Featured Research

“Recalibrating NATO Nuclear Policy”. Published by NATO Defense College; June 2020

Introduction 01
Jessica Cox

1 NATO strategy to counter nuclear intimidation 05
Jacek Durkalec

2 NATO’s nuclear response to the INF Treaty violation 13
Katarzyna Kubiak

3 Aligning the nuclear and conventional elements of NATO’s deterrence 21
Harrison Menke

4 Asking the right questions: hypersonic missiles, strategic stability and the future of deterrence 29
Carrie A. Lee

Conclusion 41
Andrea Gilli and Matteo Taraborell
TABLE OF CONTENTS

NUCLEAR WEAPONS AND DETERRENCE

- **Defense Bill Would Boost Funding for NM’s Labs** (Albuquerque Journal)
  The second research campaign is developing enabling technical capabilities to help the U.S. maintain its strategic nuclear deterrent.
- **US ICBMs Are Superfluous and Increase the Risk of Mistaken Nuclear War, Report Finds** (Union of Concerned Scientists)
  William J. Perry, defense secretary from 1994 to 1997, agrees that the United States could eliminate the ICBM fleet and still have a robust nuclear arsenal.
- **Inside a Training Mission with a B-52 Bomber, the Aircraft That Will Not Die** (Popular Science)
  What makes the BUFF so enduring is the way it was first designed, says General Timothy Ray, the head of Air Force Global Strike Command.
- **US Navy Announces Intention to Ink $10B in Contracts for First 2 Columbia Subs** (Defense News)
  All in, the program will cost roughly $109 billion, according to a recent Congressional Research Service report, and the service faces an enormous challenge in balancing the rest of the fleet’s priorities with the Columbia bill.
- **Putin’s New Nuclear Doctrine** (Real Clear Defense)
  Putin’s decree contains four announced conditions for nuclear weapons use, all of which involve first use of a nuclear weapon.

US COUNTER-WMD

- **Japan to Abandon US Missile Defense System** (VOA)
  It had been discovered that, in the current design of the system, it could not be guaranteed rocket boosters from the missiles would not fall outside the base.
- **Missile Warning Satellite Completes Space Environment Testing** (C4ISRNET)
  The SBIRS constellation provides missile warning capabilities to the U.S. military, detecting missile launches all around the globe and feeding that data to the nation’s missile defense architecture.
- **Senate Bill Would Add $120M for Hypersonic Tracking Satellites** (C4ISRNET)
  Hypersonic weapons present a significant challenge to the United States’ current missile warning architecture.

US ARMS CONTROL

- **China Warns It Will Act if U.S. Deploys New Missiles to Asian Allies** (Newsweek)
  China has said it would respond if the United States deployed intermediate-range missiles to the Asia-Pacific region and warned U.S. allies not to accept such weapons.
- **Pompeo Threatens to Finish Off Iran Nuclear Deal over Arms Embargo Dispute** (Washington Examiner)
  “I would remind the world that the Obama administration’s officials said very clearly that the United States has the unilateral ability to snap back sanctions into place,” Pompeo told reporters Wednesday.
- **Blowing Up Diplomacy on the Korean Peninsula** (Strategist)
  The prospects for an easing of tensions on the Korean peninsula are now dramatically diminished.
COMMENTARY

• **Five Reasons an Arsenal Plane Isn't the Best Choice for Rebalancing America's Long-range Strike Forces** (Defense News)
  “Today's force does not have the right balance. The DoD’s long-range strike capabilities are all standoff systems except for the Air Force’s 20 stealth B-2s.”

• **Keep Modernization of the Ground Based Strategic Deterrent Program on Track** (Defense News)
  “Today, nuclear deterrence is more important than ever, which is why we must prioritize efforts to modernize the triad.”

• **The Pentagon Must Not Falter in Its Drive to Network Its Weapons and Sensors** (Defense One)
  “A war with China – the most likely and most significant great-power contingency that the U.S. and its allies will face – will involve tens of thousands of discrete moving units.”

• **Revelations about Russia’s Nuclear Deterrence Policy** (War on the Rocks)
  “Importantly, Russia experts should appreciate that Moscow is animated by a persistent fear that Washington seeks to neutralize Russia’s strategic deterrent.”
NUCLEAR WEAPONS AND DETERRENCE

Albuquerque Journal (Albuquerque, N.M.)

Defense Bill Would Boost Funding for NM’s Labs

By Scott Turner

June 20, 2020

New Mexico’s national laboratories would receive an increase in funding from the 2021 defense spending bill before the U.S. Senate, if approved by Congress and signed by President Donald Trump.

Los Alamos National Laboratory would receive $3.22 billion, up from $2.3 billion in fiscal year 2020, through the National Nuclear Security Administration’s nuclear weapons and security programs, while Sandia National Laboratories would receive $2.6 billion, an increase of $330 million over fiscal year 2020, U.S. Sen. Martin Heinrich announced last week.

The state’s military installations and other scientific research facilities will also receive funding through the 2021 National Defense Authorization Act, which advanced to the Senate floor in a 25-2 vote by the Senate Armed Forces Committee. Heinrich is a member of the committee.

“The people of New Mexico make tremendous contributions to our national security and work at the forefront of cutting-edge research and development,” Heinrich said in a news release. “This bipartisan bill supports our service members and their families, and includes provisions I fought for to strengthen New Mexico’s military installations, national laboratories, WIPP, Spaceport America, and leadership in the future of technologies like Artificial Intelligence, directed energy, and space.”

The bill includes $220 million for soil and water remediation and removal of legacy radioactive waste at LANL, which is $100 million more than what was included in the president’s proposed budget, Heinrich said. Full funding was needed to ensure there were no delays in the cleanup effort, his office said.

The bill also includes $1.1 billion for LANL’s ongoing plutonium operations and pit production programs.

Heinrich supported second-year funding of $36 million for a new emergency operations center at Sandia. The construction project will provide a new 24,000- to 31,000-square-foot facility to improve the labs’ ability to respond to emergencies and provide emergency assistance so that appropriate response measures and notifications are taken to protect workers, the public, the environment and national security, his office said.

Another $390 million would be provided to operate the Waste Isolation Pilot Plant. The funding includes $22 million for infrastructure repair and replacement projects and line-item funding for two projects: $50 million for a new utility shaft and $10 million for a project to expand underground hoisting capability.

White Sands Missile Range would receive $15 million for infrastructure improvements to accommodate the increase in demand for directed energy testing workloads, and Heinrich said the bill includes language to encourage the Air Force to make improvements to the MQ-9 drone training facility at Holloman Air Force Base. Last year, $85 million for the construction of a new facility was diverted from Department of Defense funds to be used for construction of the wall on the border with Mexico.
The NDAA includes $3.5 million in funding for the Magdalena Ridge Observatory Interferometer telescope array. The array, which will eventually include 10 telescopes, will be one of the world’s largest once complete and will be able to track man-made satellites, missiles and rockets launched into orbit as well as provide a closer look to deep space objects.

Another $6 million would be provided for a small satellite manufacturing and innovation center in Albuquerque that would be accessible by government agencies and cleared industry partners, while $3 million would be provided for a small satellite mission operations facility, also in Albuquerque.

Scott Turner: sturner@abqjournal.com


Return to top

Union of Concerned Scientists (Cambridge, Mass.)

US ICBMs Are Superfluous and Increase the Risk of Mistaken Nuclear War, Report Finds

By UCS

June 22, 2020

CAMBRIDGE, Mass. (June 22, 2020)—Once considered a vital part of US nuclear deterrence, ground-based intercontinental ballistic missiles (ICBMs) have long been superfluous, according to a report released today by the Union of Concerned Scientists (UCS). The US Air Force keeps the missiles, located in silos in five Plains states, on high alert, increasing the risk that the United States could mistakenly start a nuclear war in response to a false warning of an attack.

“There is no technological rationale for maintaining ICBMs,” said physicist David Wright, report lead author and former co-director of the UCS Global Security Program. “Sixty years ago, ICBMs were more accurate and powerful than submarine-launched ballistic missiles (SLBMs) and communications links with subs were unreliable. Today, SLBMs are as accurate as ICBMs if not more, and the Navy has secure submarine communication links, making the ICBMs unnecessary.

“Perhaps even more important, submarines are virtually undetectable and therefore invulnerable at sea, while ICBMs are sitting ducks. Their vulnerability has prompted the Air Force to keep them on high alert, which is dangerous and could trigger a nuclear war.”

Last week, the Senate Armed Services Committee released a summary of its version of the annual National Defense Authorization Act that suggests it will support an administration request to triple funding for a new generation of ICBMs, from $500 million this year to $1.5 billion in fiscal year 2021, and prohibit taking the current ICBM fleet off high-alert status. Today, the House Armed Services Committee will begin its deliberations over the legislation.

“I want to thank UCS for this report, which I expect will become an invaluable resource as Congress considers the question of whether the United States should spend $100 billion to develop and deploy a suite of new nuclear-armed ICBMs,” said Rep. Ro Khanna (D-Calif.), a member of the House Armed Services Committee. “This is a misguided investment, and I plan to push alternative strategies in Congress to ensure American security without wasting our tax dollars.”

The Air Force maintains the missiles on high alert so it can launch them before they could be destroyed by an incoming Russian nuclear attack. Because it takes only 30 minutes for a long-range missile to travel from Russia to the United States, the president would have only a matter of minutes to decide whether to launch US ICBMs in response without any certainty that the attack warning was accurate.
“A mistaken nuclear launch is a very real possibility,” said physicist Lisbeth Gronlund, a report co-author and former co-director of the UCS Global Security Program. “In fact, there have been a number of close calls over the last 50 years where human or technological errors led both the United States and Russia to begin preparations to launch their nuclear weapons.”

William J. Perry, defense secretary from 1994 to 1997, agrees that the United States could eliminate the ICBM fleet and still have a robust nuclear arsenal.

“Retiring the ICBMs would save considerable costs, but it isn’t only budgets that would benefit,” he wrote in a New York Times column. “These missiles are some of the most dangerous weapons in the world. They could even trigger an accidental nuclear war.” Perry then described a false alarm that he experienced when a computer glitch falsely indicated that there were 200 Soviet nuclear missiles heading toward the United States.

So why does the United States still deploy 400 ICBMs?

The main reasons have nothing to do with national security, the UCS report found. The Air Force wants to retain them for bureaucratic and budgetary reasons. Federal lawmakers want to keep ICBM-related jobs in their states. And defense contractors want a piece of the Ground Based Strategic Deterrent (GBSD) Program to build a fleet of new ICBMs, at an estimated cost of $100 billion. The program is part of a 30-year plan to replace the entire arsenal of nuclear weapons and delivery systems at a cost of more than $1 trillion.

UCS recognizes that retiring the ICBM fleet does not currently have strong political support and is unlikely to happen soon. In the meantime, the report recommended a number of steps the Pentagon should take. They include:

- taking ICBMs off high alert, which can be done easily by turning on the safety switch in each silo;
- eliminating from military plans the option to fire ICBMs in response to an attack—rather than wait for confirmation—which would preclude re-alerting the missiles in a crisis; and
- developing a new warning-assessment and launch-decision process that is not constrained by the 30-minute flight time of a ballistic missile from Russia to the United States.

Finally, even if the Pentagon retains ICBMs for the foreseeable future, the report found that there is no technical reason to build the new GBSD missiles instead of extending the life of the current Minuteman III ICBMs. Maintaining and upgrading Minuteman III ICBMs would be far less expensive than building new missiles. Official studies have concluded that the Air Force can continue to extend the Minuteman missile’s operational life for decades to come. Using public data, the UCS report also found that past Air Force estimates of rocket lifetimes have been overly conservative and recommended that the Air Force invest in new surveillance methods to improve its ability to assess missile aging.

https://www.ucsusa.org/about/news/icbms-are-unnecessary-according-union-concerned-scientists

Return to top
Popular Science (New York, N.Y.)

Inside a Training Mission with a B-52 Bomber, the Aircraft That Will Not Die

By Rob Verger

June 24, 2020

Just before 9 a.m. on a blue-sky Louisiana morning, a giant gray B-52 bomber gradually lifts off the tarmac with some 190,000 pounds of fuel on board, a trail of dark exhaust behind it.

A few seconds later, there’s a small glitch: One of the aircraft’s landing gear legs—the rear one on the left—decides to stay down. The rest fold up, as they should. The pilots determine that the problem isn’t big enough to scrub the day’s flight, so the bomber pushes on with its training mission, two big wheels hanging down for five hours like an incomplete thought, limiting the plane’s speed and reducing its fuel efficiency. At some point, as planned, the crew refuels from behind an airborne tanker, taking on thousands of more pounds of gas.

That’s the B-52—a beefy old bomber that dates back to the post-World War II years. Though the US military has incorporated sleeker flying machines in recent decades, it’s not retiring what’s known as the “BUFF,” or Big Ugly Fat Fucker, anytime soon. The aircraft that lifted off that March morning from Barksdale Air Force Base in northwestern Louisiana was built by Boeing in Wichita, Kansas, and delivered to the Air Force in early March of 1962. The Cold War-era ship is far older than its two pilots that day: Carlos Espino (call sign “Loko”), 27, and Clint Scott (call sign “Silver”), 34.

Operating the B-52 is like “flying a museum,” Espino says from the left-hand seat in the cockpit just before the mission. “It’s a brick—I would say it’s like wrestling.” He’s a friendly, burly guy, and his squadron, the 20th, are known as the Buccaneers. The patch on his right shoulder shows a pirate throwing a bomb.

“It has a lot of redundant systems,” Espino adds. “So if one system fails, there’s plenty of other systems to back it up.” The most challenging maneuver, he says, is precisely lining the aircraft up with a tanker in the sky to accept more fuel. “At the end of air refueling, you’re literally sweating.”

The plane may be large—its 185-foot wingspan and 159-foot length make it bigger than a 737, and smaller than a 747—but the space for the crew is cozy. Behind and below the cockpit is a small submarine-like compartment, sometimes illuminated in red, where two others sit: radar navigator Rebecca “Ripper” Ronkainen, and aircraft navigator Jacob Tejada, both 28. If anything happens that requires an airborne evacuation from the jet, Ronkainen and Tejada’s ejection seats blast downwards rather than upwards, which is only safe if the plane is more than 250 feet off the deck. Also on board that day is an instructor and weapons systems officer, call sign “Pibber.”

Right behind where Tejada and Ripper work is a urinal. Ideally, no one poops on a B-52, even if the mission drags on for hours. Imodium can help.

Officially called the Stratofortress, or less officially, the Stratosaurus, the B-52 sports a wealth of engines hanging from its big wings. While most airliners rely on two or four engines, the BUFF has eight TF-33 turbofan thrusters. The Air Force is set to replace those engines with new ones, an improvement that could boost the jet’s efficiency by at least 20 percent.

Upgrades like that should help the B-52 fit in a little better with the Air Force’s more modern lineup. Many of the bombers have also been outfitted with a new digital system, though the craft’s cockpit is still very much awash in traditional analog dials. Plus, each BUFF goes through an exhaustive maintenance process every four years that involves some 40,000 hours of labor and around 3,000 swapped parts. The Air Force says it would like to keep the BUFF flying until 2050; it’s a plane they keep investing in because they have it, and because it can do, and has done, a lot.
B is for bomber

The Air Force's fleet of bombers is an alphabet soup of “Bs” and numbers. There’s the B-1 Lancer, which now only carries conventional bombs, due to a treaty called New START. There’s the B-2 Spirit, a stealthy wing that can deliver either conventional or nuclear weapons. There’s the B-52. And finally, there’s the B-21 Raider, the Air Force’s forthcoming stealth bomber, which is still in the works.

Currently, the military owns 20 B-2s, 62 B-1s (that number may decrease to 45 next year), and 76 B-52s. That makes the BUFF, with its long, swept-back wings and narrow body, the most abundant.

“The B-52 has been a workhorse of the Air Force for decades,” says Todd Harrison, who directs the Aerospace Security Project at the Center for Strategic and International Studies (CSIS). “It’s a remarkable aircraft, and I think it has really proven out the concept that your major platforms can stay relevant, long after their design life, by upgrading the components and the technologies that go on them.”

What makes the BUFF so enduring is the way it was first designed, says General Timothy Ray, the head of Air Force Global Strike Command. When they built the B-52 in the early 1960s, “you could do some precision engineering and precision manufacturing, but back then the efficiency wasn’t the driver,” he explains. “Today, you have the technical means to plan and manufacture to the finest of requirements.” In other words, they don’t build bombers like they used to.

Ray also notes that there’s more than one way to measure a plane’s age. “When you look at the life remaining in the air frame, the B-52 is the youngest,” he says.

Over the next decades, the Air Force might slim its bomber fleet down to just the futuristic B-21s and the old-school B-52s. Ray describes a fleet on the order of 75 BUFFs and 100 Raiders, or ideally even more: 220 bombers in total.

The costs involved with aircraft like these are astronomical. Giving each B-52 eight new engines and other upgrades requires a budget of about $130 million per plane, Ray says. The new B-21 Raider will be even pricier to buy, which is why the fleet of tomorrow would be a mix of vintage and new. What’s more, the B-52 is a metal bird that’s already in the hand, which is another reason to keep it running. “This is real,” Ray says, “whereas the B-21 is in parts getting put together right now.”

On a per-plane basis, the B-52 is less expensive for the Air Force to own and fly than the other bombers. The BUFF fleet costs the Air Force $1.4 billion per year, according to Harrison, which translates to around $18 million for a single aircraft annually. The B-1, meanwhile, clocks in at $23 million per plane each year, and the B-2 a whopping $43 million. Part of the reason for the difference is that because the Air Force has so many B-52s compared to the others, the operational costs per aircraft are much lower. But no matter how you slice it, bombers don’t come cheap.

The US has three different ways of deploying nuclear weapons: intercontinental ballistic missiles (ICBMs), nuclear missile-outfitted submarines, and those B-52 and B-2 bombers. The Air Force calls this apocalyptic arsenal the “nuclear triad.”

During a nuclear attack, Harrison says that America’s ICBMs would need to be taken out first: They’re a “missile sink.” Submarines, designed to survive, then would respond to that initial attack from their underwater hideouts. Non-stealth bombers are different, however, because they’re the most visible and dynamic. “They’re the one leg of the triad that is both unpredictable and can be used for signaling [to an adversary] in a crisis,” Harrison says.
Meanwhile, ICBMs, Ray says, are difficult to “message” with because the missile silos themselves are static. “Bombers, though, are flexible. And you can recall a bomber,” he says. “When I launch an ICBM—that’s it. Thirty minutes later, things are going down.”

Having BUFFs and other aircraft on hand also allows the military to conduct what it calls bomber task forces. Ray notes that they’ve sent bombers into the Black Sea, “which drives the Russians crazy, and it makes our day.” The same goes for flights into the Baltic Sea.

Russia performs similar operations with their fleet. Just this month, NORAD reported that that country flew bombers within 37 miles of Alaska.

As useful as the BUFF has been, though, CSIS’s Harrison wonders about the aircraft’s ongoing effectiveness against any country with modern safeguards. “If we have a conventional fight against Russia or China, the B-52 is a sitting duck to air defense systems and to Chinese and Russian fighter jets,” he says. In that case, the plane would have to operate at a safe distance from those countries, where its only effective weapons would be pricey cruise missiles. In a scenario like that, a stealthy B-2 or the forthcoming B-21 bomber might be more useful.

“At some point, you have to let important aircraft go,” Harrison says. “Is it really worth it to keep these planes in the air, or for the same amount of money, could we buy something else that’s more useful to us?” On that note, Harrison brings up a Navy aircraft called the P-8 Poseidon, which is like a 737 but can carry weapons such as cruise missiles. When asked if the military was thinking about a B-52 alternative like the Poseidon, an Air Force spokesperson said by email: “The Pentagon is carefully considering options and planning experiments toward the prospect of fielding such a plane.” A related idea is something called an arsenal aircraft, which could deploy what’s known as “standoff” weapons from afar.

Ultimately, the BUFF has its quirks—one of which was on full display during that March training mission out of Louisiana. The issue with the stubborn stay-down wheels stemmed from a fascinating design feature on the aircraft that allows the plane to pivot its main landing gear, so that if it’s landing in a cross wind, the nose of the beast can face into the wind while its wheels line up with the runway. Those landing gear legs can’t fold up into the belly, though, unless the switches say they’re centered. And sometimes the switches that control the wheels just “get out of rig,” an Air Force spokesperson wrote via email.

In fact, after that five-hour flight, another team quickly hopped into the same B-52 and took off again with the landing gear issue still unresolved, its crew said. That’s the BUFF. It’s not perfect, but it’s pretty good, and it gets a lot done. That should be enough to keep it cruising onward, punching through the sky for maybe the next three decades, perhaps with the occasional part out of place.


Return to top
**US Navy Announces Intent to Ink $10B in Contracts for First 2 Columbia Subs**

By David B. Larter

June 22, 2020

WASHINGTON — The U.S. Navy is poised to ink almost $10.4 billion in contracts with General Dynamics Electric Boat to procure the first two Columbia-class ballistic missile submarines, which carry more than a dozen nuclear missiles on constant deterrent patrols.

The announcement, released by the Defense Department Monday afternoon, detailed an award of $869 million to Electric Boat to complete design work on the subs as part of a contract modification. The announcement also establishes the Navy’s intent to award an additional $9.5 billion for the first two hulls, which will happen once Congress officially approves the two-ship buy and appropriates the money.

“The intent would be to award that option as soon as possible after the FY21 appropriation to ensure we keep this No. 1 priority on track,” said James Geurts, the Navy’s assistant secretary for research, development and acquisition. “That will allow us to begin full-rate construction of the first ship, begin advanced construction on the second ship, with the intent of beginning construction of the second ship in 2024.”

In a statement Rep. Joe Courtney, D-Conn., who represents the Electric Boat’s district, praised the announcement, saying it was years in the making.

“This award is the culmination of nearly a decade’s worth of preparation for this milestone moment for our region and our nation,” Courtney said. “The replacement of our sea-based strategic deterrent comes only once every other generation, and this work is already fueling unprecedented growth in the workforce in Groton and transformation of the shipyard.”

The Columbia-class subs are the Navy's top acquisition priority, and a monstrously expensive one at that. All in, the program will cost roughly $109 billion, according to a recent Congressional Research Service report, and the service faces an enormous challenge in balancing the rest of the fleet’s priorities with the Columbia bill.


Real Clear Defense (Washington, D.C.)

**Putin’s New Nuclear Doctrine**

By Mark B. Schneider

June 23, 2020

In June 2020, Russian President Vladimir Putin issued an edict on “On the foundations of state policy in the field of nuclear deterrence.”[1] This is a first because the previous versions of this document were classified[2] and previous unclassified Russian written doctrinal pronouncements on nuclear weapons use at the Presidential level were part of longer documents on military doctrine. Notwithstanding the significance of Putin’s new edict, there are major inconsistencies in the new document. Moreover, Putin is making unprecedented (for a doctrinal document) nuclear first use threats while simultaneously denying Russia’s policy provides for such a course of action.
Putin’s decree represents a major, but incomplete, victory for the hardline faction in the Russian military who support the first use of nuclear weapons and want to talk about it in public. Major General (ret) Vladimir Dvorkin commented that the purpose of the edict was to “...force him [President Trump] to agree to the extension of the 2012 New START treaty.”[3] While there is no logical reason nuclear threats should “force” a U.S. President to extend a seriously flawed arms control treaty, the Russian default mode is if Russia does not like what is going on in the world, it resorts to making nuclear threats. Still, while it is unusual for Russia to combine doctrinal statements and nuclear targeting threats, it is not unprecedented. In July 2014, Russian Foreign Minister Sergei Lavrov made a nuclear threat relating to Crimea by referencing Russia’s nuclear doctrine.[4] Ironically, the unclassified 2010 version of the Russian nuclear doctrine (in effect until Putin’s June 2020 decree) would not apparently apply to Crimea since the loss of Crimea, which was not Russian territory to begin with, would hardly destroy the Russian state, which was supposedly the basis of their announced policy. The reason was that Russia’s 2010 pronouncement on nuclear weapons first use, which was presented as a new limitation on first use, was a deception. Even at the time, it was announced (February 2010), Colonel General Sergei Ivanov, then-Deputy Prime Minister and formerly Defense Minister, said, “In terms of hypothetical use of nuclear weapons by Russia, the new Military Doctrine does not differ from the one that was signed in 2000.”[5] Indeed, in February 2015, Ilya Kramnik, the long-time military correspondent for an official Russian news agency RIA Novosti, wrote that the 2010 revision of Russia’s military doctrine “further lowered” the threshold of “combat use” of nuclear weapons.[6]

According to Olga Oliker, Program Director, Europe and Central Asia, Crisis Group, Brussels, we are supposed to “rejoice” over Putin’s new edict because before this it was necessary to “...piece together Moscow’s positions and intentions from components of other documents (most notably a line or two in the country’s military doctrine statements from officials, exercises, force structure and the writings of Russia’s own specialists and strategists...)”[7] While I see no reason to rejoice over the Putin decree, Ms. Oliker is correct insofar that it was necessary to piece together Russian nuclear strategy from these sources, however, it is rather amazing that she omits statements by senior U.S. civilian and military leaders, intelligence officials, the content of official reports and declassified intelligence reports on nuclear first use from her list of sources. The problem is that for two decades, Minimum Deterrence advocates and their apologists in the “expert” community for Russian nuclear first use policy ignored almost all of these sources. The only good news in Putin’s decree is that it is now more difficult for Russia’s apologists to continue to ignore the fact that Russia plans on nuclear weapons first use in circumstances that no Western leader would even consider using them. However, they will certainly try.

Significantly, it is imperative to point out that Russian nuclear doctrine has not been consolidated in one place. There are obviously classified and highly classified aspects of Russian nuclear doctrine that are not in the Putin decree. There is a separate published Presidential directive that deals with Naval nuclear weapons policy in the context of escalation.[8] There are Defense Ministry documents that deal with Russian nuclear weapons use policy. One of the most important of these is the 2003 publication, “The Priority Tasks of the Development of the Armed Forces of the Russian Federation,” which announced Russia’s nuclear escalate to deescalate policy stating, “De-escalation of aggression is forcing the enemy to halt military action by a threat to deliver or by the actual delivery of strikes of varying intensity with reliance on conventional and (or) nuclear weapons.”[9] In the same year, Alexei Arbatov, Vice Chairman of the Duma Defense Committee and head of the International Security Center within the Russian Academy of Sciences’ Institute of World Economy and International Relations, said Russia had put more emphasis on tactical nuclear weapons “...although a selective first strike with strategic nuclear forces also is possible.”[10]
In 2009, Russia announced that it was classifying its nuclear doctrine,[11] including its plans for a pre-emptive nuclear attack. In August 2009, prominent Russian journalist Colonel (ret.) Nikolai Litovkin wrote that the Russian nuclear first use provision would be in the closed part of the new military doctrine and further maintained that, “Russia has recognized for itself the right to the preventive employment of nuclear weapons should we be attacked by some military bloc (like NATO).”[12] In late December 2009, less than two months before the publication of the unclassified version of the new military doctrine in February 2010, Alexei Arbatov said, “Russia’s new draft military doctrine drawn up by a Russian Security Council commission contains a preemptive nuclear strike concept.”[13] In September 2014, General of the Army (ret.) Yuriy Baluyevskiy, former Chief of the General Staff and First Deputy Defense Minister, who developed the 2010 revision of Russia’s nuclear doctrine when he was Deputy Secretary of the Russian National Security Council, stated that the "...conditions for pre-emptive nuclear strikes...is contained in classified policy documents."[14] 

Thanks to Putin’s decree, we now know that Russian state-run RT (formerly Russia Today) and the independent Interfax news agency were accurate when they both reported Russian nuclear doctrine allows for nuclear weapons first use “…if the sovereignty and territorial integrity of the Russian Federation are under threat.” (Emphasis in the original).[15] Paragraph 4 of Putin’s 2020 decree states, “The state nuclear deterrence policy is of a defensive nature and is directed at supporting the capabilities of nuclear forces at a level sufficient to ensure nuclear deterrence and to guarantee the sovereignty and territorial integrity of the state and to deter a potential adversary from aggression against the Russian Federation and (or) its allies in the event of the emergence of armed conflict by preventing the escalation of military activities and ending them on conditions acceptable to the Russian Federation and (or) its allies.”[16] In 2008, General of the Army Yuriy Baluyevskiy threatened preventive nuclear war using these criteria: “We do not intend to attack anyone, but we consider it necessary for all our partners in that to defend the sovereignty and territorial integrity of Russia and its allies, military forces will be used, including preventively, including with the use of nuclear weapons.”[17] A threat to sovereignty and territorial integrity may represent a still unannounced condition for Russia’s nuclear first use. If so, it is potentially very permissive because of its ambiguity. Both concepts could have more than one meaning.

Announced Conditions for Nuclear Weapons Use

Putin’s decree contains four announced conditions for nuclear weapons use, all of which involve first use of a nuclear weapon. It states:

The conditions which determine the possibility for the use by the Russian Federation of nuclear weapons are:

a) the receiving of creditable information concerning the launch of ballistic missiles attacking the territories of the Russian Federation and (or) its allies;

b) the use by an enemy of a nuclear weapon or other types of weapons of mass destruction against the territories of the Russian Federation and (or) its allies;

c) enemy actions against critically important state or military facilities of the Russian Federation, the disablement of which will lead to a disruption of retaliatory operations of the nuclear forces;

d) aggression against the Russian Federation involving the use of conventional weaponry, which threatens the existence of the state itself.[18]

According to Olga Oliker, “Some of this is old. But two things are new or newish. First is the clear statement that Russia can launch under warning of a ballistic missile attack. This is in line with Putin’s statements, but still notable to see in a formal document. Second, is the equally clear statement that an attack (military or otherwise) on Russia’s nuclear, command and related..."
infrastructure, broadly defined, justifies a nuclear response. This has been a matter of speculation and often assumed to be true. Now it’s confirmed.”[19] This is not completely accurate. Her later statement that "First use is allowed only in case of existential threat: to Russia or to its deterrent”[20] is inaccurate. All four of Putin’s announced conditions allow for nuclear weapons first use. Paragraph 19 (A), (B) and (C) all contain conditions for nuclear weapons first use that are lower than even what appeared in the most alarming of the open-source reports concerning Russian willingness to use nuclear weapons first.

The most important revelation of paragraph 19 is that what was supposed to be a limitation on Russia first use of nuclear weapons adopted in the 2010 edition of the Presidential document on Russia military doctrine (paragraph 19 [D] in Putin’s decree), the existential threat criteria, was just one of several "conditions determining the possibility of the use of nuclear weapons by the Russian Federation..." Launch under attack is hardly new and is actually part of some of Russia’s narratives for Russia’s large strategic exercises, but not in the extreme form of the Putin decree.[21] Similarly, “...the equally clear statement that an attack (military or otherwise) on Russia’s nuclear, command and related infrastructure, broadly defined, justifies a nuclear response,” was hidden by Russia for a long time but it is not new. In September 2017, Colonel General (ret.) Viktor Yesin, former Commander of the Strategic Missile Force, said, "Our military doctrine says that even a conventional attack on our nuclear installation will be considered the start of a nuclear war that will entail a massive nuclear retaliatory strike. That’s why no one will ever risk attacking a nuclear arsenal with conventional weapons."[22] He was not speculating but reporting fact. The formulation just released by Putin goes beyond conventional attacks and includes nuclear command and control facilities, which General Yesin did not mention. Thus, this could be an evolution of Russian doctrine lowering the nuclear use threshold. Alternatively, General Yesin may merely have spoken about only part of what was in their closed military doctrine.

There are a number of important aspects of the newly released language. First, as noted Russian journalist Pavel Felgenhauer pointed out, the Russian formulation is consistent with a nuclear response “possibly even [to] single missile launches...”[23] This would be while the type of warhead on the missile or missiles is unknown. Second, the condition of a nuclear response to "other types of weapons of mass destruction..." is broader than the three previous formulations, which spoke specifically about chemical and biological attack.[24] This is clearly a change in declaratory policy. Third, the use of “nuclear forces” rather than “strategic nuclear forces” in the provision related to non-nuclear attacks on nuclear and command and control facilities (paragraph 19 [C]) opens up the possibility of a nuclear response to a non-nuclear attack on a vast number of Russian military facilities, airbases, naval ships and Army bases and units. This is because dual capability (conventional and nuclear capability) is almost universal in Russia.[25] The Russians are trying to effectively use the threat of nuclear escalation to negate our conventional and cyber capabilities. If they impose this targeting constraint upon us, we lose the war.

Moreover, there may well still be undisclosed conditions for Russian use of nuclear weapons as reported in the Russian press, including state media. In March 2020, state-run Sputnik News said that Russian nuclear doctrine provided for nuclear first use “...in response to large-scale conventional aggression.”[26] This is clearly a lower use threshold than the official formulation of aggression that “threatens the existence of the state itself.” Russian press reporting of nuclear weapons policy different than the official line on nuclear strategy goes back to the very start of the Putin era. Noted Russia expert Stephen Blank writes that in 1999 there were Russian press reports that said that in the classified documents, Russia reserved the right for a nuclear response to conventional attacks on Russian nuclear forces or a ground invasion of Russian territory.[27] Thus, we have evidence that Putin’s Paragraph 19 (C) condition goes back to 1999.
The 1999/2000 Putin nuclear doctrine provided for nuclear weapons first use in "situations critical to the national security of the Russian Federation and its allies."[28] Alexei Arbatov and fellow Duma Deputy Petr Romashkin suggested that under Putin's nuclear doctrine, Russian first use of nuclear weapons would be appropriate in response to contingencies like NATO's past military action in Kosovo.[29] In 1999, then Colonel General Vladimir Nikolayevich Yakovlev, then-Commander of the Strategic Missile Force, stated that "The need for Russia's orientation toward expanded nuclear deterrence, which means including not only nuclear and wide-scale conventional wars, but also regional and even local military conflicts in the sphere of interests of the RVSN [ICBM force] and Strategic Nuclear Forces as a whole, is because of a number of objective reasons."[30] In October 2009, Nikolay Patrushev, the Secretary of Russia’s National Security Council, revealed, "We have corrected the conditions for use of nuclear weapons to resist aggression with conventional forces not only in large-scale wars, but also in regional or even a local one....There is also a multiple-options provision for use of nuclear weapons depending on the situation and intentions of the potential enemy. 'In a situation critical for national security, we don't exclude a preventive nuclear strike at the aggressor.'"[31] (Emphasis in the original). In October 2009, then-Russian Ambassador to NATO Dmitry Rogozin said, "Russia's main threat is now coming from territorial and local conflict. So the country is developing a compact, mobile force with state-of-the-art flexible nuclear weaponry."[32] (Emphasis in the original). Provisions related to the use of nuclear weapons in local war apparently are in the classified part of Russia's nuclear doctrine.

Russian Nuclear De-escalation of a War

Olga Oliker is still beating a dead horse about "escalate to deescalate" not being Russian nuclear strategy. Despite her statement about having to look at multiple sources, she argues that "...the combination of paragraphs four and 15 [of the Putin 2020 decree] may be understood as follows: Russia will use nuclear weapons only under the conditions delineated in paragraph 19. That is to say, it will not use them for simple battlefield advantage or to 'escalate to deescalate.' First use is allowed only in case of existential threat: to Russia or to its deterrent."[33] This is not a valid legal analysis. It discards two of the four conditions in paragraph 19 ([A] and [B]). As I have suggested above, paragraph 4 may be an unrevealed condition for nuclear first use, as General Baluyevskiy stated in 2008.

Ms. Oliker ignores the evidence that we have with regard to Russia's introducing nuclear weapons in regional war exercises where there is clearly no "existential threat: to Russia or to its deterrent." Indeed, Nikolai Sokov, who she approvingly quotes, wrote in 2014 that "...all large-scale military exercises that Russia conducted beginning in 2000 featured simulations of limited nuclear strikes."[34] In 2016, NATO Secretary General Jens Stoltenberg said that Russia "simulated nuclear attacks on NATO Allies (eg, ZAPAD) and on partners (e.g., March 7 2013 simulated attacks on Sweden) ..."[35] Sweden hardly poses an existential threat to Russia or its nuclear deterrent. In 2017, then-DIA Director Lieutenant General Vincent Stewart, said Russia is "the only country that I know of that has this concept of escalate to terminate or escalate to deescalate but they do have that built into their operational concept, we've seen them exercise that idea and it's really kind of a dangerous idea..."[36] He also said that he had seen no evidence that this policy was changing.[37] The "Hard-core believers in 'escalate to deescalate'" include not only the 2018 Nuclear Posture Review report but the senior political and military leaders of the Obama and the Trump administrations, the Obama administration’s Defense Science Board, the Obama administration’s National Intelligence Council and the November 2018 report of the Commission on the National Defense Strategy for the United States.[38]

There is nothing in Putin’s 2020 decree that indicates that his 2017 decree on the Russian Navy is still not Russian policy. The content of the 2017 decree contradicts Ms. Oliker’s assertion that Russia will not use nuclear weapons “...for simple battlefield advantage or to 'escalate to
deescalate.” The July 2017 Putin decree on the Russian Navy said, "During the escalation of military conflict, demonstration of readiness and determination to employ nonstrategic nuclear weapons capabilities is an effective deterrent,"[39] and the, "Indicators of the effectiveness of measures undertaken to execute the State Policy on Naval Operations are:....b) the capability of the Navy to damage an enemy's fleet at a level not lower than critical with the use of nonstrategic nuclear weapons."[40]

In 2016, Ambassador Steven Pifer pointed out, "The 'de-escalation' doctrine, Putin's references to nuclear weapons in his public statements, and the broad modernization of Russia's nonstrategic nuclear forces suggest that the classified strategy could envisage use of those weapons in wider circumstances."[41] Indeed, a 2011 RAND Corporation report by James T. Quinlivan and Olga Oliker, warned that Russia might, “...remove what it might interpret as threats to the survival of the state (its own or an ally's) with small nuclear attacks that promise both definite effects on the battlefield and ‘de-escalation of military actions’.”[42] Ms. Oliker got it right then except that the threshold for first use of nuclear weapons is lower than the survival of the state.

Dr. Mark B. Schneider is a Senior Analyst with the National Institute for Public Policy. Before his retirement from the Department of Defense Senior Executive Service, Dr. Schneider served in a number of senior positions within the Office of Secretary of Defense for Policy including Principal Director for Forces Policy, Principal Director for Strategic Defense, Space and Verification Policy, Director for Strategic Arms Control Policy and Representative of the Secretary of Defense to the Nuclear Arms Control Implementation Commissions. He also served in the senior Foreign Service as a Member of the State Department Policy Planning Staff.

Notes:


[3] Ibid.


“Russia classifies information on pre-emptive nuclear strikes – military,” BBC Monitoring Former Soviet Union, September 5, 2014, available at Interfax-AVN military news agency, Moscow, in Russian 0728,0752,0826Sep

14/BBC.


“Putin approves state policy on nuclear deterrence – text,” op. cit.


“Putin approves state policy on nuclear deterrence – text,” op. cit.

[20] Ibid.


[32] Ibid,


[37] Ibid.


[40] Ibid, p. 16.


Return to top
US COUNTER-WMD

VOA (Washington, D.C.)

**Japan to Abandon US Missile Defense System**

By VOA News

June 25, 2020

Japan Defense Minister Taro Kono announced Thursday Japan had decided to scrap plans to deploy the U.S.-made land-based Aegis Ashore missile defense system that was intended to protect Japan from North Korean threats.

The announcement came one week after Kono said the deployment was being suspended after it was discovered that the safety of the civilian community could not be guaranteed near the Mutsumi base in Yamaguchi, southwestern Japan, one of two sites for the proposed land-based missile defense system. The other unit was being planned in Akita in the north.

It had been discovered that, in the current design of the system, it could not be guaranteed rocket boosters from the missiles would not fall outside the base. Japan had promised it would never allow something like that to happen. But it said fixing the system would require a total redesign of, not only the software, but the hardware of the system, which would be too costly and time consuming.

At a Thursday news conference in Tokyo, Kono apologized for the inconvenience and said discussions would continue in Japan with the United States on how best to carry out the nation’s defense strategies.

The Aegis Ashore defense system was aimed at bolstering the country's capability against escalating threats from North Korea.


Return to top

C4ISRNET (Vienna, Va.)

**Missile Warning Satellite Completes Space Environment Testing**

By Nathan Strout

June 22, 2020

The Space Force’s next missile warning satellite has successfully completed two months of testing to ensure it will survive in the harsh environment of space, according to the program’s prime contractor Lockheed Martin.

The company said that the fifth geosynchronous Space Based Infrared System satellite completed its thermal vacuum (TVAC) testing June 9, bringing it one step closer to launch. During testing, the satellite was exposed to heat and cold in a depressurized atmosphere that mimics the environmental effects of space.

The SBIRS constellation provides missile warning capabilities to the U.S. military, detecting missile launches all around the globe and feeding that data to the nation's missile defense architecture. The constellation currently includes four geosynchronous satellites with two additional satellites in highly elliptical orbits for global coverage.
The successful testing — which began April 16 — is also a major milestone for Lockheed Martin, since SBIRS GEO-5 is the first military satellite built on the company's modernized LM 2100 bus.

“The completion of TVAC can be attributed to a tremendous effort from the Air Force, Lockheed Martin, Aerospace Corporation, and supporting contractor teams,” Tucker White, SBIRS GEO-5 assembly, test, and launch operations lead from the government’s program office, said in a statement. “The teams worked around the clock and finished on schedule to their original projection. This test phase is vital to any space vehicle test regime and takes GEO-5 one step closer to providing enhanced missile detection to our warfighters.”

The satellite is expected to launch in 2021.

In 2014, Lockheed Martin was awarded $1.86 billion to build the fifth and sixth geosynchronous SBIRS satellites, which will replace the first two in the constellation. Those two satellites will be the final additions to the SBIRS constellation. Plans for two more satellites were scrapped in 2018. Instead, the Department of Defense is investing in the Next Gen Overhead Persistent Infrared, which will consist of three satellites in geosynchronous orbit and two covering the polar regions.

Lockheed Martin was selected to build the former while Northrop Grumman was selected to build the latter. The first Next Gen OPIR satellite is expected to be delivered in 2025.

https://www.c4isrnet.com/battlefield-tech/space/2020/06/21/missile-warning-satellite-completes-space-environment-testing/

C4ISRNET (Vienna, Va.)

**Senate Bill Would Add $120M for Hypersonic Tracking Satellites**

By Nathan Strout

June 24, 2020

The Senate’s annual defense policy bill would authorize an additional $120 million toward a space-based sensor layer capable of tracking hypersonic weapons, despite the fact the Department of Defense did not seek more funding for the project in its fiscal 2021 budget requests.

The Hypersonic and Ballistic Tracking Space Sensor is DoD’s answer to the growing threat posed by hypersonic weapons being developed by China and Russia. Hypersonic weapons present a significant challenge to the United States’ current missile warning architecture. Not only can these weapons maneuver around ground based sensors, they're too dim to be picked up and tracked by space-based sensors in higher orbits.

HBTSS theoretically solves this problem via a proliferated constellation of Overhead Persistent Infrared (OPIR) sensors operating in low earth orbit. At that lower orbit, the sensors will be able to pick up and track the otherwise dim objects. But because the satellites are closer to the earth and have a limited field of view, the system will need to pass off custody responsibility from sensor to sensor as the weapons traverse the globe. Hence the need for a proliferated constellation.

HBTSS will plug into the Space Development Agency’s National Defense Space Architecture, a new system of satellites operating in low earth orbit.

The Missile Defense Agency awarded $20 million contracts to four companies in October to develop HBTSS prototypes: Northrop Grumman, Leidos, Harris Corporation and Raytheon.
The Senate’s version of the National Defense Authorization Act would authorize the Missile Defense Agency $120 million in research, development, testing and engineering funds for HBTSS.

If passed, this would be the second consecutive year the department did not include money for HBTSS in its annual budget request, but Congress allocated money for the project anyway. In 2019, MDA put the program at the top of its unfunded priority list, seeking $108 million for that effort. Congress fully funded that request in the legislation that passed in December.

The decision to give the HBTSS funding to the Missile Defense Agency in fiscal year 2021 continues a 2019 battle between the administration and Congress over which agency should lead the program’s development effort. While lawmakers wanted to place MDA firmly in charge of the effort, the White House argued that it was too soon to put one agency in charge. Ultimately, Congress included a provision putting primary responsibility for the development and deployment of the system in MDA’s hands.

Just three months after that legislation passed, lawmakers expressed frustration and confusion over MDA’s FY2021 budget request, which sought to transfer HBTSS funding responsibility to SDA. While MDA Director Vice Adm. Jon Hill tried to assure legislators at the March hearing that his agency was fully in charge of developing the sensor for HBTSS, skepticism has continued. According to Hill, funding for the effort would be allocated to SDA, who would in turn provide the funding to MDA. As currently drafted, the legislation de facto rejects DoD’s request to transfer funding responsibility to SDA.

Furthermore, it specifically assigns principal responsibility for the development and deployment of HBTSS through the end of FY2022, after which it may be transferred over to the U.S. Space Force.

It’s not the only legislative proposal emphasizing Congress’ desire for MDA to be in charge of the system.

The House version of the FY2021 defense bill made public in June asks for the Secretary of Defense to certify that MDA is indeed in charge of HBTSS. According to a defense official, Under Secretary of Defense for Research and Engineering Michael Griffin sent a letter signed May 29 certifying that MDA was in charge of payload development. Griffin has since resigned, stating that he has received an opportunity to work in the private sector.

The Senate version requires on orbit testing of HBTSS to begin by December 31, 2022, with full operational deployment as soon as technically feasible.

https://www.c4isrnet.com/battlefield-tech/space/2020/06/24/senate-bill-adds-120m-for-hypersonic-tracking-satellites/

Return to top
US ARMS CONTROL

Newsweek (New York, N.Y.)

China Warns It Will Act if U.S. Deploys New Missiles to Asian Allies

By Tom O’Connor

June 24, 2020

China has said it would respond if the United States deployed intermediate-range missiles to the Asia-Pacific region and warned U.S. allies not to accept such weapons.

Chinese Defense Ministry spokesperson Senior Colonel Wu Qian told a press briefing Wednesday in Beijing that "China is firmly opposed to the deployment of intermediate-range missiles by the U.S. in the Asia-Pacific region." The Pentagon was long barred from deploying such weapons as a result of a 1987 treaty with Russia but President Donald Trump's administration left the deal last August and has since signaled a willingness to confront China, and China has threatened to retaliate.

"If the U.S. insists on the deployment, it will be a provocation at China's doorstep. China will never sit idle and will take all necessary countermeasures," Wu told reporters.

The latest warning came as Japan, close U.S. ally, considered reshaping its own defense policy amid tensions in the region. Wu warned Tokyo not to deploy such weapons at Washington's behest.

"At the same time, China hopes that Japan and other countries concerned can act cautiously with the big picture of regional peace and stability in mind, and should not allow the U.S. to deploy medium-range missiles on their territories, so as not to fall victim to Washington's geopolitical ploys," he added.

Shortly after the U.S. exit from the Intermediate-range Nuclear Forces (INF) Treaty that banned Washington and Moscow from fielding land-launched missiles ranging from 310 to 3,420 miles, Defense Secretary Mark Esper told journalists in August 2019 he "would like to" deploy such weapons in Asia. Two weeks later, the U.S. tested a cruise missile that exceeded 310 miles in California.

The Pentagon conducted a second test topping this range two months later, sending a ballistic missile out of the same West Coast testing range in another move that sparked anger from both Beijing and Moscow. While China viewed U.S. military moves in the region as a major threat, Washington saw Beijing as a destabilizing player.

"The Chinese Communist Party is behaving in ways that fundamentally put the American people's security at risk," Pompeo tweeted Wednesday, adding that the Trump administration "is the first in decades to take this threat seriously."

U.S. allies, however, have also expressed uncertainty about the prospect of intermediate-range missiles being deployed on their territory. Australia and South Korea have already said they would not host such weapons, while Japanese officials appeared to be more divided on the matter.

A Japanese Defense Ministry official told Newsweek in September that there were "no detailed talks about the future deployment of U.S. missiles systems in Japan," though the official acknowledged this could change. Japanese Defense Minister Kono Taro offered a similar analysis the following month.

But on Wednesday, Japan's Jiji Press outlet reported that the country's National Security Council had convened in order to review the country's defense policy, which has evolved to include more
allowances for offensive measures under Prime Minister Abe Shinzo. The meeting came shortly after Defense Minister Kono Taro announced that Japan would be suspending its plans to acquire the U.S.-built Aegis Ashore missile defense system and began sea trials for its new Maya-class destroyer with anti-missile capabilities.

Chinese Foreign Ministry spokesperson Zhao Lijian said he took note of this meeting at a separate press briefing Wednesday. He alluded to Japan’s World War II history and urged Tokyo to stray from restraints on its armed forces.

"Due to historical reasons, developments in Japan’s military security have been closely followed by its Asian neighbors and the international community," Zhao told reporters. "Some in Japan have long been hyping up so-called 'external threats' in order to free itself under various pretexts and achieve some breakthroughs in its military security policies."

"However, this intention has been seen through by the world," he added. "We urge Japan to draw lessons from history, faithfully implement its 'exclusively defense-oriented policy,' and stay committed to peaceful development by taking real actions."

While ties between China and Japan have improved in recent years, with Chinese President Xi Jinping even set to visit on a trip since postponed by the novel coronavirus pandemic, tensions remain between the two nations. Chinese vessels have sailed near the disputed, Japanese-controlled Senkaku Islands—known to China as the Diaoyu Islands—in the East China Sea or some 71 consecutive days and Taro took the rare step recently of publicly identifying what he said was a Chinese submarine spotted outside of Japanese waters northeast of Kagoshima province’s Amami-Oshima Island.

https://www.newsweek.com/china-act-us-deploy-missile-warns-allies-1513168

Washington Examiner (Washington, D.C.)

Pompeo Threatens to Finish Off Iran Nuclear Deal over Arms Embargo Dispute

By Joel Gehrke

June 24, 2020

President Trump will force all nations to renew the sanctions lifted in the 2015 Iran nuclear deal if global leaders refuse to extend an expiring arms embargo on the regime, Secretary of State Mike Pompeo warned.

“I would remind the world that the Obama administration’s officials said very clearly that the United States has the unilateral ability to snap back sanctions into place,” Pompeo told reporters Wednesday.

That legal argument irritates allied governments, given that Trump withdrew the U.S. from the nuclear deal in 2018. Pompeo underscored that option as U.S. officials attempt to convince Western allies, as well as Russia and China, to back a United Nations Security Council resolution that would extend an arms sale ban that expires in October.

“It’s unacceptable for the Europeans to have equipment inside of Iran, move into Iran, that can threaten the people of Europe," Pompeo said. "Belgium, Denmark are at threat because of an expiration of an arms embargo on the world’s largest state sponsor of terror.”
The "snapback" authority allows the U.S. to extend the arms embargo through a legal process that Russia and China cannot veto. Yet, that maneuver would entail the final destruction of the nuclear deal over the objections of the European Union and Western European allies, who believe the deal defused a nuclear crisis.

The Trump administration's relationship with European governments has been strained additionally by the fallout from the coronavirus pandemic, including Trump's unexpected decision to ban travel from the European Union in March, which the EU soon reciprocated. European officials may continue to ban travel from the U.S., even as they reopen to other regions, in an implicit critique of the Trump administration's handling of the coronavirus.

"We have to make sure that we have all of the elements in place to reopen travel between the EU and the United States," Pompeo said. "We're working on finding the right way to do it, the right timing to do it the right tactics to have in place. We certainly don't want to reopen [in a way] that jeopardizes the United States from people traveling here. And we certainly don't want to cause problems anyplace else."

He expressed hope for a cooperative spirit on the arms embargo question. "I'm very hopeful that the whole world, when we come to the point when this decision must be made, that they will come to the same understanding that the United States has — that this is dangerous for the world for this to have expired," Pompeo said.


The Strategist (Barton ACT, Australia)

Blowing Up Diplomacy on the Korean Peninsula

By Malcolm Davis

June 22, 2020

In a stunning dismissal of the value of inter-Korean diplomacy, Kim Yo-jong, the sister of North Korean dictator Kim Jong-un, ordered the destruction of the joint liaison office in Kaesong near the border with South Korea. It wasn't just a decision to hold off on further contact with the South—she had the building blown up. Diplomacy seems to be dead in the eyes of the Kim regime.

This move follows a long-running leafleting campaign by North Korean defectors based in the South. North Korea appears to be using that campaign as an excuse for a series of retaliatory actions designed to pressure Seoul into making concessions. The risk is that each provocation could increase the chances of inadvertent escalation across the demilitarised zone.

The official North Korean news agency, KCNA, released several statements following the destruction of the liaison office. They suggest that the regime plans on deploying the Korean People's Army into the Mt Kumgang resort area and the Kaesong industrial zone, as well as 'opening many areas in the ground front and southwestern waters'. Any harassment at sea, along the Northern Limit Line, would increase the potential for naval conflict.

The statements indicate that destroying the liaison office won't be the last provocative move. Reporting suggests that the Korean People's Army will reinstall guard posts and resume military exercises in frontline areas, reversing progress in North–South diplomacy made over the past two years. Frontline units, such as artillery, will reinforce formations close to the DMZ, increasing the
threat to South Korean territory from which the balloon-borne leafleting campaign was launched. North Korea has rejected an offer from Moon Jae-in’s government in Seoul to restart talks.

The prospects for an easing of tensions on the Korean peninsula are now dramatically diminished.

Attempts at diplomacy by the United States have also clearly been rejected by Pyongyang. The North Korean foreign minister, Ri Son-gwon, has ruled out further negotiations with President Donald Trump, noting, ‘Pyongyang will never again provide the US chief executive with another package to be used for achievements without receiving any returns.’

Instead, North Korea is apparently focused on ramping up the production of long-range missiles and nuclear weapons following a meeting of the Central Military Commission of the ruling Workers’ Party of Korea, chaired by Kim Jong-un. He said the country ‘should mass-produce nuclear warheads and ballistic missiles, the power and reliability of which have already been proven to the full, to give a spur to the efforts for deploying them for action’. In December, Kim announced that North Korea was no longer bound by its self-imposed moratorium on nuclear and long-range missile tests, and suggested that a new strategic weapon would be unveiled.

So, don’t expect any new moves towards a summit between Trump and Kim, especially in a combustible atmosphere charged by North Korean provocations along the DMZ with South Korea. Instead, the prospect of additional long-range missile tests, and the potential for a new nuclear test, have to be taken seriously.

What is perhaps most interesting about this latest crisis is the role of Kim Jong-un’s sister, Kim Yo-jong. After Kim Jong-un disappeared for some weeks in April, likely either isolating himself from Covid-19 or suffering health issues, his sister emerged as increasingly influential in the regime. Now she is apparently moving to strengthen her influence and visibility by building up her ‘revolutionary achievements’, such as provocations against South Korea, as a way to enhance her authority in a male-dominated hierarchy.

Kim Yo-jong is extremely militant in her language and threats against South Korea, a posture likely to be approved by her brother, and which reinforces the message that the Kim line is firmly in charge of the state. South Korea’s Daily NK newspaper suggests she still feels sufficiently insecure in her powerbase and must demonstrate toughness and political acumen to elders within the regime, including the military leadership of the North Korean People’s Army.

The North Korean actions also tie into the impact of Covid-19 on the hermit kingdom, with the requirement to close the border between North Korea and China accentuating the economic misery faced by the North Korean people, who are already suffering the effects of sanctions. By bullying South Korea, Pyongyang wants to see Seoul split with Washington and the lifting of sanctions. Such an achievement would be a huge coup for Kim Yo-jong and would strengthen her influence greatly.

Harry Kazianis, senior director of Korean Studies at the Washington think tank the Center for the National Interest, argues that North Korea’s actions ‘have zero to do with leaflets sent over the DMZ but [rather] the anger it feels towards the Moon government for not delivering bigger incentives in recent years of détente’. The regime in Pyongyang felt that both summits between Trump and Kim, and inter-Korean diplomacy, would by now have brought real concessions to North Korea and at least the lifting of sanctions.

Although inter-Korean engagement has brought benefits such as a reduction of military forces along both sides of the DMZ, sanctions remain in place and neither South Korea nor the US will lift them unless North Korea moves to comprehensive, verifiable and irreversible denuclearisation, an outcome unacceptable to Pyongyang.
So, Kim Yo-jong, seeking to strengthen her revolutionary political credentials, with the support of Kim Jong-un, plans to coerce the South into lifting sanctions and looks set on using military provocations to prove her ability to lead. In one of the most heavily militarised locations on earth, that's a bold and dangerous path to take, because Seoul is unlikely to buckle.

When that becomes apparent to Kim Yo-jong, what might she do next?

AUTHOR

Malcolm Davis is a senior analyst at ASPI.


COMMENTARY

Defense News (Washington, D.C.)

**Five Reasons an Arsenal Plane Isn’t the Best Choice for Rebalancing America’s Long-range Strike Forces**

By Mark Gunzinger

June 18, 2020

America’s security interests are being threatened like never before. China and Russia pose challenges of a nature the U.S. has not confronted since the Cold War, and rogue states such as Iran and North Korea seek the means to launch devastating missile attacks. The Pentagon is modernizing to meet these challenges, including buying next-generation capabilities to strike with precision over long ranges. Long-range strikes are one of the most effective tools available to America’s theater commanders when paired with strategies that target vital resources on which an enemy’s offensive depends. As the Department of Defense modernizes its long-range strike portfolio, it should focus on its most critical shortfall: the lack of stealth bombers capable of attacking thousands of targets anywhere in the battle space.

There are two basic approaches to conducting long-range strikes. Stand-in strikes use stealth bombers to penetrate enemy defenses and release munitions in proximity to targets. The other approach is called standoff strikes, which entails using non-stealth aircraft, ships and land batteries located outside contested areas to launch missiles at targets. Air Force Chief of Staff Gen. David Goldfein has said multiple war games have shown the force that wins will have the right balance of both stand-in and standoff strike capabilities.

Today’s force does not have the right balance. The DoD’s long-range strike capabilities are all standoff systems except for the Air Force’s 20 stealth B-2s. This is a key reason the DoD is buying B-21s that have advanced stealth, sensors and data links, as well as the ability to fuse information similar to fifth-generation F-35s.

Despite this imbalance, there is interest in developing a so-called arsenal plane for the Air Force based on a new design or an airlift aircraft. There are multiple problems with this schema.

An arsenal plane would grow the DoD’s standoff strike capacity instead of rebalancing its force mix. Doing so at the expense of procuring more B-21s would reduce options to strike anywhere in the battle space and risk over-investing in standoff strike capacity, since other services are also buying new standoff weapons.
An airlift aircraft strike concept doesn’t make sense from an operational perspective. The DoD may require more airlift to support distributed operations during a conflict with China or Russia. Allocating some C-17 or C-130 aircraft to conduct strikes would reduce the airlift capability available to deploy and sustain U.S. forces. Gen. Timothy Ray, commander of Air Force Global Strike Command, has voiced this concern.

Arsenal planes have targeting limitations. The farther the standoff range of an arsenal plane, the larger the munition it must use to reach distant targets. Larger munitions translate to fewer weapons delivered per aircraft sortie, which can increase time needed to strike all targets required by theater commanders — time an enemy could use to its advantage. Long-range weapons are also less effective against targets that are hardened, deeply buried or can quickly relocate — countermeasures used by China, Russia and others to defeat U.S. precision strikes. Long-range weapons cannot carry warheads large enough to kill very hard/deeply buried targets, and weapon flight times of multiple tens of minutes give enemies opportunities to detect attacks and move assets at risk. In contrast, stand-in bombers can approach defended targets closely enough to attack them with weapons that are smaller, cheaper and have shorter flight times.

Greater reliance on standoff strikes doesn’t make sense from a cost-per-target perspective. Weapon costs increase in proportion to the weapon’s range and sophistication. The design features of long-range weapons can drive their cost to $1 million or more, and the cheapest hypersonic (Mach 5-plus) missiles could cost $2-3 million. Short-range weapons such as the Joint Direct Attack Munition can cost less than $50,000. While next-generation standoff weapons are needed, launching these one-time-use assets against tens of thousands of targets would cost far more than reusable penetrating bombers.

An arsenal plane would not be cheaper or quicker. Restarting C-17 production alone would require billions of dollars, and a clean-sheet design could be even more expensive. Plus, since 1980, the time between major new Air Force aircraft program starts and first flights averaged six years, and another three to four years are needed before they are operational. If this track record holds true, B-21s would be joining the force in significant numbers before an arsenal plane is operational.

All of the services divested long-range strike capacity over the last 30 years due to mandates to generate savings and the lack of a peer competitor. Today, the Air Force’s 76 B-52Hs, 62 B-1Bs and 20 B-2s constitute its smallest bomber force in its entire history. As the service grows this force later in the decade, it must procure the most cost-effective capabilities that create the greatest number of options for theater commanders.

The Air Force already has arsenal planes in the form of its B-52H and B-1B bombers; it does not need another one — especially since other services are investing in new standoff weapons. Resetting the long-range strike balance for future threats requires the Air Force to fully focus on being the stand-in force on America’s war-fighting team. The country simply lacks the resources to invest in subpar or excessively duplicative capabilities.

Mark Gunzinger, a retired U.S. Air Force colonel and former deputy assistant secretary of defense for forces transformation and resources, is the director for future concepts and capability assessments at the Mitchell Institute.

https://www.defensenews.com/opinion/commentary/2020/06/18/five-reasons-an-arsenal-plane-isnt-the-best-choice-for-rebalancing-americas-long-range-strike-forces/

Return to top
Defense News (Washington, D.C.)

**Keep Modernization of the Ground Based Strategic Deterrent Program on Track**

By former U.S. Air Force secretaries and chiefs of staff

June 19, 2020

In 1959, the U.S. Air Force deployed its first intercontinental ballistic missile at Vandenberg Air Force Base in California. A year later, the Navy deployed its first submarine-launched ballistic missile aboard the aircraft carrier George Washington. These systems, together with the Air Force’s nuclear-capable bomber force, formed the United States’ nuclear deterrence capability, which came to be known as the “triad.”

The triad has been the foundation of U.S. national security policy for over 60 years, providing stability to America’s global military operations and diplomacy efforts. The triad — and the security umbrella it extends to our allies and partners — has fostered decades of peace and prosperity. Nuclear deterrence has successfully prevented crises from escalating to conflicts and promoted cooperation and diplomacy in resolving disputes.

Today, nuclear deterrence is more important than ever, which is why we must prioritize efforts to modernize the triad.

Throughout the Cold War and into the 21st century, military and political leaders have worked together to maintain a credible, safe and reliable nuclear deterrence capability. As technologies and threats evolve, so has the triad. Over the years, each leg has been modernized several times.

Currently, the Air Force is developing the B-21 long-range strike bomber, which will enter service later this decade, and the Navy is replacing its fleet of ballistic missile submarines with the Columbia class, scheduled to begin patrols in 2031.

A replacement is also needed for the Minuteman ICBM system, which first entered service in 1962 and has been upgraded and extended 40 years beyond its original service life. In 2010, after affirming the importance of maintaining a land-based leg, the Obama administration initiated the Ground Based Strategic Deterrent program, a modern ICBM system that will improve reliability, lower operational costs, and respond to current and future threats.

The Air Force will soon begin work on GBSD, which will enter service in 2029. Over 10 years of planning have led to this goal, with the program’s necessity validated by two presidential administrations, six congresses and six secretaries of defense.

ICBMs are an integral part of the triad, providing complementary capabilities to the sea-based and bomber legs that enhance our overall deterrence posture. For example, land-based missiles are the most robust and stabilizing leg of the triad. Consisting of 400 active, hardened missile launch facilities on sovereign U.S. soil and dispersed over 30,000 square miles, ICBMs pose a nearly insurmountable obstacle to those who wish us harm. They prevent any rational adversary from credibly threatening or confidently planning a strike.

Failing to adequately maintain the land-based leg of the triad by fully funding the GBSD would threaten strategic stability and make remaining U.S. nuclear forces more vulnerable. America’s ICBM force is both affordable and cost-effective — it features the lowest annual sustainment and recapitalization costs compared to the other two legs. It is vital the nation maintain its nuclear force posture, which has acted as a stabilizing element of global security for decades.

Modernizing the triad is no small undertaking, and our current modernization efforts are the result of decades of careful planning and bipartisan support. Stewardship is handed down from one set of leaders to the next, and in this critical moment of transition it is imperative our current leaders...
keep these modernization programs on track. We strongly recommend that members of Congress support moving ahead with the GBSD program so it can join the other legs in providing effective deterrence for decades to come.


https://www.defensenews.com/opinion/commentary/2020/06/19/keep-modernization-of-the-ground-based-strategic-deterrent-program-on-track/

Return to top

Defense One (Washington, D.C.)

The Pentagon Must Not Falter in Its Drive to Network Its Weapons and Sensors

By Seth Cropsey

June 19, 2020

The dominance in coordination, intelligence, and targeting that enabled American victory in conventional conflicts throughout the post-Cold War period is eroding. China in particular has invested in C4ISR networks to coordinate its dispersed missile-armed forces, a critical capability if the Beijing regime hopes to strike Taiwan or another regional target while simultaneously forestalling American intervention.

A war with China – the most likely and most significant great-power contingency that the U.S. and its allies will face – will involve tens of thousands of discrete moving units. China will attempt to saturate targets in the Western Pacific with missile salvos, launched from surface warships, aircraft, and ground installations. The U.S. must be able to coordinate American and allied units effectively enough to defend critical targets from air attack, and in turn strike back at enemy forces throughout the region.

American and allied forces must fight as a team, maximizing limited resources by allocating specific responses to specific threats. This goes beyond the “jointness” that dominates conventional Western military planning. As it stands, the majority of Western European states, all the U.S. armed forces, and several Asian allies use the standardized Link 16 system, a tactical data link network that enables communication and information-sharing between different units and across services. But the individual ships, air defense platforms, radar stations, and aircraft often have different software for intelligence, surveillance, reconnaissance, and targeting. Broadly speaking, all the American services and major allied forces are interoperable. Nevertheless, internal software differences can generate critical discrepancies between the data individual units send to their commanders.

These discrepancies are particularly important in aerial combat. China’s saturation strikes will flood American and allied radars with thousands of distinct targets, ranging from standard cruise and ballistic missiles and strike aircraft to unmanned aerial vehicles, strategic bombers, and hypersonic weapons. Even simple discrepancies between targeting data in the “air picture” – the military term for the visual representation a commander receives of local and regional air combat – can prove disastrous. Indeed, the Missile Defense Agency has already identified this problem during its wargames, when it has attempted to integrate air data from the THAAD anti-ballistic missile
system and Aegis Naval Combat System, and from THAAD and the Patriot surface-to-air missile system.

Every service understands the need for effective information coordination. To that end, each has developed its own system to integrate data. But sensor data integration occurs only after each service’s specific tools have collected and collated it, and then sent it through the Link 16 or the similar Link 11 – or future Link 22 – network. These inefficiencies stem from the Defense Department’s structural constraints. Individual programs are “stovepiped,” and therefore developed independently of their technologically equivalent counterparts with little thought to organic integration.

The Army’s Integrated Battle Command System strips away these additional layers of transmission and processing, fusing all the data from the systems in which it is installed into a single data picture. IBCS accomplishes this by replacing each combat system’s command-and-control software with the IBCS’ command modules. Each IBCS-equipped unit is connected to every other; the system is designed to run in the background during any deployment, continuously fusing data and generating an air picture that it then distributes throughout the combat force.

But sensor fusion and a unified understanding of the battlespace is not enough, especially when thousands of targets and threats flood radar screens. To that end, IBCS includes a threat assessment program, which combines fused targeting data with information on friendly capabilities and positions to generate targeting options that maximize U.S. forces.

IBCS and similar systems are currently defensive. However, testing has begun that translates these capabilities into offensive missions. During an August 2019 test, IBCS used additional sensor data from short-range radars and F-35 tracking tools to conduct an intercept far outside the Patriot’s organic radar range. This has obvious offensive applications. Units equipped with UAVs and short-range sensors can transmit data back to allied forces out of harm’s way, which in turn can conduct strikes against targets beyond standard detection ranges. Indeed, as the U.S. Marine Corps shifts to a maritime island-hopping force, information integration technology like IBCS will become increasingly important: Marines forward-deployed on isolated islands can have an outsized effect on the broader battlespace, directing fire for long-range missiles much like the spotter aircraft of bygone battleships.

As important as IBCS will be the Navy’s equivalent program, the Cooperative Engagement Capability, or CEC, integrated fire control sensor network. It is reasonable for both services to develop separate C4ISR integration programs, particularly because multiple systems enable greater redundancies. Nevertheless, each service must attempt to integrate its battle management systems with those of every other. IBCS is already integrated with the F-35, but full-scale interservice integration is critical to future combat effectiveness. Earlier integration attempts will improve combat effectiveness once IBCS, CEC, and other similar systems are fully mature. By waiting too long, the U.S. risks encountering the same stovepiping issues that necessitated sensor fusion programs in the first place.

Absent a massive spending cut, the Army is likely to deploy IBCS in the next few years, beginning with low-rate initial production and expanding over time. However, simply developing IBCS or a similar data fusion system is insufficient. Unless the Army, or any other service with similar software, integrates IBCS into all critical air defense systems, IBCS will not have a major effect. As it stands, the Army does not plan to integrate IBCS into its THAAD or Ground-Based Midcourse Defense systems, two major pillars of Army air defense, because of funding gaps in the 2022-26 budgets. These issues are compounded when considering interservice integration. Navy budget shortfalls could jeopardize both CEC and naval systems integration with IBCS. Congressional
leadership is needed, not only to ensure steady funding, but also to guide the services as they invest in data fusion technologies and link them into a broader command and control network.

China is, and will likely remain, the most powerful challenger to the U.S. position in the world and to the international order. It continues to transform itself from a land to a land/sea power broadening the areas of strategic competition to include purchases of strategic port facilities and other critical infrastructure, control of 5G networks, debt diplomacy and cyber-attacks. None of this can be allowed to obscure the fact that battlefield dominance remains the spine of any state's ability to prevail. As battlefield dominance becomes vastly more intricate and as our potential foe's systems multiply in number and complexity, the assured integration of U.S. forces is an unqualified necessity.

Seth Cropsey is a senior fellow at Hudson Institute and director of Hudson’s Center for American Seapower. He served as a naval officer and as deputy Undersecretary of the Navy in the Reagan and George H. W. Bush administrations.


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

Revelations about Russia’s Nuclear Deterrence Policy

By Cynthia Roberts

June 19, 2020

On June 2, the Kremlin published an unprecedented six-page document entitled Principles of State Policy of the Russian Federation in the Sphere of Nuclear Deterrence. Although this statement of Russia’s official position on nuclear deterrence policy does not overturn current military doctrine, it is notable for identifying the range of threats that Russia seeks to deter with its nuclear forces, clarifying Russia’s approach to nuclear deterrence, and articulating the conditions under which Moscow might escalate to the use of nuclear weapons. Given Russia’s nuclear stockpile of approximately 4,310 warheads and the deteriorating relations between Moscow and the West, such issues are vital to global peace and security.

The set of public statements, or declaratory policy, on nuclear deterrence matters — especially for American analysts — because it gives insight into how the role of Russian nuclear weapons has evolved over time in response to technological innovation, international challenges to the security of Russia’s nuclear deterrent policy, and internal debates in Moscow over the details of military policy and how best to ensure a credible nuclear deterrent posture. Despite sharing some similarities with the deterrence policies of the United States — such as maintaining a nuclear triad to address threats to the survivability of land-based forces and considering limited nuclear options to deter further escalation or de-escalate a conflict — important elements of Russia’s approach to nuclear deterrence are unique.

Analysts should read Principles of State Policy extremely carefully and with a Russian lens. Importantly, Russia experts should appreciate that Moscow is animated by a persistent fear that Washington seeks to neutralize Russia’s strategic deterrent. As a result, the military is fixated on preemption to prevent a disabling first strike, even as the political leadership has traditionally resisted pre-delegating nuclear authority. The document also shows that Russian nuclear doctrine has focused more on ensuring deterrence and less on nuclear coercion for aggressive aims.
American Views on Russian Nuclear Policy

American strategists need to understand how the contents of Principles of State Policy fit into the larger body of evidence about Russia's nuclear decision calculus. As a start, the new document indirectly addresses Western concerns that Russian strategy embraces limited nuclear employment in future regional conflicts to signal its resolve and “compel an end to a conventional conflict” that Russia starts. In other words, Moscow would seek to “escalate to de-escalate” “a conflict on terms favorable to Russia.”

U.S. policymakers mistakenly consider this de-escalation concept in primarily coercive terms by which Russia lowers the nuclear threshold to consolidate battlefield success. Then, they elevate this interpretation into an ominous component of Russian military doctrine that must be countered, as reflected in the 2018 U.S. Nuclear Posture Review and other official statements. In fact, “escalate to de-escalate” and other concepts for controlling escalation have been discussed for decades in Russian military journals. However, the phrase appears nowhere in official Russian doctrine. Though Principles is consistent with the Russian preference to leverage the risk and uncertainty of potential nuclear escalation to enhance its deterrence of adversaries, it avoids language that would reinforce U.S. misconceptions.

Experts have speculated about a classified document with almost the exact same title, “Principles of State Policy in the Sphere of Nuclear Deterrence Until 2020,” that was approved by then President Dmitry Medvedev in Feb. 2010 on the same day the military doctrine was issued. That document, unlike either the 2020 Principles or official Russian government doctrine from both 2010 and 2014, reportedly contained references to nuclear preemption. The latest version of official Russian military doctrine, which was released in 2014, states that

The Russian Federation reserves the right to use nuclear weapons in response to the use of nuclear and other types of weapons of mass destruction against it and/or its allies, as well as in the event of aggression against the Russian Federation with the use of conventional weapons when the very existence of the state is threatened.

One reason for speculation that the secret doctrine was different from the published text was the 2010 debate on the subject within the Russian leadership. Preemption advocates like Nikolai Patrushev, secretary of the Russian security council, and Gen. Yuri Baluevsky, a former chief of the general staff, saw preemption as a way to counter the threat of America's conventional prompt global strike capabilities. Detractors, including Col. Gen. Viktor Esin, a former chief of staff of the Strategic Rocket Forces, didn't see preemption as credible in that role. A decade ago, Russian opponents of preemption apparently won the battle over the 2010 official doctrine. Nevertheless, it remains unclear what was in the secret variant and whether there is a secret version of the new Principles document.

Troublesome incremental changes in Russian nuclear declaratory policy continued to appear, notably in the 2017 naval doctrine, which contends that “demonstrating the willingness and determination to employ force, including non-strategic nuclear weapons” strengthens deterrence in conditions of an escalating military conflict. In 2014 during the Ukraine conflict, President Vladimir Putin and other officials reinvigorated the public discussion on nuclear operational policy and simultaneously launched a nuclear saber rattling campaign to signal Russian national interests while preserving ambiguity about how far their actions would go. Putin again underlined the threat posed by a disarming strike that uses non-nuclear, high-precision weapons against key sites of Russia’s military infrastructure, telling a meeting of the Valdai Club in 2015 that such weapons are “comparable in their effect to nuclear weapons.”
Principles enumerates similar dangers that drive Russia’s need for a nuclear deterrent — none of which are surprising or new. Besides global strike capabilities, the document lists the possession and proliferation of nuclear and other weapons of mass destruction, the deployment of missile defenses, cruise missiles, hypersonic weapons, directed energy weapons, combat drones, and other nuclear-capable systems near Russia, including U.S. nuclear weapons in Europe that are part of NATO’s nuclear sharing arrangements.

In Clause 10, Principles also essentially reiterates the language of the 2014 military doctrine, stating that nuclear deterrence is ensured when Russian nuclear weapons, support forces and facilities, as well as command and control systems are maintained at a level of readiness that “guarantees the infliction of unacceptable damage on an aggressor in whatever situation.” Thus, there is no downshifting to a less demanding requirement, such as assured retaliation, for strategic nuclear forces.

What’s New in Russian Nuclear Strategy?

What is new and most striking in Russian nuclear strategy is how Principles handles the possible employment of nuclear weapons if deterrence fails. Section III on “Conditions under which the Russian Federation Transitions to the Use of Nuclear Weapons,” especially Clause 19, specifies four conditions that could lead to nuclear use. The first such condition is the possession of reliable information about the launch of ballistic missiles to attack Russian territory and/or its allies. This situation opens the possibility for Moscow to launch Russian nuclear weapons on warning of a nuclear attack instead of delaying retaliatory action until confirmation that targets are destroyed or alternatively launching while an attack is underway. Developed during the Cold War, the “launch on warning” option was considered by both sides as a means to strengthen nuclear deterrence by helping to guarantee retaliation. But, if adopted, launch on warning is also associated with the significant risk of false warning alerts and an accidental launch. The second condition is the use of nuclear weapons or other weapons of mass destruction by an adversary against Russian territory and/or its allies. Next, the third condition has to do with actions taken against Russian critical government or military installations by an adversary that would have the effect of disrupting Russia’s capacity for nuclear retaliation. Finally, the fourth condition in which Russia could employ nuclear weapons is in the event of aggression against Russia using conventional weapons that threaten the very existence of the state.

Putin and other officials have hinted at launch on warning, but such statements have not previously appeared in official documents. Even then, it is unclear whether the leadership really means launch on warning or the current posture of launch while under attack, supported by the semi-automatic Perimeter system. This system reportedly involves a degree of pre-delegation of authority to ensure that decapitation does not prevent retaliation. The third subclause of Principles’ Clause 19 is also noteworthy as it raises concerns about threats to the nuclear enterprise that are not specified but likely include cyber attacks against command and control infrastructure and/or attempted leadership decapitation.

It’s possible that the debate over a launch on warning and preemptive strikes is not resolved by the new document. It’s also possible that Moscow is concerned about potential U.S. missile deployments in Europe. With the termination of the Intermediate-Range Nuclear Forces (INF) Treaty, Col. Gen. Esin predicted that the United States would return ground-based nuclear missiles to Europe and, because of such missiles’ short flight time to Russian targets of about six minutes, Moscow would “abandon the doctrine of retaliatory strike by ‘launch under attack’ [otvetnovstreichny uydar] and move to the ‘doctrine of preemptive strike’ [uprezhdjayushchyi uydar].” It is curious that Principles only specifies launch on warning for ballistic missile attacks. Is this phrasing intended to fuel Western opposition against the return of Pershing II or similar intermediate-range nuclear systems?
ballistic missiles to Europe, or is it related to Russia’s geography problem that constrains warning time when U.S. submarine-launched ballistic missiles are launched from the Atlantic Ocean or closer to Russia?

In 2019, the United States tested both a ground-launched, intermediate-range cruise missile and ballistic missile, and dismissed Putin’s proposed freeze on missile deployments (preserving about 100 of Russia’s non-INF Treaty compliant SSC-8/Novator 9M729 ground-launched cruise missiles). However, the United States disavows intentions to return nuclear intermediate-range missiles to Europe. Both sides are also developing conventional and nuclear prompt global attack capabilities, including hypersonic weapons that similarly raise concerns about crisis stability given their greater maneuverability to change direction and avoid defenses. Some experts worry that such weapons may lead states fearing a nuclear attack in a crisis to respond promptly on warning — or even preemptively.

Principles also mentions the role of “uncertainty” in deterrence, which — at one level — is evidently a factor underlying Putin’s nuclear threats. With respect to uncertainty in ensuring a survivable second-strike capability and nuclear command, control, and communications, both Soviet history and U.S. experience are again instructive. Although it invested in a more survivable triad, Washington has faced the vulnerability of its land-based forces and, like Moscow, seeks to maintain a resilient nuclear command, control, and communications system despite myriad challenges, including some from new Russian and Chinese anti-satellite weapons. American policymakers historically debated a launch on warning posture — especially for U.S. ground-based intercontinental ballistic missiles — yet resolved, according to a Reagan administration nuclear employment policy directive, not to irrevocably rely on a launch on warning posture but to “leave Soviet planners with strong uncertainty as to how we might actually respond to such warning.”

From the standpoint of national policy, Principles, which was issued by presidential decree (ukaz), is a reminder that Putin is the most actively engaged Russian leader on nuclear weapons since Nikita Khrushchev. Putin is far more successful than Khrushchev in rebuilding Russian military and nuclear capabilities without breaking the economy or losing power while also perhaps the most nuclear attentive current leader of any contemporary nuclear weapons state. Principles reminds us that, like the American president, the Russian president has the responsibility to decide the use of nuclear weapons. Putin is unusually blunt in signaling Russia’s willingness to exploit its nuclear strength and declares the active deterrent relevance of nuclear weapons such as in the event that the United States or NATO attempt to use force to reverse Russia’s annexation of Crimea. This coercive form of nuclear signaling reflects the Russian emphasis on deterring major powers by means of intimidation and the punishing use of Russian nuclear forces.

Russian Nuclear Forces

Putin has presided over Russia’s most extensive and costly nuclear modernization program since the Cold War, which has led to the development of six new nuclear systems designed to ensure a robust deterrent and capabilities for multiple contingencies. Russia’s exotic new systems — especially the Avangard nuclear-armed hypersonic glide vehicle that will sit atop an intercontinental ballistic missile and the multi-megaton Poseidon, a nuclear-powered and nuclear-armed torpedo with transoceanic range — while not necessarily designed to achieve greater destruction than the current arsenal, are not counted under New START Treaty limits but vividly challenge assertions of U.S. nuclear primacy. They give credence not only to deterrence but also to Putin’s demands to “listen to us now” and take Russian interests seriously. For reassurance, which reflects the other side of the coin that nuclear war is best avoided, Putin embraces the reality of mutual assured destruction, and disavows that Russia would attempt all-out preventive nuclear strikes — but hasn’t ruled out more limited preemptive strikes.
What about a potential Russian fait accompli operation against a U.S. ally or partner that Moscow could terminate with the limited use of low-yield nuclear weapons in accordance with the so-called “escalate to de-escalate” concept? Current and former Western officials infer aggressive intentions from increased Russian deployments of tactical and intermediate-range ballistic missiles, including the SSC-8, from Russia’s aggression towards Ukraine, and from their own confirmation bias in reading Russian military statements about nuclear use for de-escalation. Indeed, the 2018 U.S. Nuclear Posture Review asserts that “Russia has demonstrated its willingness to use force to alter the map of Europe and impose its will on its neighbors, backed by implicit and explicit nuclear first-use threats.” American conflict scenarios start with Russian aggression and shift to the Russian first use of nuclear weapons in either demonstration or small strikes to coerce NATO to abandon allies.

Given Russia’s large and growing stockpile of non-strategic nuclear weapons, providing credible response options to deter limited nuclear attacks is a prudent measure. One such response option involves modifying some W76 Trident II warheads to include survivable low-yield W76-2 warheads on U.S. nuclear ballistic missile submarines. These modifications, which do not increase the total U.S. nuclear stockpile, strengthen the package of available limited nuclear options to demonstrate U.S. credibility and will to respond to even limited Russian nuclear first use, helping ensure that attempted Russian aggression will fail.

On the other hand, U.S. statements and analyses about Russian writings on escalation are frequently problematic or incorrect, relying on quotations out of context or Russian military debates about proposed changes to doctrine. Of course, Russians do not write about how they will seize the Baltic states and lob a few nuclear missiles at NATO allies to convince them to abandon the fight; at the same time, there is no expectation embedded in Russia’s strategy that they can escalate their way out of failed conventional aggression, as U.S. officials frequently allege. Rather, a willingness to escalate is deemed essential for deterrence by providing a means to impose costs, increasing the risk of what comes next, or denying the opponent his objective. The deterrent logic of resorting to escalation with the limited use of nuclear weapons could be to compel the United States and its allies to back down when Russian critical assets are under aerospace attack, as noted in Clause 19. Other than demonstrating a readiness and resolve for deterrence, official Russian doctrine does not specify how Moscow might employ its non-strategic nuclear weapons.

With this detail in mind, Western readers should resist misinterpreting Clause 4 in Section I about “General Principles,” which states that, besides deterring aggression against Russia, the objective “in the event of a military conflict” is to “prevent the escalation of military actions and end them under conditions acceptable” to Russia and/or its allies. In previous official statements, the standard formulation was to end conflict on “favorable” terms; now, it expects only “acceptable” conditions. Perhaps this change is another signal that Russian doctrine should not be erroneously characterized as “escalate to win.” Principles goes on to underscore the defensive nature of nuclear deterrence, the aim for sufficiency in force requirements, and that Russia considers nuclear weapons solely as a deterrent — the use of which would constitute an extreme and necessary measure.

This interpretation is not to deny that Russian planners probably have secret nuclear weapons employment guidance that specifies a range of possible options for integrating conventional and nuclear forces in support of global or regional objectives. However, Principles is not that document. Instead, it outlines Russian ideas about deterrence and only hints at deterrence/employment trade-offs.

Consider the Audience and the Context

Principles of State Policy Nuclear Deterrence is clearly aimed at multiple audiences. The Kremlin seeks to signal its updated declaratory policy to domestic stakeholders — like the Russian military
and defense community, as well as diplomats dealing with security and arms control. Moreover, the document is meant to shape opinion among international opponents and potential partners. Nevertheless, it will not resolve all the debates about Russian nuclear policy. The document’s timing follows Washington’s termination of the INF Treaty after Moscow refused to come back into compliance. It is probably no accident that Principles emerged while the U.S. is engaged in its own nuclear modernization program. Russians perceive further U.S. improvements to strategic forces, both conventional and nuclear, as part of a continuous effort to stalk Russia’s nuclear deterrent and deny Moscow a viable second-strike option.

Another reason that Principles should be read through a Russian lens involves Russia’s long preoccupation with forestalling the risk of potentially fatal first blows — from preempting its adversaries in 1914, which led to disaster and defeat in World War I, to the opposite decision in 1941, when Stalin rebuffed the General Staff for advocating a preemptive attack against the German army massing on the border. The German invasion led to catastrophe and near defeat for Russia before its arduous and costly victory in World War II. From this experience, the Russian military learned not to cede the initiative or wait to act until the enemy lands its devastating first blows but, instead, to anticipate and when feasible preempt the enemy. This lesson is arguably not the right one for either the circumstances in 1941 or the nuclear age. Even if it’s only a coincidence that Principles emerged at the beginning of June, in between the 75th anniversary of Russia’s victory in the Great Patriotic War, which was rescheduled because of the novel coronavirus pandemic, and the remembrance of the German attack on June 22, it should be remembered that Russia’s attention to preemption — both as an opportunity and a threat as from a surprise nuclear strike — has strong historical roots.

Looking Ahead

Debate over Russian nuclear intentions will not end with the publication of Russia’s new statement about its deterrence policy — nor should it since both the United States and Russia consider the nuclear deterrence mission as the bedrock of their national security. Nevertheless, U.S. policymakers and analysts should read Russian statements and publications more carefully to avoid succumbing to confirmation bias. A better understanding of Russian intentions and perspectives would help advance critical analyses of the nuclear policy challenges facing the United States and its allies.

It’s doubtful that Principles of State Policy of the Russian Federation in the Sphere of Nuclear Deterrence will impact the current stalemate in nuclear arms control, although that may be one of its motivations. The document mentions that Russia’s principles for nuclear deterrence are in compliance with arms control obligations and universally recognized norms of international law. However, there is little in Principles that will likely energize the Trump administration to negotiate an extension of the New START Treaty or settle on a concrete plan to build on it.

What this new document could do is structure future strategic stability talks, which Moscow and Washington agreed to resume in May. Given misconceptions about doctrines, policy directives, and intentions, there is an advantage in seeking improved explanations and airing disagreements, especially in the nuclear realm where miscalculations can have catastrophic consequences.

Cynthia Roberts is a professor of political science at Hunter College, City University of New York, and a senior research scholar at the Saltzman Institute of War and Peace Studies, Columbia University.


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."

DISCLAIMER: Opinions, conclusions, and recommendations expressed or implied within are solely those of the authors and do not necessarily represent the views of the Air University, the United States Air Force, the Department of Defense, or any other US government agency.