UN Security Council, which are all also nuclear weapons states—to strengthen the Nuclear Nonproliferation Treaty and increase cooperation to prevent terrorists from acquiring nuclear materials.
BEFORE IT’S TOO LATE

For decades, strategic stability between the United States and Russia included a mutual recognition of vital interests, redlines, and the means to reduce the risks of accidents or miscalculations leading to conflict, and especially the use of nuclear weapons. Today...
advanced missile systems, and new cyberweapons have destabilized the old equilibrium. Political polarization in Washington has only made matters worse, undoing any remnants of a domestic consensus about U.S. foreign policy toward Russia. Unless Washington and Moscow confront these problems now, a major international conflict or nuclear escalation is disturbingly plausible—perhaps even likely. Instead, Trump and Putin have bantered about Russia’s interference in the 2016 U.S. presidential election, the idea of “getting rid of the press,” and the problem of “fake news,” all at a time when press freedoms are threatened globally and authoritarianism is on the rise. Under these grim circumstances, some have suggested abandoning U.S.-Russian talks and waiting for new leadership in both countries. That would be a mistake. Dialogue between the two presidents remains essential: only that can create the political space for civilian and military officials in both nations to engage with one another in discussions that could prevent catastrophe. Congress must set a tone of bipartisan support for communicating and cooperating with Russia to reduce military risks, especially those involving nuclear weapons. To do otherwise puts Americans at grave risk.

To paraphrase John F. Kennedy—who, during the Cuban missile crisis, had a closer call with Armageddon than any other U.S. leader—humankind has not survived the tests and trials of thousands of years only to surrender everything now, including its existence. Today, watching as the edifice of strategic stability slowly but surely collapses, Washington and Moscow are acting as if time is on their side. It is not. 🫥
The Year of Living Dangerously With Nuclear Weapons

Three Crises Washington Could Face in 2019

Nicholas L. Miller and Vipin Narang

If You Want Peace, Prepare for Nuclear War