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## Feature Report

***“A Spreading Plague: Lessons and Recommendations for Responding to a Deliberate Biological Event”***. Published by Nuclear Threat Initiative; June 13, 2019

<https://www.nti.org/newsroom/news/news-spreading-plague-new-report-offers-recommendations-responding-deliberate-biological-event/>

The risks of a global catastrophic biological event are rising, and international leaders and organizations today are unprepared to react with the kind of effective, coordinated response needed to investigate and identify the pathogen, prevent the spread of disease, and, most importantly, save lives, according to a new report from NTI | bio, Georgetown University’s Center for Global Health Science and Security, and the Center for Global Development.

*A Spreading Plague: Lessons and Recommendation for Responding to a Deliberate Biological Event* offers recommendations for urgent action to address this deficit.

“Without the right procedures and tools in place, there is little doubt that a rapidly spreading biological event would place overwhelming stress on the people and institutions responsible for response,” the report states. “The lack of established procedures would very likely undermine the trust and cooperation needed among health professionals, humanitarian responders, and security officials who would be aiming for a coordinated, effective response.”

The paper presents key findings from a dramatic tabletop exercise based in “Vestia,” a fictitious country embroiled in civil unrest and facing an unusual, fast-moving outbreak that appears to be plague. Highlighting the gaps in preparedness, the exercise sparked disagreements among the participants—senior leaders from security, public health, humanitarian, and political sectors—as they struggled to coordinate and rapidly respond.

Organizers of the event—Elizabeth Cameron of the Nuclear Threat Initiative, Rebecca Katz of the Center for Global Health Science and Security at Georgetown University, and Jeremy Konyndyk of the Center for Global Development—which was held on the eve of the 2019 Munich Security Conference, drew on the exercise to develop recommendations for critical improvements to avoid catastrophic consequences of both deliberate and other high-consequence biological events. The recommendations include steps to enhance international coordination, information sharing, and investigation and attribution, and to increase financing for response and preparedness.

Organizers noted that many of the gaps in preparedness and response have been well-known for years—but they must not be viewed as intractable. “Leaders across all sectors have an obligation to develop better systems, mechanisms, and procedures for saving lives and preventing future potentially catastrophic outbreaks,” the report states. “The risks are rising. It is time to meet this challenge.”

# TABLE OF CONTENTS

## NUCLEAR WEAPONS

- [Government Watchdog Finds 3 Issues Disrupting US Nuclear Modernization Efforts](#) (Defense News)

The [NNSA] ... is facing three main challenges, according to the report: a dwindling supply of explosive materials, aging and deteriorating infrastructure, and difficulty in recruiting and training qualified staff.

- [Nuclear Weapons and Iran's Uranium Enrichment Program: 4 Questions Answered](#) (The Conversation)  
Freshly mined uranium contains more than 99% of an isotope called uranium 238, which is not fissile, plus a tiny fraction of uranium 235, which is fissile. Enrichment is an industrial process to increase the proportion of U-235.
- [Here's How Many Nuclear Warheads Exist, and Which Countries Own Them](#) (Defense News)  
The report found that 13,865 warheads in existence at the start of 2019 were owned by nine nations: the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and North Korea.

## US COUNTER-WMD

- [World Unprepared for Biological Catastrophe, Report Says](#) (Homeland Preparedness News)  
Leaders and organizations lack a coordinated response that would be necessary to investigate and identify a pathogen, prevent the spread of disease, and save lives.

## US ARMS CONTROL

- [Building on Past Experience, Iran Leads the Waltz with the US](#) (Atlantic Council)  
Experience tells Iran that if it wants to negotiate with the US, it has to run the show with its Gulf Arab neighbors.
- [Russian Lawmakers Back Putin on Withdrawal from Nuclear Arms Treaty](#) (The Hill)  
Putin signed an executive order exiting the nuclear arms deal in March, and Tuesday's overwhelming vote in the State Duma confirmed that decree.
- [Leaked N. Korean Document Shows Internal Policy against Denuclearization](#) (VOA)  
The document is a teaching guide for instructing top military officials on Pyongyang's official internal position prior to a second summit with U.S. President Donald Trump.

## COMMENTARY

- [Arms Control and Russia's Global Strategy after the INF Treaty](#) (Real Clear Defense)  
Russia's ability to intervene in neighboring states and its coercive diplomacy towards them and NATO "rests upon its nuclear arsenal, as well as on the newest conventional weapons, and is used for both defensive and offensive purposes."
- [House Democrats Want to Kill This More Useable Nuke. They're Right.](#) (Defense One)  
... adding new low-yield warhead option to the U.S. arsenal is a solution in search of a problem.
- [The New India Versus the Nuclear Revolution: The Future of Crises among Nuclear Powers](#) (War on the Rocks)  
Robert Jervis' seminal book and other classics of nuclear strategy argue that survivable nuclear weapons fundamentally change the nature of statecraft, with a number of implications for the behavior and outcomes we should expect between nuclear powers.

# NUCLEAR WEAPONS

Defense News (Washington, D.C.)

## **Government Watchdog Finds 3 Issues Disrupting US Nuclear Modernization Efforts**

By Kelsey Reichmann

June 19, 2019

WASHINGTON — The U.S. agency responsible for making explosive materials used in nuclear weapons is facing challenges that could impact the country's planned modernization of its nuclear arsenal, according to a report by the Government Accountability Office.

The National Nuclear Security Administration, a semiautonomous agency within the Energy Department, is facing three main challenges, according to the report: a dwindling supply of explosive materials, aging and deteriorating infrastructure, and difficulty in recruiting and training qualified staff.

This report comes amid congressional debate over the cost of modernizing the U.S. nuclear arsenal, an effort driven by President Donald Trump.

NNSA's supply of materials, which are "highly specialized" with specific chemical and physical characteristics, are in low supply, the report says. Furthermore, the NNSA is lacking the knowledge base to produce the materials, as the recipes to make them were not well-documented, or the processes themselves infrequently practiced, the report notes.

Challenges in obtaining materials is not a new issue for the NNSA, the watchdog notes. The agency experienced a similar situation with a material known as "Fogbank," and the GAO reported in March 2009 that the NNSA lacked the knowledge to manufacture the material — leaving the process for Fogbank "dormant for about 25 years."

Fogbank is used in the production of the W76-1, a warhead for the Navy's Trident ballistic missile. Under the Trump administration's plans for a new low-yield nuclear weapon, the U.S. is making a W76-2 variant, which entered production earlier this year.

The GAO notes that when the NNSA is actually able to replicate formulas for materials, procuring those materials has proved challenging, given the irregular and small order specifications to contractors.

But the GAO identifies aging infrastructure as the greatest risk to the NNSA.

"The NNSA 2019 Master Asset Plan states that 40 percent of the explosives infrastructure of NNSA's sites is insufficient to meet mission needs, which can lead to contamination of explosive products or limit the use of facilities," the report says. It notes that contamination has already occurred from rust falling off rafters and grass blowing through cracks in the walls, contaminating batches of explosives.

Aging facilities must receive updates to modern safety standards to protect employees, the GAO says. The Los Alamos High Explosives Chemistry Laboratory, for example, was built in the 1950s and has struggled to adopt to modern instrumentation, according to the report.

Facilities also deal with limited storage, the report says, meaning explosives can be stored in a single location where they could potentially cause a chemical reaction.

The report also cites NNSA documents that describe challenges in recruiting qualified staff, who often must have a security clearance. For example, Pantex, a contractor hired by the agency, in 2018

estimated it would need 211 full-time staff members. However, in November that year, it reported only 172 full-time employees. Officials with agency contractors told the GAO that the problem is largely due to the competitive industry; in particular, Pantex competes with oil and gas companies in Texas. The company has now expanded its recruitment efforts to include local colleges and universities, the report says.

In a written response to the report, the head of the NNSA, Lisa Gordon-Hagerty, said the “GAO’s observations and recommendations are consistent with [the Department of Energy]/NNSA’s recent efforts to centralize management of energetic material.”

The Office of Safety, Infrastructure, and Operations previously identified many of the infrastructure data issues presented in the report and developed a series of actions aimed at improving the accuracy of asset data,” she wrote. “These efforts have already resulted in improved data quality, and the accuracy and consistency of data will continue to improve as additional actions are completed.”

<https://www.defensenews.com/global/the-americas/2019/06/19/government-watchdog-finds-3-issues-disrupting-us-nuclear-modernization-efforts/>

[Return to top](#)

The Conversation (Boston, Mass.)

## **Nuclear Weapons and Iran’s Uranium Enrichment Program: 4 Questions Answered**

By Miles A. Pomper

June 18, 2019

Editor’s note: Iranian leaders have threatened to withdraw from a 2015 agreement that limits their nation’s nuclear activities. Under the deal, the United States and five other world powers lifted economic sanctions they had imposed to prevent Iran from developing nuclear weapons. But President Trump removed the U.S. from the deal in 2018 and reimposed sanctions.

Miles Pomper, a senior fellow at the Middlebury Institute of International Studies at Monterey, explains one of the key activities that the Iran deal covers – uranium enrichment – and why it is central to both peaceful nuclear energy programs and building nuclear weapons.

### 1. What is uranium enrichment?

Uranium can fuel nuclear power plants and nuclear bombs because some of its isotopes, or atomic forms, are fissile: Their atoms can be easily split to release energy.

Freshly mined uranium contains more than 99% of an isotope called uranium 238, which is not fissile, plus a tiny fraction of uranium 235, which is fissile. Enrichment is an industrial process to increase the proportion of U-235. It’s usually done by passing uranium gas through devices called centrifuges, which rotate at high speeds. This process sifts out U-235, which is lighter than U-238.

Commercial nuclear power plants run on low-enriched uranium fuel, which contains 3-5% U-235. Further processing can produce highly enriched uranium, which contains more than 20% U-235.

Moderate and conservative Iranian leaders have been debating whether to pursue nuclear weapons since the country’s 1979 revolution.

## 2. How is enriching uranium connected to making nuclear weapons?

The same technology is used to enrich uranium for either nuclear power or nuclear weapons. Nuclear weapons typically contain uranium enriched to 80% U-235 or more, which is known as weapon-grade uranium.

Nuclear weapons can also be powered with plutonium, but Iran would need to irradiate uranium fuel in its Arak nuclear reactor and build an additional facility to separate plutonium from the spent fuel to take that route. Currently its uranium work poses a more immediate risk.

Both nuclear power and nuclear weapons rely on nuclear chain reactions to release energy, but in different ways. A commercial nuclear power plant uses low-enriched uranium fuel and various design elements to generate a slow nuclear chain reaction that produces a constant stream of energy. In a nuclear weapon, specially designed high explosives cram together enough weapon-grade uranium or plutonium to produce an extremely fast chain reaction that generates an explosion.

Producing a nuclear weapon involves more than making highly enriched uranium or plutonium, but experts generally view this as the most time-consuming step. It's also the stage that is most visible to outsiders, so it is an important indicator of a country's progress.

## 3. How good is Iran at enriching uranium?

Iran's work on uranium enrichment has proceeded in fits and starts, but now experts generally believe that if it exits the nuclear deal, it could make enough highly enriched uranium for a nuclear weapon.

These efforts began in the late 1980s, while Iran was engaged in a bloody war with Iraq. The first centrifuges and designs were provided by Abdul Qadeer Khan, a Pakistani nuclear scientist who ran a black market network for nuclear technologies from the 1970s through the early 2000s. These machines were poor-quality, frequently secondhand models and often broke down. And the United States and Israel reportedly carried out espionage operations, including cyberattacks, to further disable Iran's enrichment ability.

Iran continues to have technical problems in producing more advanced centrifuges. Nonetheless, it improved their performance sufficiently in the years leading up to the 2015 deal that observers widely believe Iran could produce enough material for a nuclear weapons program. The 2015 agreement deal set limits on Iran's research and development activities to limit further progress, but Iran is already testing the legal boundaries of these restrictions.

## 4. How does the Iran deal limit Iran's activities?

The agreement limits how much uranium Iran can enrich and to what level. It also specifies how much enriched uranium Iran can stockpile, how many and what types of centrifuges it can use, and what kinds of research and development activities it can conduct.

All of these limits are designed to prevent Iranian scientists from amassing enough highly enriched uranium for a nuclear weapon – roughly 10 to 30 kilograms (22 to 65 pounds), depending on the device's design and the bomb-makers' sophistication and experience – in under a year. That delay is seen as long enough to give the international community time to respond if Iran decided to go nuclear.

The agreement also restricts Iran's plutonium separation research, and requires it to accept International Atomic Energy Agency inspections to ensure that it is not using peaceful nuclear activities as a cover to produce weapons.

If Iran does not exit the agreement, restrictions on its enrichment activities are scheduled to start easing in 2026 and largely end in 2031, although international monitoring will continue after that.

<http://theconversation.com/nuclear-weapons-and-irans-uranium-enrichment-program-4-questions-answered-118981>

[Return to top](#)

Defense News (Washington, D.C.)

## **Here's How Many Nuclear Warheads Exist, and Which Countries Own Them**

By Kelsey Reichmann

June 17, 2019

WASHINGTON — The number of warheads has decreased over the past year, even as countries continue to modernize their nuclear forces, according to an annual assessment of global nuclear arms.

The Stockholm International Peace Research Institute released the SIPRI Yearbook 2019 on the current state of armaments, disarmament and international security.

The report found that 13,865 warheads in existence at the start of 2019 were owned by nine nations: the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and North Korea.

The year before hosted an arsenal of 14,465 warheads.

“A key finding is that despite an overall decrease in the number of nuclear warheads in 2018, all nuclear weapon-possessing states continue to modernize their nuclear arsenals,” Jan Eliasson, SIPRI Governing Board chair ambassador and former deputy secretary-general of the United Nations, said in a news release.

The U.S. and Russia were the only nations that decreased their warhead inventory, by 265 and 350 respectively, according to the report.

The U.K., China, Pakistan, North Korea and possibly Israel all increased their number of warheads, SIPRI found. India and France saw no changes to the size of their arsenals.

One big cause of the decrease in arsenal size, according to SIPRI, is the implementation of the New START Treaty between the U.S. and Russia, meant to reduce and set limits on ballistic missiles. The two nations produce more than 90 percent of the world's nuclear arms.

The U.S. and Russia announced in 2018 that they had met the limits of the New START Treaty. But if an extension is not implemented, the treaty will expire in 2021.

What's the United States up to?

The U.S. is in the process of modernizing its nuclear arsenal per the Trump administration 2018 Nuclear Posture Review, which put forth measures to continue a modernization program started by the Obama administration. However, the NPR moves away from reducing nuclear weapons and instead sets a plan to develop new versions while and modifying others.

The U.S. hopes to achieve its goals by expanding nuclear options to include low-yield nuclear weapons, which will expand capabilities associated with submarine-launched ballistic missiles. This would add to a U.S. arsenal that already contains 1,000 gravity bombs and air-launched cruise missiles with low-yield warhead options, according to the SIPRI report.

The NPR claims these new capabilities are necessary without evidence that the existing arsenal is insufficient.

The SIPRI report notes that America's focus on its nonstrategic nuclear arsenal could push other nations in that same direction.

Where does Russia stand?

"Russia's decisions about the size and composition of its non-strategic nuclear arsenal appear to be driven by the USA's superiority in conventional forces and not by the US non-strategic nuclear arsenal or by weapons yield," according to the SIPRI report.

"Instead, pursuit of a new [submarine-launched cruise missile] to 'provide a needed non-strategic regional presence' in Europe and Asia could — especially when combined with the parallel expansion of US long-range conventional strike capabilities — strengthen Russia's reliance on non-strategic nuclear weapons and potentially could even trigger Chinese interest in developing such a capability," the report adds.

SIPRI data shows Russia has about 4,330 nuclear warheads; approximately 1,830 of them are categorized as nonstrategic.

In 2018, Russia continued long-range operations over the Arctic, Atlantic and Pacific oceans. And in December, it also sent to Venezuela two Tu-160 planes, which are part of its long-range aviation command fleet.

Russia also fired air-launched cruise missiles from a Tu-160 bomber over northern Russia in November, which caught attention because the number of cruise missiles launched.

Meanwhile, in China, India and Pakistan ...

China has an estimated 290 nuclear warheads. Though China is working to expand its nuclear forces, the report notes, it has said it's committed to a no-first-use policy. However, the report added that China has taken steps to improve its retaliation response.

Rivals India and Pakistan each provide little information about the size of their nuclear arsenals. However, they have made separate statements about missile tests. India has an estimated 130-140 warheads, and Pakistan has an estimated 150-160 warheads.

Both nations are estimated to have increased their arsenal by 10 to 20 warheads in the last year.

North Korea has provided little transparency about its nuclear weapons capabilities, besides announcing missile tests afterward. It's estimated the country has 20-30 warheads, which would be an increase of 10-20 warheads from a 2018 estimate.

The SIPRI report cites a lack of transparency from most nations in regard to nuclear stockpiles.

The U.S., the U.K. and France have disclosed some information about their respective arsenals. Information from other nations is mainly based on missile tests and the supply of military fissile materials.

<https://www.defensenews.com/global/2019/06/16/heres-how-many-nuclear-warheads-exist-and-which-countries-own-them/>

[Return to top](#)



# US COUNTER-WMD

Homeland Preparedness News (Washington, D.C.)

## **World Unprepared for Biological Catastrophe, Report Says**

By Melina Druga

June 17, 2019

International leaders and organizations are unprepared for a global catastrophic biological event, according to a report from Georgetown University's Center for Global Health Science and Security, the Center for Global Development, and the Nuclear Threat Initiative.

Leaders and organizations lack a coordinated response that would be necessary to investigate and identify a pathogen, prevent the spread of disease, and save lives.

"Without the right procedures and tools in place, there is little doubt that a rapidly spreading biological event would place overwhelming stress on the people and institutions responsible for response," the report said. "The lack of established procedures would very likely undermine the trust and cooperation needed among health professionals, humanitarian responders, and security officials who would be aiming for a coordinated, effective response."

Leaders must develop better systems, mechanisms, and procedures, the report said.

The report, *A Spreading Plague: Lessons and Recommendation for Responding to a Deliberate Biological Event*, examines a fictional nation called "Vestia" that is embroiled in civil unrest. Vestia faces a fast-moving outbreak of what is believed to be plague. Political, public health, security, and humanitarian leaders all lack a coordinated and rapid response, the report said.

The report also offers ways to enhance investigation and attribution, information sharing, and international coordination, and to increase financing.

<https://homelandprepnews.com/stories/34380-world-unprepared-for-biological-catastrophe-report-says/>

[Return to top](#)

# US ARMS CONTROL

Atlantic Council (Washington, D.C.)

## **Building on Past Experience, Iran Leads the Waltz with the US**

By Banafsheh Keynoush

June 18, 2019

During 2013, Iran seized on a rare opportunity to talk directly with the United States for a new round of nuclear negotiations. European countries speaking at the time to Iran to cap its nuclear program asked the US, which had been part of the nuclear talks since 2006, to join in fresh discussions with Iran. The P5+1 talks that followed between Iran and the US—along with Britain, China, France, Germany, and Russia—came with a promise that the countries would not tighten the multilateral sanctions regime against Tehran if an agreement was reached. The arrangement led to the 2015 Iran nuclear deal also known as the Joint Comprehensive Plan of Action (JCPOA).

Iran was enticing the US to talk once again this past month, by withdrawing some of its obligations under the nuclear deal in May. The two countries had a falling out after US President Donald Trump pulled out of the JCPOA, and re-imposed punitive sanctions on Tehran. To trigger Washington into some action to end this impasse, on May 22, Iranian President Hassan Rouhani reached out to the US by suggesting that engaging in a new round of talks was possible—if they returned to the table.

Reaching out to Washington was facilitated when tensions between Iran and some US allies in the Persian Gulf mounted in May, following attacks on four oil tankers in the Persian Gulf and a Saudi oil pipeline by Iran-backed Houthi rebels. After the attacks, Tehran accelerated plans suggesting it was open to fresh talks with the US even on its foreign policy, by proposing a non-aggression pact with US Arab allies.

Tehran's proposal for a regional pact comes at an opportune time. Experience tells Iran that if it wants to negotiate with the US, it has to run the show with its Gulf Arab neighbors. This is not always easy to achieve, given the June 14 attack on two oil tankers in the Persian Gulf which Iran calls "suspicious" but is blamed for by the US and Saudi Arabia. By aiming to de-escalate regional tensions after the Gulf attacks, Iran is hoping to build a buffer between itself and its Arab neighbors to keep them hopeful with a promise of a pact, to then reach out directly to the United States. The tactic has partially worked for now because Iran's Arab neighbors have conveyed to German leaders touring the region that they do not seek to escalate tensions with Iran.

Even during the P5+1 talks, Iran recognized that talking with the US could throw water over agitations by Arab neighbors concerned with Tehran's nuclear program. The Obama administration danced the dance with Iran, keeping countries like Saudi Arabia that had far deeper misgivings about Iran's nuclear ambitions at arm's length throughout the nuclear negotiations.

Back then, Iran also opted out the idea of discussing anything except its nuclear program with the United States, which shelved other differences including Iran's growing regional influence and ballistic missile program. Some in Iran preferred a so-called "grand bargain" with the US that would have involved additional discussions on all issues that divided the two countries. But in conversations this author has had with an advisor to President Rouhani a year before the nuclear deal was concluded, it appeared that a "grand bargain" with the US, though desirable, would face multiple regional hurdles along the way if Iran's Arab neighbors were to offer an endless list of grievances. Iran's highest authorities decided to discuss with the US only what seemed to be the most negotiable item at the time: its nuclear program.

Since then, many have believed that a successful nuclear agreement would lead to Iran's change of behavior in the region. But Tehran has never altered its foreign policy goals, unless it receives incentives to moderate some in a manner that ensures Iranian power and regional influence.

Iran is now trying to stay a step ahead once more, by using the opportunity of talks with the US as an option to de-escalate regional tensions. President Trump might believe that he is the one leading the dance here, by presenting a war-like escalation option on the table, only to then reach out to Tehran and offer phone numbers while insisting that Washington does not seek regime change. But in reality, it appears that Tehran is dancing a Waltz with President Trump, slowly and methodically mastering each step to survive.

In May, Iranian Foreign Minister Mohammad Javad Zarif took the first step, by touring Iraq, Pakistan and India. This was in tandem with Iranian diplomat and nuclear negotiator Abbas Araghchi travels to Oman, Qatar and Kuwait. On these trips, Iran encouraged its neighbors to insist on a regional de-escalation. Iran's neighbors may not be capable of leveraging the US to reduce pressures on Tehran, but Iraq has expressed willingness to mediate the tensions.

Iran knows that it cannot fully rely on its neighbors to deter the US from taking military action against it. So it will keep engaging those neighbors for as long as it can—along with other concerned countries such as Germany and Japan whose leaders are offering to mediate tensions—without being fully clear about whether it will or will not take President Trump's offer to re-negotiate the nuclear deal.

On May 29, though Rouhani suggested that future talks with the US were possible, Iran's Supreme Leader Ali Khamenei dismissed the idea. The Supreme Leader repeated this during Japanese Prime Minister Shinzo Abe's visit to Tehran on June 13. However, in May, Zarif and the Iranian ambassador to the United Nations indicated Tehran's willingness to talk to the US but not under pressure. Still, it appeared that Iran might take Japan's advice to consider negotiating with the US without preconditions, even though for now it appears that the Japanese mediation faltered. Tehran has never liked the idea of laying out preconditions for talks in any case, which may have also triggered Secretary of State Mike Pompeo's recent statement of dropping preconditions to engage in negotiations with Iran.

Iran is also leading the second step of the dance. Rouhani has called for a national referendum to decide the fate of the JCPOA. The referendum can help Iran keep the US at arm's length until Tehran calculates what its next moves are. The call for a referendum can rally the public behind President Rouhani if his goal is to jumpstart talks with the United States.

If these talks were to happen, Iran has learned several key lessons from North Korea's recent talks with the US to lead the third step of the dance. Tehran has even sought Pyongyang's advice along the way.

North Korean diplomats, according to an Iranian official this author recently spoke to, made a point of traveling to Iran to convey that the US could not be trusted when it comes to talks. Tehran clearly recognizes that solely speaking to the US is not a stable parameter to ensure success. But Tehran can buy time with Trump for as long as the US president remains unclear about his Iran policy.

For now, it seems Iran is buying time while pursuing a more aggressive nuclear policy. Though it might seem that the June 14 attacks on two tankers in the Gulf of Oman build uncertainty about the future of talks, it also gives Tehran some more time. These tactics might allow Tehran to ultimately achieve some "soft compromises" in talks with the Trump administration, including the de-escalation of regional tensions and the easing of some restrictions to allow modest trade between Iran and the rest of the world. But the dance between Iran and the US will likely go on, whether tensions further escalate or not, as the stakes are too high to get it wrong.

Banafsheh Keynoush is a foreign affairs scholar. She is also the author of Saudi Arabia and Iran: Friends or Foes?.

<https://www.atlanticcouncil.org/blogs/iransource/building-on-past-experience-iran-leads-the-waltz-with-the-us>

[Return to top](#)

The Hill (Washington, D.C.)

## **Russian Lawmakers Back Putin on Withdrawal from Nuclear Arms Treaty**

By Chris Mills Rodrigo

June 18, 2019

Russian lawmakers on Tuesday voted to back President Vladimir Putin's exit from the Intermediate-Range Nuclear Forces (INF) treaty, The Associated Press reported.

Putin signed an executive order exiting the nuclear arms deal in March, and Tuesday's overwhelming vote in the State Duma confirmed that decree.

Russia's exit from the 1987 arms treaty follows the U.S.'s notice on Feb. 1 that it would stop complying with the treaty in six months.

The Trump administration has accused Russia of violating the treaty, which bans the creation and maintenance of nuclear and conventional ground-launch ballistic and cruise missiles with ranges between 300 and 3,400 miles, since 2014.

Russia has denied breaking the treaty and has accused the U.S. of doing so.

The European Union has also accused Russia of violating the treaty.

Putin has warned that if the U.S. places ground-based intermediate-range missiles in Europe, then Russia will retaliate.

<https://thehill.com/policy/defense/449035-russian-lawmakers-back-putin-on-withdrawal-from-nuclear-arms-treaty>

[Return to top](#)

VOA News (Washington, D.C.)

## **Leaked N. Korean Document Shows Internal Policy against Denuclearization**

By Baik Sung-won

June 17, 2019

WASHINGTON - Christy Lee contributed to this report which originated on VOA's Korean Service.

An official North Korean document obtained by the Voice of America suggests Kim Jong Un does not intend to give up his regime's nuclear weapons, a position that appears to contradict the Trump administration's certainty that North Korea will denuclearize.

The document is a teaching guide for instructing top military officials on Pyongyang's official internal position prior to a second summit with U.S. President Donald Trump. The document makes clear that Kim saw the meeting in Hanoi to strike "a final deal" as a means to acceptance as a "global nuclear strategic state."

Kim is quoted as saying he would use the meeting “to further consolidate nuclear power that we have created.”

The Hanoi summit failed to reach a deal due to a clash of views on denuclearization and sanctions relief.

In response to the document VOA obtained on Sunday, a State Department spokesperson told VOA Korean Service on Monday that “President Trump remains committed to the goals the two leaders set out at the Singapore summit of transformed U.S.-North Korea relations, building lasting peace, and complete denuclearization.”

The spokesperson continued, “As President Trump has said, he believes Chairman Kim will fulfill his commitment to denuclearize.”

Morgan Ortagus, the State Department spokesperson, reiterated that position later in the day when asked about the document at a press briefing. “We certainly don’t comment and speculate on every report,” she said. “But since you asked me, President Trump and the Secretary believe that Chairman Kim will fulfill his commitment to denuclearize, and that remains our policy.”

Secretary of State Mike Pompeo has repeatedly said he is “confident” that the U.S. will make a progress toward denuclearizing North Korea.

Pompeo also said that Kim told him “face-to-face, personally” that he would denuclearize North Korea.

And, in an interview that aired on Sunday, when ABC’s George Stephanopoulos asked Trump if he thinks Kim is still building nuclear weapons, the president said, “I don’t know.” Trump continued, “I hope not. He promised me he wouldn’t be.”

The confidential document indicates that Kim has made two different nuclear policy statements. One, not included in the document, was targeted to foreign audiences, such as that delivered in his 2019 New Year message that conveyed Kim’s unwavering commitment for the complete denuclearization of the Korean Peninsula.

The military elite, according to the document, were told in December that Kim intended his second meeting with Trump “to achieve the final outcome of raising the [North Korea’s] status as a world-class nuclear force nation.”

Kim continued, “The Korea People’s Army must firmly hold the nuclear weapons [as] our all-around security sword to protect the revolutionary leadership like an impregnable fortress.”

Kim further said the U.S. is “so terrified by our nuclear power” it proposed meeting with North Korea to negotiate and “to get rid of our nuclear weapons by [any] means.”

Published by the Korea Workers’ Party Publishing Company in November 2018, the document was prepared as a material for December training lectures for North Korea’s top military officials.

The South Korea’s Unification Ministry, which oversees relations with North Korea, said it is aware of the report VOA obtained and that its authenticity needs to be verified.

Cheong Seong-chang, a North Korea expert at the Sejong Institute in Seoul, said the document was missing key elements and the format of the date is also not standard, according to the Korean news agency Newsis, reported UPI.

The documents acquired by VOA match other recent documents leaked to the Korean Service from a trusted source.

In an interview with VOA Korean Service on Sunday, Ri Jong Ho, a former North Korean senior official who defected to South Korea in 2014 and moved to the U.S. in 2016, said he attended training lectures similar to the ones mentioned in the document.

Ri said, “The document directly reflects Kim’s thoughts and the ideology of the Korea Workers’ Party because it is published by the Party.”

Ri also said he has learned through his sources in North Korea that the government is reinforcing the country as a nuclear state and establishing North Korea as a nuclear state is the policy of the party.

The document describes Kim’s aspiration to rule the world with nuclear weapons.

“The dear supreme commander will dominate the world with the nuclear weapons, will make the U.S. apologize and compensate for us for decades of bullying our people, and will declare to the entire world that the world’s powerful order will be reshaped by the Juche-Korea, not the United States,” according to the document. Juche is the North Korean ideology of total self-reliance.

Ri, who now lives in Virginia, worked for North Korea’s Office 39, the Workers’ Party operation known for raising money for Kim through illicit activities.

Ri defected to South Korea in 2014 out of fear that his family might be targeted after Kim executed his uncle Jang Song Thaek for being “a traitor for all ages” and purged people who worked for Jang. Ri worried his family could be the next to face such threat and escaped to South Korea with his family before moving to the U.S.

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[Return to top](#)

## COMMENTARY

Real Clear Defense (Washington, D.C.)

### **Arms Control and Russia’s Global Strategy after the INF Treaty**

By Stephen Blank

June 19, 2019

The INF treaty regime collapsed due to Russian cheating. Although China’s massive buildup of intermediate-range ballistic and cruise missiles played no small role in galvanizing U.S. opinion and transforming international security, Russia’s deliberate deployment of up to 100 of the Novator or 9M729 missiles furnished a decisive trigger for Washington to exercise its right of withdrawal. Indeed, Moscow has deployed four battalions of this missile, thus threatening both European and Asian targets. Even worse, Latvian Foreign Minister Edgars Rinkevics recently commented that Latvia knew Russia was violating the treaty long before Washington decided to withdraw. Latvia and the U.S. also knew and discussed the fact that Moscow had already targeted the Baltic States with four different types of missiles banned under the INF treaty and deployed in Kaliningrad and European Russia. In other words, even if one believes, as some evidence has it that Russia produces nuclear weapons in droves simply because that is what its defense sector can reliably do, there was and is a strategy behind the deployment of these and presumably other nuclear weapons which remain the priority procurement for the Russian military.

So while commentators have expressed alarm that the demise of this treaty regime could leave both Moscow and Washington bereft of an arms control “architecture” the fact is Moscow deliberately and with ulterior strategic objectives in mind violated this treaty and has possibly also violated the New START Treaty even though the State Department claims it is in compliance with it. In other words, the blame for destroying this architecture resides in Moscow<sup>2</sup>, not Washington. These facts raise the issue of what kind of architecture there can be if one side persistently violates all the treaties it has negotiated? Indeed, Russian Ambassador to Washington, Anatoly Antonov has now admitted that Russia’s new strategic weapons do not come under the NEW START Treaty’s rubric. That is, they circumvent the treaty and will not be discussed in any new treaty negotiation, thereby demonstrating the insufficiencies of the NEW START TREATY. Simultaneously Secretary of State Pompeo also revealed that these fears of no arms control architecture should be allayed as preliminary discussions have begun with Russia on a new arms control treaty when this treaty expires in 2021. In fact, President Trump has ordered his staff to press for new arms control agreements with Russia and China. Predictably Russia has responded by saying that such proposals are not serious while China has remained officially silent. Thus we are negotiating with a power whose reputation for compliance is dubious at best and who may have violated the original treaty and definitely circumvented that treaty whose subsequent renewal is the issue under discussion.

Worse yet it appears that Moscow is now carrying Beijing's water for it on arms control. China has consistently remained a "free rider" on arms control issues and is certainly not prepared to enter into serious nuclear negotiations that would force it to reveal its true capabilities, submit them to verification and also designate some for demolition under the treaty. Meanwhile, China is steadily building up its land, sea, and air-based nuclear capabilities to hit the U.S. and other targets while nobody knows precisely what China's capabilities are. Since Russia previously stated that in any arms control negotiation after the New START Treaty China must be at the table (clearly due to its concerns about Chinese nuclear capabilities and intentions), Moscow's silence about China and attempt to shield its current weapons from any negotiation with the U.S. suggests several negative trends in Russian policy. One is a growing military alliance (albeit an informal one) directed against the U.S. Second is the increasing appearance that Russia is seriously entertaining nuclear war-fighting scenarios of what it believes will be a limited nuclear war.

Thus the veteran British expert on the Russian military, Charles J. Dick, has observed that whereas during the Cold War the Soviet military was in practice constrained from attacking Europe due to its understanding of the catastrophic consequences of attacking Europe and NATO, today it is by no means clear that this constraint still exists. Indeed, he asks, "Why would Russia invest considerable resources in creating offensive and defensive capabilities for the conduct of nuclear war if it were not prepared, or even did not intend to do so? Is this part of a far-sighted comprehensive preparation for war, or is it part of an influence operation to deter and intimidate political enemies?" And we should understand that his question does not mean that these two options are mutually exclusive. Quite the opposite may, in fact, be the case, namely that Russia is both preparing for nuclear war and simultaneously conducting perception management or influence operations. Indeed, as Dick points out whatever Moscow's intent may be, its Army is now apparently capable of conducting large-scale operations against our allies and possesses a considerably reinforced nuclear deterrent to support those operations.

Equally if not more alarming is the fact that, in December 2017, Bill Gertz reported, “Russia is aggressively building up its nuclear forces and is expected to deploy a total force of 8,000 warheads by 2026 along with modernizing deep underground bunkers, according to Pentagon officials. The 8,000 warheads will include both large strategic warheads and thousands of new low-yield and very low-yield warheads to circumvent arms treaty limits and support Moscow’s new doctrine of using nuclear arms early in any conflict.” This is quite plausible. Existing Russian programs can

support the deployment of 8,000 or more nuclear weapons with an emphasis on either strategic or non-strategic (tactical) nuclear weapons or both.

Moreover, during 2018 and 2019, President Putin has regularly trumpeted the virtues and capabilities of new nuclear weapons that Russia is designing. In his statements, it is crystal clear that he is threatening both the U.S. and NATO. Indeed, Russian officials have long advocated nuclear weapons that can overcome or circumvent the U.S. missile defense system to which they have ascribed truly magical powers in spite of dozens of briefings specifying its real capabilities and analyses by reputable Russian experts. These new weapons include hypersonic, multi-warhead ICBM, laser, underwater autonomous, nuclear-powered cruise missiles, air defense systems with an anti-satellite potential (ASAT), land-based and ship-based cruise missiles, not to mention conventional weapons like the SU-57 Fighter, etc.

Furthermore, the ground forces now field 11 brigades, each carrying 12 Iskander-M missile launchers with a range of 400-500 KM and capable of delivering conventional, nuclear, or fuel-air warheads. These are also supplemented by comparable air and sea-based missiles, e.g. the Kalibr' cruise missile. Thus, all in all, Moscow is now building between 20-23 short, intermediate and long-range nuclear weapons comprising both countervalue and counterforce projects. And these are part of a long-term project, discerned long ago by U.S. intelligence agencies to build a fleet of nuclear weapons tailored to every conceivable kind of contingency and range. Indeed, Putin recently confirmed this by referring to the fact that the buildup of nuclear missiles began in 2004 if not earlier. So we are dealing with a long-term strategic policy here, not mindless missile building.

Recently General Paul Selva (USAF) Vice Chairman of the Joint Chiefs of Staff, observed that Russia is also developing new tactical nuclear weapons to tailor its forces to virtually any contingency. And that is only one of over 20 Russian programs currently underway to manufacture and deploy nuclear weapons, e.g. a heavy ICBM, new bombers, new SLBMS, and missile submarines. Moreover, given current procurement plans and counting rules under the New START Treaty, Russia could actually increase its nuclear weapons and still comply with that treaty. Finally, General John Hyten (USAF), Commander in chief of US STRATCOM, has testified that Russian weapons are being built to circumvent the NEW START TREATY, obviously a view at odds with that of the State Department, but probably more accurate given Antonov's admission which amounts to a confirmation. All these developments impel us to examine what Russian nuclear strategy really is, especially as it appears to be developing what arguably is an excessively unbalanced and nuclear-heavy military. For as Charles Dick has recently written,

Why would Russia invest considerable resources in creating offensive and defensive capabilities for the conduct of nuclear war if it was not prepared, or even did not intend, to do so? Is this part of a far-sighted, comprehensive preparation for war, or is it a part of an influence operation to deter and intimidate political enemies?

In posing this question, however, Dick omits the possibility that Russian strategy might comprise both the influence and deterrence operation on the one hand and the preparation for war or conflict on the other. Arguably this is the real answer, and this essay attempts to substantiate this proposition.

### Russia's Nuclear Strategy

If we try to think with Moscow, as proper analysis of Russian strategy requires, today's emphasis (not to mention during the Soviet period) makes considerable sense. If a regime, overwhelmingly cognizant of its own domestic illegitimacy and possessing an obsession with having an acknowledged great power status, believes that for years stronger alliances (i.e. NATO) and the strongest power in the world are bent on overthrowing it than a permanent posture of being in a



state of siege and relying on nuclear weapons to overcome conventional inferiorities makes sense. This is the well-known Russian *Weltanschauung* even though it exists largely in the fevered minds of Russia's leaders, not Western ones. And, of course, this also resembles in many ways Pakistan and North Korea's reasons for building nuclear weapons, as well as Israel's original situation when its presumed program began in the 1950s.

But beyond these well-known facts, nuclear weapons serve multiple purposes for Moscow. Russian doctrine advertises the deterrent purpose of its nuclear weapons and if NATO attacked first, especially if targeted nuclear command and control, we could reasonably expect to see a retaliatory first strike. But deterrence only begins here. Russia's ability to intervene in neighboring states and its coercive diplomacy towards them and NATO "rests upon its nuclear arsenal, as well as on the newest conventional weapons, and is used for both defensive and offensive purposes." Thus deterrence does not stop at deterring a NATO attack but rather includes Russia's interventions in what has been called the gray zone, e.g. its original attack on Crimea and the Donbas, its intervention in Syria. Thus the tailored nuclear arsenal replete with capabilities that can be employed at all levels and ranges of conflict and the capacity to inflict what Moscow calls calibrated damage upon an enemy that will compel him to stop hostilities (*Zadannaya Ushcherb'*) is automatically invoked whenever Moscow intervenes abroad to deter any U.S. and/or NATO response.

Russian nuclear weapons, therefore, are part of what Putin has called an asymmetrical strategy. And defenders of Russian policy, for example, Andrei Tsygankov, explicitly invoke this kind of strategy. Thus he writes that "It seems that a major factor in understanding the present and future global transition processes will be a global rethinking of (asymmetric) resources available to international actors, ideas and perceptions of the leaders of major powers, and the nature of internal political processes." Though he omits nuclear weapons here, it is quite clear that they, like cyber capabilities, serve that purpose.

Nuclear weapons consequently serve a much broader strategic need than deterring real or potential conventional or nuclear strikes. As Dmitry Adamsky observes, "The nuclear component is an inseparable part of Russian operational art that cannot be analyzed as a stand-alone issue." This is because it abets Russian conventional threats and aggression through the deterrence of adversaries' counteraction to that aggression. Similarly, Major Amos C. Fox (USA) writes that the strategic defense provided by Russian nuclear weapons and its IADS facilitate the attainment of all of Russia's conventional warfare objectives: deterring NATO expansion into Russia's historic sphere of influence, retaining regional hegemony in Eurasia, and demonstrating improvements to Russian military capabilities. Beyond that,

The presence of nuclear weapons is perhaps the first critical component for modern hybrid warfare. Nuclear weapons provide insurance against a massive ground response to an incremental limited war. The offensive nation that possesses nuclear weapons knows that the adversary or its allies will not likely commit large ground forces to a conflict for fear of the aggressor employing those weapons against ground [or naval-SB] forces. This dynamic emboldens the aggressor nation. In the case of Russia, its possession of nuclear weapons emboldens leaders to take offensive action because they know that even the threat of nuclear employment forces potential adversaries to a standstill.

As Fox points out, this is how Moscow can use nuclear weapons to prevent NATO from responding to a limited but large-scale Russian attack and thus limit a massive ground response to an "incremental limited war."

Therefore we arrive at a conclusion that nuclear weapons are not used merely to intimidate, deter, or threaten enemies but are rather a primordial instrument of an effective strategy of escalation

control and conflict regulation. Moreover, this strategy is, as Dick notes, fundamentally offensive in nature.

Russia's adversarial posture vis-à-vis the West is the corollary of the country's sense of grievance over what it regards as its dismissive even humiliating treatment since the disintegration of the Soviet Union and its consequent revisionist predisposition. This necessarily carries with it a preparedness for armed conflict, or even a willingness to use its armed forces aggressively. The rearmament and reorganization currently underway is plainly not designed for a purely reactive, defensive posture. Nor would such a stance make military sense for a state that sees itself as being surrounded by enemies, shorn of its strategic depth, and suffering a legacy of painful historical experience, and with ambitions to revise at least element of the Post Cold War status quo. The Russian military is thus oriented towards offensive action, with an admixture of the defensive.

Moscow's behavior and apparent nuclear strategy validate these points because the document detailing that strategy and conditions for nuclear use is classified while open doctrinal statements are hardly revealing. To say that nuclear weapons might be used in a first strike if there is a vital threat to the state's survival is hardly revelatory for any nuclear power, especially one haunted by the real specter of state disintegration cannot afford to lose any war. But Russia's "nuclear behavior" is sufficient grounds for real anxiety. As Colin Gray observes, even though there is no sign of Russian discourse coming true concerning the use of a nuclear weapon to defeat NATO in limited nuclear scenarios, Moscow talks as if it can achieve this outcome.

In a manner that is ominously reminiscent of Adolf Hitler, Putin and others have chosen to introduce explicitly ruthless threats, including nuclear threats, into Russian reasoning about acute international crises. They hypothesize about the high political value that would accrue as a result of nuclear use on a limited scale. The hoop, apparently, is that the NATO enemy, indeed the less robust members, at least, would be out-gunned either by the actuality or more likely only by the credible threat of nuclear use (especially in a first-strike mode-SB).

Not surprisingly, and as we argue here, Gray's inescapable conclusion is that escalation dominance is Russia's strategic goal. While no such scenario has yet occurred, nor is it immediately likely; this does show just how nuclear scenarios are intertwined with conventional wars. Arguably a seamless web leads from conventional scenarios to and including these supposedly limited nuclear war scenarios perhaps using tactical nuclear weapons for which the West as yet has found no response. Or as Finnish LTC Pertti Forsstrom argues,

In this way, the content of the concept of traditional strategic deterrence is broadened to cover both Russian nuclear and conventional assets. On the other hand, the abolishment of the restrictions for the use of nuclear weapons means that the dividing line between waging war with conventional or with nuclear weapons is vanishing. When the principle of surprise is connected to this idea, it seems that Russia wants to indicate that non-strategic nuclear weapons could be regarded as "normal" assets on a conventional battlefield. This is the basis upon which Russia regulates the level of deterrence, for example in the Kaliningrad exclave. By introducing the concept of pre-emptive strike to its military means, Russia is trying to enhance its non-nuclear deterrence even further.

Thus we see a broader nuclear strategy that aims to use these weapons to control the entire process of escalation throughout the crisis from start to finish. If the crisis becomes kinetic, then escalating to de-escalate may well become an operative possibility within that framework. We should note here that this strategy clearly comprises both the real threat of nuclear operations and the constant reality of a threat to use those weapons as a means of deterrence and intimidation or in other words, a strategy of perception management. As suggested above, there is no need to choose between the influence operation elements of this strategy and its operational dimension.

At the same time, this kind of strategy explains the violations of the INF and the new developments in Russian nuclear weaponry. Although some claim that the decision to violate the INF is connected to NATO enlargement; the strategic rationale of girding for war with the West and attempting to develop the capabilities for dominating the former Soviet glacis and even projecting limited power abroad backed up by the threat of initiating nuclear operations are bound up in this approach.

Nuclear weapons are therefore critical instruments for prevailing in an environment of international rivalry and contestation that from Moscow's view is characterized by the struggle for relative, rather than absolute gains, a climate of small gray zone clashes that are controlled in Russia's favor or can be due to its nuclear arsenal and proclaimed readiness to use it first across a range of contingencies. As the Russian scholar, Stanislav Tkachenko observes,

Still, in deciding to get involved in a conflict and utilize coercive diplomacy, Russian civilian and military authorities do believe that the conflict itself could be located within existing norms of international law. Russia's economic and military resources would allow a standoff against any opponent along Russian borders for a limited period of time, while its nuclear weapons prevent the conversion of conflict into a full-fledged war.

In this context the possession of a wide range of usable nuclear weapons allows Moscow not only to dominate its former Soviet peripheries and threaten all of Europe and the United States, it also allows it to project power abroad in places as far away as Venezuela and Syria without too much fear of consequences and then steadily enhance its strategic and military position in these areas. While Moscow is doing so, its intermediate and longer-range conventional and nuclear missiles hold European, American (and if it ever came to this Chinese) military power at risk. We have already seen repeated examples of this strategy in Ukraine and Syria so that Moscow not only now has an integrated air and naval defense capability in and around the Black Sea that threatens littoral states like Ukraine, Georgia, Turkey, Bulgaria, and Romania; it has also long since begun building a chain of naval and air bases across the Middle East and Eastern Mediterranean. And beyond these clearly articulated intentions for a base structure resembling that of the USSR in the 1970s and 1980s, it is also clear that Moscow has more expansive if still unrealized ambitions for ultimately projecting power beyond its borders. Thus in 2014, exactly when Russian troops were entering Crimea, Defense Minister Sergei Shoigu publicly announced progress in talks with eight governments to establish a global network of airbases to extend the reach of Russia's long-range maritime and strategic aviation assets and thus increase Russia's global military presence. Shoigu stated, "We are working actively with the Seychelles, Singapore, Algeria, Cyprus, Nicaragua, Venezuela, and even in some other countries. We are in talks and close to a result." Shoigu cited Russia's need for refueling bases near the equator and that "It is imperative that our navy has the opportunities for replenishment."

Although sanctions and ensuing economic constraints have impeded the realization of this vision, it is hardly in abeyance. We now see signs of the projection of power into Africa through so-called private security firms' armies, but in Venezuela, we see regular troops who will probably expand previous efforts to gain air and/or naval bases in Venezuela if not elsewhere in Latin America. When Putin was preparing the recent expedition to Venezuela of 100 Russian air force troops and accompanying material, he also warned Washington about the INF treaty that he was ready for another Cuban missile crisis if Washington wanted one. Since then not only has he dispatched these forces but he also sent TU-160 (Blackjack) long-range strategic (i.e. nuclear) bombers there in late 2018 to suggest what might follow. And now apparently, the Kremlin is also setting up an Air Force Bomber Group in Venezuela. Lt. General Vasily Petrovich Tonkoshkurov leads this formation, and the term "military group" in Russian denotes an external group of forces or air group commanded by a comparably high-ranking General. We have seen such formations in East Germany, Vietnam, Angola, and more recently, Syria. This group not only will be the beachhead for an expandable

presence, it will also no doubt provoke the U.S. The forces and their logistical supply, including an Ilyushin Il-62M (Classic) and an Antonov-124 (Condor), are already in the theater and Blackjack Bombers are apparently being readied at Engels-2 base in southern Russia for a journey around the Norwegian North Cape mid-air refueling and down the Atlantic to Venezuela.

Undoubtedly as these forces are being reinforced so too will air and/or naval bases be developed for them. In late 2018 Venezuela announced that Russia is obtaining a long-term base on the island of La Orchila that had been offered to Moscow a decade earlier by Hugo Chavez. The base is some 160 miles from Caracas and the home of a Venezuelan airfield and navy base. Clearly, this is a portentous event and a harbinger of developments to come. Moscow has been interested in Latin American bases for at least a decade, indeed in February 2014 Shoigu explicitly mentioned Cuba, Venezuela and Nicaragua as places where Moscow wanted naval and potentially air bases. The Venezuelan crisis and collapse of the INF treaty regime thus appear to have come together in official policy to produce a result that threatens to create a base for Blackjack strategic bombers carrying ICBMs or Intermediate Range Ballistic Missile to target the U.S. In addition Russian commentators openly stated that this would be the beginning of Moscow's nuclear retaliation against the U.S. for its intention to leave the INF treaty. Accordingly, we can expect regular visits by nuclear-capable planes and ships to the neighboring naval base, if not permanent deployments, since a precedent has been set unlike 1962 and 1969.

This will also signify to many different audiences that Moscow is fully capable of playing in Washington's "backyard" as it alleges the U.S. is doing to it, e.g. in Ukraine.

There are even reports of Moscow, through low-level contacts, offering Washington a trade, namely, we will stay out of your backyard if you get out of Ukraine. And, along with the air base it has apparently gotten the right to make port calls here. In fact, earlier in 2018 Venezuela's Defense Minister, Vladimir Lopez told his Russian counterpart Sergei Shoigu, that Venezuela aspired to go beyond arms sales to operational level cooperation. This raises the question of what operations these governments are thinking about, where they might take place, and against whom might they be directed? This question becomes especially pertinent when we realize that Venezuela at least, is expecting more Russian troops.

It is not only the U.S. or Canada that should feel threatened by such deployments covered by a likely nuclear umbrella. Russian forces in Venezuela or client forces like the estimated 15,000 Cuban forces there represent a threat as well to other Latin American countries of either intervention or organized subversion backed up by a robust conventional and nuclear deterrent. Already in 2018 Colombia, Venezuela's neighbor and a staunch U.S. ally complained that "Venezuela's joint military exercises with Russia should put the entire South American continent on alert against an "unfriendly act."

Neither is such activity confined to Venezuela. We now know that Russian strategy in Africa is not merely driven by the opportunities to make money from mining and energy concessions or arms sales in Africa as some have opined. Instead, it is part of a conscious strategy, using all the instruments of Russian foreign policy, including military ones, to embed Russian political, strategic, and economic influence in Africa. And here too this "offensive" is bound up with the quest for military bases.

## Conclusion

Many veteran Russia and arms control commentators have now opined that President Trump is insincere in calling for China to join talks or that is a ruse to scupper arms control in advance of a new treaty to replace the NEW START Treaty that expires in 2021. Supposedly this is John Bolton's

dark initiative to abort any future negotiations and saddle others with the blame. Moreover, they allege that it is the U.S.' fault that we are approaching "the end of arms control as we know it."

Such arguments are groundless. It is long since necessary that China is included in any arms control negotiations. It is a major nuclear power, rightly insists on being treated as a great global power and is steadily building up its capabilities to threaten both Russia and the United States. For both Moscow and Washington it makes no strategic sense to allow China to continue to have a free hand to build up an unverified and unverifiable nuclear capability under such circumstances. And from the U.S. point of view, it is equally senseless to allow China to escape the consequences of its ever more overt hostility to U.S. interests, allies, and values. Allowing this state of affairs to continue without any attempt to reverse it represents an act of considerable strategic malfeasance.

At the same time, Russia's actions in Venezuela, Syria, and Ukraine correspond to Tkachenko's theory that Russia is employing "a new strategy for nuclear powers." This strategy employs nuclear weapons not only to threaten and deter but also to make the world safe for limited Russian wars by controlling escalatory dynamics and conflict regulation processes. The metaphor is 'careless pedestrian behavior,' i.e. entering a road and forcing drivers to stop their car lest superior force, including nuclear weapons, be brought to bear. In several cases, Russian leaders have utilized military means in a mass, holistically, and in a risky manner. Russian leaders today consider military standoffs with political opponents in neighboring states as comprehensive operations of its Army, operating under the authority of a single commander, while all needed resources are mobilized for the sake of immediate breakthrough.

This is an audacious strategy of limited war where nuclear weapons are always there to deter and allow Moscow to take risks to achieve any positive transformation in the status quo. And as we noted above limited nuclear war scenarios – which are intrinsically unpredictable scenarios for nobody knows what will follow the first use of a nuclear weapon -- contain within them an inherent potential for escalation beyond any means of control. Thus the discussion of such scenarios in official circles and the Russian policies of building an entire ensemble of weapons to match to any conceivable future contingency all bespeak an effort to control the escalation ladder throughout any crisis and attempt to dictate terms while threatening even worse escalation.

But as Alexander Gorchakov the example of 19th century Tsarist foreign policy that Russian leaders love to quote, memorably wrote, the danger lies in knowing where to stop. On the one hand, Russian diplomats say they want to continue the NEW START TREATY, but on the other hand, these same diplomats then argue that Russia's most threatening new weapons do not come under that Treaty. Therefore Russia can and must continue to deploy those particular weapons. In other words, Moscow wants to constrain Washington but not itself. Clearly, that is an unacceptable outcome.

As the necessity for Putin to continue conducting great power adventures grows with the erosion of public support and the utter repudiation of economic-political reform, the likelihood of his intervening somewhere to sustain the great power myth and obsession along with his power grows and with it the possibility for serious escalation and miscalculation. What Gorchakov's colleague P.A. Valuev wrote about the "lure of something erotic in the borderlands" still seems to drive Russian statesmen even beyond knowing where to stop. The effort to build a nuclear arsenal that is usable as far as possible across the entire spectrum of conflict is novel and innovative. But when we look at Ukraine and the other examples where Moscow seems all too willing to run the risk of nuclear escalation has it really been a successful strategy not only in our eyes but in Putin's and is it not subject the law of diminishing returns? Since those returns comprise the future of his system and his state, what then becomes of these diminishing returns to a strategy displaying a readiness

to wage even nuclear war when they diminish beyond the break-even point? When that happens what is left to Russia then?

Stephen Blank, Ph.D., is an internationally recognized expert on Russian foreign and defense policies and international relations across the former Soviet Union. He is also a leading expert on European and Asian security, including energy issues.. From 1989-2013 he was a Professor of Russian National Security Studies at the Strategic Studies Institute of the U.S. Army War College in Pennsylvania. Dr. Blank has been Professor of National Security Affairs at the Strategic Studies Institute since 1989. In 1998-2001 he was Douglas MacArthur Professor of Research at the War College.

Dr. Blank has consulted for the CIA, major think tanks and foundations, chaired major international conferences in the USA and abroad In Florence, Prague, and London, and has been a commentator on foreign affairs in the media in the United States and abroad. He has also advised major corporations on investing in Russia and is a consultant for the Gerson Lehrmann Group. He has published over 1300 articles and monographs on Soviet/Russian, U.S., Asian, and European military and foreign policies, including publishing or editing 15 books, testified frequently before Congress on Russia, China, and Central Asia for business, government, and professional think tanks here and abroad on these issues.

Prior to his appointment at the Army War College in 1989 Dr. Blank was Associate Professor for Soviet Studies at the Center for Aerospace Doctrine, Research, and Education of Air University at Maxwell AFB. He also held the position of 1980-86: Assistant Professor of Russian History, University of Texas, San Antonio, 1980-86, and Visiting Assistant Professor of Russian history, University of California, Riverside, 1979-80.

Dr. Blank's M.A. and Ph.D. are in Russian History from the University of Chicago. His B.A is in History from the University of Pennsylvania.

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[Return to top](#)

Defense One (Washington, D.C.)

## **House Democrats Want to Kill This More Useable Nuke. They're Right.**

By Caroline Dorminey and Kingston Reif

June 18, 2019

After the 2018 midterm elections, it seemed likely that the new Democratic-led House would provide more aggressive oversight of the Trump administration's unnecessary, unsustainable, and unsafe plans to augment the role of nuclear weapons and retreat from the longstanding U.S. leadership role on arms control and nonproliferation. So far, the House appropriations and armed services committees have done just that.

The early versions of the House's 2020 defense and energy and water appropriations bills and national defense authorization act send a resounding message of concern about the new nuclear capabilities proposed in the Trump administration's Nuclear Posture Review, or NPR, released in February 2018. Most notably, the legislation provides none of the requested \$29.6 million for and prohibits fielding of the W76-2, a new and more usable low-yield warhead for submarine-launched ballistic missiles, or SLBMs.

Last week, the House Armed Services Committee rejected on party line votes two amendments offered by Rep. Liz Cheney, R-Wyoming, to allow the Defense Department to start deploying the new warhead. As House appropriators prepares to continue their work on appropriations bills this week, the full House will debate and likely vote on another Rep. Cheney amendment to the defense appropriations bill to reverse the prudent funding cut to the W76-2 made by the Democratic majority. This would be unwise. The case for the W76-2 is deeply and dangerously flawed.

The new nuclear warhead is a less powerful variant of the existing W76-1 warhead that arms Trident D5 SLBMs carried on Ohio-class nuclear ballistic missile submarines. Production of the W76-2 began last year and the Navy plans to begin fielding the warhead as soon as this fall.

The 2018 NPR justifies the addition of the W76-2, and in the longer-term a new low-yield nuclear-armed sea-launched cruise missile, to attempt to correct Russia's purported "mistaken impression" that its larger arsenal of lower-yield nuclear weapons could "provide a coercive advantage in crises or at lower levels of conflict." The NPR claims that a low-yield SLBM would provide the United States with a proportional, prompt, and assured response option that it currently lacks.

But adding new low-yield warhead option to the U.S. arsenal is a solution in search of a problem. The United States already possesses hundreds of low-yield warheads as part of the air leg of the nuclear triad and plans to invest scores of billions of dollars in the coming decades to ensure these weapons can penetrate advanced air defenses. On what basis does it make sense to invest such a large amount to upgrade these existing weapons if they cannot perform their intended mission?

In addition, the belief that a nuclear conflict could be controlled is dangerous thinking. The fog of war is thick; the fog of nuclear war would be even thicker. The W76-2 in particular could increase the risk of unintended nuclear escalation. Given that U.S. strategic submarines currently carry SLBMs armed with higher-yield warheads, how would Russia be able to tell whether an incoming missile was carrying low- or high-yield warheads? Even if it could, how would it know that such limited use would not be the leading edge of a massive attack? In fact, Russia would not know.

A low-yield SLBM is not necessary to promptly strike time-perishable targets. If military action has already started in the European theater and Russia uses a low-yield nuclear weapon to seek to end a conflict it believes NATO would win conventionally, it is likely that the United States would have had sufficient time to forward deploy forces, including conventional and nuclear fighters and bombers, to provide a timely response. Regardless, it's far from clear why the United States would need or want to respond to Russian limited nuclear use in minutes, rather than hours or even days.

Finally, firing a single low-yield warhead from a strategic submarine could undermine the most survivable and important leg of the U.S. nuclear triad, which would be at a premium in the event of a potential nuclear conflict. As former Defense and Energy department official Madelyn Creedon has written: "Launching a high-value D5 missile from a ballistic missile submarine will most likely give away its location. China and Russia are expanding their ability to detect a missile launch and will be able to locate a U.S. submarine if it launches a D5 missile. Is having a low-yield warhead worth the risk of exposing the location of a ballistic missile submarine at sea?"

The answer to this question is clearly no.

For the past two years, the Republican majority in the House served as a rubber stamp for the Trump administration's redundant and reckless effort to expand U.S. nuclear capabilities. Those days, it appears, are over. And not a moment too soon.

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<https://www.defenseone.com/ideas/2019/06/house-democrats-want-kill-more-useable-nuke-theyre-right/157803/?oref=d-river>

[Return to top](#)

War on the Rocks (Washington, D.C.)

## **The New India Versus the Nuclear Revolution: The Future of Crises among Nuclear Powers**

By T. Negeen Pegahi

June 12, 2019

What is going on with relations among nuclear-armed states these days? Last February, the United States was threatening a “bloody nose” attack against North Korea. This February, India actually conducted airstrikes against Pakistan. Next February, well, that’s anyone’s guess but odds are it won’t be anything good. Does no one read *The Meaning of the Nuclear Revolution* anymore??

Robert Jervis’ seminal book and other classics of nuclear strategy argue that survivable nuclear weapons fundamentally change the nature of statecraft, with a number of implications for the behavior and outcomes we should expect between nuclear powers. Jervis writes:

If nuclear weapons have had the influence that the nuclear-revolution theory indicates they should have, then there will be peace between the superpowers [the pair of nuclear-armed adversaries on which he was focused], crises will be rare, neither side will be eager to press bargaining advantages to the limit, the status quo will be relatively easy to maintain, and political outcomes will not be closely related to either the nuclear or the conventional balance.

To drastically simplify an immense and rich body of work: Nuclear weapons mean everybody should just be cool already. So why are we seeing all these nuclear powers threatening and even using armed force against one another?

The standard counter-argument is that nuclear weapons can be good not just for deterrence but also for compellence — convincing others to change their behavior. The logic is pretty straightforward, if a bit farfetched. A nuclear-armed state facing a non-nuclear adversary can demand: “Do what I want or I could nuke you, and you can’t threaten the same back.” And that nuclear state can make demands of even a fellow nuclear power if the latter’s arsenal is perceived to be “inferior”: “Do what I want or I could nuke you, and you can’t threaten as much devastation in return.” In theory, this rival school of thought could explain recent instances of aggression between nuclear powers.

But, by this logic, the side making the demands and even committing the aggression should actually get something for its efforts — i.e., “win” — and that’s clearly not happening in South Asia. Pakistan hasn’t been able to convince India to cough up Kashmir, despite sponsoring militancy geared towards that end for decades, and India hasn’t been able to convince Pakistan to stop that sponsorship, despite a wide range of efforts that have recently expanded to include kinetic strikes. Thus, neither the proponents of the nuclear revolution nor their critics seem able to explain what’s going on in the region. What are we missing?

Both sides in the current debate are focused on nuclear weapons’ usefulness in achieving various foreign policy objectives. But risking nuclear war can be useful in terms of states’ domestic environments, too. And once domestic considerations are allowed to play a significant role in foreign policy decision-making, we’re in a very different ballgame. The range of issues about which states might be dissatisfied can expand, the depth of that dissatisfaction can deepen, and the value of escalation as a tool can correspondingly increase.



Each of these three developments was on display in the most recent Indo-Pakistani crisis. And while analysts have noted a number of individual factors — e.g., India’s increasingly jingoistic media, New Delhi’s break with longstanding policy, the “commitment trap” set for both sides — these discrete developments are part of a broader story, one that likely extends well beyond South Asia.

Without some change in the current trajectory, crises and even conflicts among nuclear powers will keep happening, with greater and greater levels of risk, but without actually achieving any of the participants’ objectives. While Jervis allows that extreme dissatisfaction with the status quo and increased salience of domestic politics can short-circuit some aspects of the nuclear revolution, digging into when and how that short-circuiting is likely to occur can help us predict and manage the consequences.

### The Risk of Deliberate Escalation is Real

One implication of the recent India-Pakistan confrontation is that certain pathways of escalation are becoming more likely. Scholars have typically worried most about “inadvertent escalation” in a crisis — when one party takes an action without realizing how seriously the other side will view it. That’s certainly how the last Indo-Pakistani conflict kicked off, in 1999, when the Pakistan Army sent paramilitary forces across the Line of Control to capture territory around the Indian town of Kargil. The Pakistani generals assumed — quite incorrectly, as it turned out — that Indian leaders would simply accept the land grab as a *fait accompli*.

But we now need to pay at least as much attention to the incentives for “deliberate escalation.” In this pathway, one side takes an escalatory action knowing full well how the other side will view it. That’s what happened in February, when India launched airstrikes against Pakistan after an Indian Kashmiri with ties to a Pakistan-based militant group drove an explosives-laden car into a convoy carrying Indian security forces, killing over 40. This was the first time in almost 50 years that India had used offensive airpower against Pakistan or had struck targets in Pakistan proper — i.e., beyond Pakistan’s portion of the disputed region of Kashmir.

Pakistan responded in kind, launching retaliatory airstrikes against India. This was Pakistan’s first time using airpower against its rival in almost 50 years, too, as well as its first time responding with force to Indian actions on its territory in the context of the Kashmir insurgency. Pakistan did limit its strikes to the Indian portion of Kashmir and to uninhabited areas, but both sides still deliberately crossed thresholds they hadn’t previously crossed.

In theory, deliberate escalation should be rare among nuclear powers. Joseph Nye has referenced the “crystal ball effect” that nuclear weapons supposedly produce. According to this line of thinking, the terrible consequences that would so obviously result from any nuclear use will (or should) chasten even the most revisionist states, causing them to behave with relative restraint in crises. But nuclear weapons don’t seem to be having this effect in South Asia, where revisionism is running rampant on all sides and fueling crises between India and Pakistan.

### Revisionism Isn’t Limited to Territory – or to Pakistan

As with escalation, there are multiple pathways to revisionism. “Revisionism” refers to states taking actions in hopes of changing a status quo that doesn’t satisfy them. So “revisionist” states challenge some aspect of the status quo while “status quo” powers are content with things the way they are. Although these terms are simply descriptive, “revisionism” and “revisionist” tend to carry negative connotations while “status quo” carries positive ones.

Pakistan has long been recognized as a revisionist state in the enduring Indo-Pakistani rivalry. Observers note that Pakistan initiated two of the three wars the countries have fought with one another, as well as the one “near war.” Each time, Pakistan’s goal was to take control of all or part of

the former princely state of Jammu and Kashmir that the departing British awarded to India in the run-up to the two South Asian states' independence, in 1947. Once an insurgency broke out in the Kashmir Valley in the late 1980s, Pakistan moved quickly to sideline the militant structure that had developed indigenously and replace it with groups and leaders more amenable to Pakistani interests and control. Attacks staged by these Pakistan-supported groups have in turn sparked a number of crises between the two countries.

This understanding of revisionism and the underlying status quo that states might seek to revise is all about territory. Pakistan wants to change who gets to own what pieces of land, so it is viewed as a revisionist state in the conflict. India, on the other hand, appears content to make a permanent border out of the Line of Control, so it tends to be viewed as a status quo power.

But revisionism isn't limited to territory alone. While Pakistan may be deeply dissatisfied with the territorial component of the status quo in the region, India is equally dissatisfied with the behavioral component of that status quo — one in which Pakistan continues to support militant groups that continue to conduct attacks against Indian targets. Indian leaders are at least as interested in compelling Pakistan to curtail its sponsorship of groups like Jaish-e-Mohammed and Lashkar-e-Taiba as they are interested in deterring the groups themselves from conducting further attacks. Until recently, Indian efforts in this respect have focused on non-kinetic approaches.

#### Domestic Variables Are the New Coin of the Indian Realm

That all changed once the Bharatiya Janata Party ("Indian People's Party," or BJP) came to power in India. The BJP was elected in 2014, following 10 years of governance by India's other major political party, the Indian National Congress. BJP leaders regularly criticize the Congress for not taking harsher action against terrorism and Pakistan, particularly after the devastating attack on Mumbai in 2008. The change in administration thus suggested India would respond more aggressively to any large-scale militant strikes linked to Pakistan.

And the BJP got its chance in 2016. In September of that year, militants attacked an Indian Army installation near the town of Uri, killing almost 20 in what was then the deadliest attack on Indian security forces in decades. Eleven days later, India claimed it had launched "surgical strikes" against "terror launching pads" across the Line of Control. Small teams of Indian special forces allegedly struck up to two kilometers into Pakistani territory, targeting a number of camps belonging to multiple militant groups. Pakistan, for its part, simply denied anything had happened.

The strikes were hugely popular in India. Parties from across the political spectrum lauded the armed forces' actions, and the body governing India's institutions of higher learning called on students across the country to celebrate September 29 as "Surgical Strike Day." India's motion picture producers association announced a ban that barred Pakistani stars from working in India's large film industry, and, more recently, a movie made dramatizing the strikes did extremely well at the box office.

Congress Party leaders had conducted similar operations in the past but kept them covert. Explaining the shift toward publicized strikes, former Indian National Security Advisor Shivshankar Menon suggested that domestic drivers trump strategic considerations for BJP leaders: "Covert operations were not announced to the country [during the Congress years] because the primary goal was to pacify the [Line of Control] and cut down infiltration and ceasefire violations, not to manage public opinion at home." The BJP's approach proved successful, as the country, including the media and Bollywood, rallied behind Modi, whose handling of the crisis may have won him some voters.

## What Does It All Mean?

Three interrelated shifts are unfolding in South Asia. First, the risk of deliberate escalation — not simply the risk of accidental, unauthorized, or inadvertent escalation, on which scholars have tended to focus — is very real. Twenty years ago, Pakistan stumbled into a near-war with India and the two sides became only the second pair of nuclear-armed adversaries to fight a large-scale conventional conflict with one another. Earlier this year, India and Pakistan engaged in a very different, very deliberate kinetic exchange with one another, becoming the first pair of nuclear-armed adversaries to trade airstrikes on one another's territory. Both sides will likely feel compelled to respond even more forcefully next time.

Second, a newly revisionist India represents a major change in and for the region. While Pakistani leaders have long pursued proxy warfare against India in hopes of changing the territorial status quo, India has only recently abandoned its longstanding policy of "strategic restraint" in dealing with Pakistan's provocations. Starting in 2016 and continuing in 2019, Indian leaders are openly using military force in hopes of changing the behavioral status quo in the subcontinent. So far, India's efforts to compel Pakistan to stop its support for militancy have been as unsuccessful as Pakistan's to compel India to give up its portion of Kashmir. As with Pakistan, though, India could simply use failure to justify even more aggressive measures in the future.

Finally, the role and nature of the domestic landscape in India have evolved as well. Domestic considerations appear to be playing a larger role in New Delhi's decision-making, and popular preferences appear to be increasingly bellicose. Anti-Pakistan sentiments have increased steadily among Indians during the BJP era and are highest among Indians who support Modi. The hawkish BJP leader's recent landslide reelection suggests India will continue to "select into" crises and that those crises will be increasingly severe.

Classics of strategy among nuclear powers have little to say about these trends. Nuclear-armed rivals aren't supposed to deliberately push each other, seek to overturn the status quo, or allow domestic concerns to play a large role in decision-making. Recent Indo-Pakistani crises have challenged all three of these aphorisms, however, and the resulting risks clearly aren't limited to South Asia. Such off-ramps from the nuclear revolution merit increased study if we'd like to see the current nuclear-strike-free era extend into its 75th year and beyond.

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<https://warontherocks.com/2019/06/the-new-india-versus-the-nuclear-revolution-the-future-of-crisis-among-nuclear-powers/>

[Return to top](#)

## ABOUT THE USAF CSDS

The USAF Counterproliferation Center (CPC) was established in 1998 at the direction of the Chief of Staff of the Air Force. Located at Maxwell AFB, this Center capitalizes on the resident expertise of Air University — while extending its reach far beyond — and influences a wide audience of leaders and policy makers. A memorandum of agreement between the Air Staff's Director for Nuclear and Counterproliferation (then AF/XON) and Air War College commandant established the initial personnel and responsibilities of the Center. This included integrating counterproliferation awareness into the curriculum and ongoing research at the Air University; establishing an information repository to promote research on counterproliferation and nonproliferation issues; and directing research on the various topics associated with counterproliferation and nonproliferation.

In 2008, the Secretary of Defense's Task Force on Nuclear Weapons Management recommended "Air Force personnel connected to the nuclear mission be required to take a professional military education (PME) course on national, defense, and Air Force concepts for deterrence and defense." This led to the addition of three teaching positions to the CPC in 2011 to enhance nuclear PME efforts. At the same time, the Air Force Nuclear Weapons Center, in coordination with the AF/A10 and Air Force Global Strike Command, established a series of courses at Kirtland AFB to provide professional continuing education (PCE) through the careers of those Air Force personnel working in or supporting the nuclear enterprise. This mission was transferred to the CPC in 2012, broadening its mandate to providing education and research on not just countering WMD but also nuclear operations issues. In April 2016, the nuclear PCE courses were transferred from the Air War College to the U.S. Air Force Institute for Technology.

In February 2014, the Center's name was changed to the Center for Unconventional Weapons Studies (CUWS) to reflect its broad coverage of unconventional weapons issues, both offensive and defensive, across the six joint operating concepts (deterrence operations, cooperative security, major combat operations, irregular warfare, stability operations, and homeland security). The term "unconventional weapons," currently defined as nuclear, biological, and chemical weapons, also includes the improvised use of chemical, biological, and radiological hazards. In May 2018, the name changed again to the Center for Strategic Deterrence Studies (CSDS) in recognition of senior Air Force interest in focusing on this vital national security topic.

The Center's military insignia displays the symbols of nuclear, biological, and chemical hazards. The arrows above the hazards represent the four aspects of counterproliferation — counterforce, active defense, passive defense, and consequence management. The Latin inscription "Armis Bella Venenis Geri" stands for "weapons of war involving poisons."

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