

WASHINGTON ICBM CONTRACTORS (ICons) GROUP



20 Sep 2020

Sep ICons:

Location: Virtual

Date: 23 Sep

Time: 10:30 EDT

ADMINISTRATION/PROGRAM SPECIFICS

'Tipping Point' Is Here for Nuclear Modernization, Defense Official Says

<https://www.defense.gov/Explore/News/Article/Article/2351959/tipping-point-is-here-for-nuclear-modernization-defense-official-says/>

BY: [C. TODD LOPEZ](#), for DOD NEWS // SEPT. 17, 2020

Important Further Reading:

<https://www.defense.gov/Experience/Americas-Nuclear-Triad/>

<https://www.armed-services.senate.gov/hearings/20-09-17-matters-relating-to-the-budget-of-the-national-nuclear-security-administration>

<https://www.defense.gov/Explore/News/Article/Article/2351959/tipping-point-is-here-for-nuclear-modernization-defense-official-says/>

https://www.armed-services.senate.gov/imo/media/doc/Lord--Richard_09-17-20.pdf

The Defense Department has long talked about modernization of the nuclear deterrent capability it maintains and operates and has issued warnings about the risks of allowing that deterrent, the [nuclear triad](#), to become too old to effectively perform its mission.

Now, **Ellen M. Lord**, undersecretary of defense for acquisition and sustainment, said the nuclear enterprise has reached a critical juncture beyond which failure to act will have devastating consequences going into the future. "Today, we face a stark reality: the long-standing and repeated warnings about the need to modernize and recapitalize the U.S. nuclear deterrent is no longer a warning about the future," Lord said during testimony today on Capitol Hill before the Senate Armed Services Committee.

"The tipping point in recapitalization that we have long tried to avoid is here. And we believe the condition of the nuclear enterprise now poses possibly the greatest risk to deterrence." In a prepared statement to the committee submitted by Lord and Navy Adm. Charles A. Richard, commander of the U.S. Strategic Command, both of whom testified, more details about the state of the U.S. nuclear deterrence were spelled out.

"Previous and well-intentioned directive policy changes and de-emphasis of our nuclear deterrent resulted in decades of deferred investments in nuclear warheads, delivery systems, platforms, nuclear command, control, and communications and supporting infrastructure," the statement reads. "Although sustainment efforts have allowed us to maintain a viable nuclear triad and to defer modernization investments for many years, continued delays are no longer an option."

The statement from both of those defense leaders concludes that nearly all of the systems currently a part of the nuclear deterrent are beyond their original service lives and can no longer be cost-effectively maintained to meet future requirements. Additionally, they said, the nuclear weapons production infrastructure used to develop new weapons dates to the 1950s or earlier. "The majority of this infrastructure is rated as being in no better than fair condition," the statement reads.

The department is now engaged in a recapitalization of the nuclear triad, which involves new submarines, such as the Columbia-class ballistic missile submarines; new intercontinental ballistic missiles as part of the Ground Based Strategic Deterrent program; and new bomber aircraft, such as the B-

21 Raider. That effort, Lord said, is something the department will need help with. "DOD has embarked upon the first recapitalization of our triad since the end of the Cold War, and we cannot do it alone," she said.

Lord cited partnerships between DOD, the Department of Energy and the National Nuclear Security Administration as critical to continued work to rebuild the U.S. nuclear deterrence capability. Also a critical part of that partnership, she said, is the Nuclear Weapons Council, an interagency group made up of both the DOD and the NNSC that oversees sustainment and modernization of nuclear weapons and supporting infrastructure. Lord serves as chairwoman of the NWC.

"On behalf of the NWC, I strongly urge full support for the NNSA's budget request, as well as successful resolution of the language in various FY21 congressional bills that would prevent the NWC from carrying out its statutorily mandated responsibilities," Lord said. "I want to thank this committee for its long standing bipartisan support to our nuclear deterrent mission and the men and women in uniform who are its backbone."

Five Takeaways From the New Air Force Chief's Vision 'Accelerate Change, or Lose'

RealClearDefense.com, 12 Sep 20

Mackenzie Eaglen

The Air Force's new chief didn't waste time or mince words in his vision document, aptly entitled "Accelerate Change, or Lose." General Charles Brown, Jr., is sending up flares, and policymakers should pay attention. The time is ripe, he asserts, while still in the early years of a new defense strategy, having just stood up a new service in the Space Force, and during a pandemic. Here are the five key takeaways.

1. The Risks Are Real

A "large and growing body of evidence" suggests America's armed forces will lose in great power competition if they fail to adapt, Gen Brown notes. If the Air Force doesn't change, the service risks "losing a high-end fight"—and along with it, airmen, credibility and security. The consequences of failure, the chief says, are profound. Outright mission failure is very real. Capital losses are not just possible, but likely, in the next big war. In clear words targeted at an audience much wider than the Air Force, Gen. Brown says Americans cannot wish away the risks. Nor can the Air Force afford to shy away from tough conversations with key stakeholders, including the other services, civilian leaders, industry and Congress. Additionally, the service seeks a better balance of risks across these groups. What might an example of better risk sharing mean exactly? Air Force leaders keep sending up budgets that buy more strategy outcomes, as they've been directed. But Congress keeps shooting down their proposals to retire significant numbers of aircraft to free up funds to better win the competition with China. The U.S. has just 157 heavy bombers. Some should be retired, and others preserved to keep longer the ones with the most life left.

Another example of better burden and risk sharing is to quash the notion that all the services can and should pursue any means of deep attack. More long-range strike capability is worthy, but there simply isn't enough money to go around for all the services to go off in different directions.

2. Speed, Speed, Speed. In Everything: Go Faster (But Do Less)

Bringing a distinctly Asia-Pacific lens by which he sees future challenges given his most recent job before this, Gen. Brown is a man in a hurry, in part because the “warning signs have been blinking for some time.”

Resident in the National Defense Strategy’s five key challenges, he notes that four of them are in USINDOPACOM's area of operations. The region covers over half the earth’s surface and is home to 60 percent of the world’s population.

Right now, the services bring their individual platforms to bear as part of global force management. But this is like a military JENGA® puzzle where the services put in and pull out various parts without fully knowing the risks. Sometimes, this hurts the other services.

Combatant commanders and civilian defense leaders and overseers also need to be more disciplined about the use of force—for any reason, including to keep the peace. The Air Force, and all the services, must say “no” to themselves more often. Restraining the appetite for presence, assurance, and deterrence missions are essential to harvesting people, money, and risk to better focus on achieving strategic goals.

Leaders must ask themselves: Does the instinct to “do something now!” solve short-term problems but cause harm in the Future Years Defense Plan by wearing out man and machine faster? More prudent employment of forces is required. Great power competition is a decades-long effort, and the Defense Department cannot hope a series of sprints will be enough to prevail.

3. Time for a Robust Roles & Missions Review

With urgency, Gen Brown highlights that “likely future budget pressures will require the most difficult force structure decisions in generations.” He goes on to warn that “the worst outcome would be to ... cut DoD funding without adjusting the strategy or priorities.” To him, this “would amount to sequestration by another name.”

He’s not wrong.

If budgets are falling, the services need to adjust downward to what they are doing and what they are buying. Gen Brown fires a warning shot, stating that “programs that once held promise, but are no longer affordable or will not deliver needed capabilities ... must be divested or terminated.”

The Air Force needs help from stakeholders outside the service. According to Gen Brown, the Air Force has “many constraints and restraints that could hamper our ability to achieve our objectives as originally envisioned.”

More intelligent risk-taking needs to be incentivized, the new chief notes. Stakeholders from within the Pentagon to Congress to industry must “acknowledge, balance, and share” more risk with the Air Force.

Distributing risk more equitably and honestly requires a candid assessment of each organization’s own “internal impediments to change.” Winning the long-term competition requires “ruthless prioritization,” and decisions must be framed with an enterprise-wide perspective.

How can policymakers do this? According to Gen Brown, the first step is to “rethink prior assumptions and take steps towards consolidating and reducing redundancies” across the services.

Should the Air Force take on air base defense even though the Army is also heavily pursuing counter-drone weapons? Handing it to the Air Force could “better defend the fenceline against all threats from small [unmanned aerial systems], all the way through hypersonics,” Gen. Brown has said previously.

4. People, Payload & Effects Over Platforms

The new chief also wants change to come to thinking and to processes, including the Air Force's personnel structure. He laments the multiple deployment models that need to be more standard and uniform across the service.

Trust and empowerment need to be pushed down to lower levels of service. Gen Brown wants the Air Force to develop and build a "deep institutional understanding of China and Russia" and bolster incentives and rewards for airmen who get it.

The Air Force must create “viable sustainment pathways” to incorporate “innovative ideas” from airmen, according to Gen. Brown. Decisions about what to buy must be better informed by and linked to “how they fare against our understanding of competitors’ theories of victory, ways of war, and force development strategies.”

The service is going broke based on the ever-rising costs of sustainment for old equipment, continuous operations, and long-deferred modernization, according to Gen Brown. The “Terrible 20’s” are here, and they don’t accept the same old worn out Band-Aids to work as solutions to buy more time until someone else makes the tough choices any longer.

5. The Air Force Must Work Differently With Stakeholders

Competition is interactive, and it requires a continual assessment relative to our adversaries' adaptations, Gen. Brown said. The new boss wants to throw out the old metrics of cost, schedule, and performance for more relevant metrics of acquisition success.

The Pentagon simply must conceive, develop, and field new capabilities "inside our competitors' fielding timelines." Beating China and Russia in conflict requires we beat them in development and fielding of capability, according to Brown.

In other words, “good enough today will fail tomorrow.” The chief knows that past success is no guarantee of future performance.

According to the Air Force acquisition executive, Dr. Will Roper, China is growing to scale in terms of GDP, overall population, and sheer quantity of annual STEM graduates. This means the Air Force must be disruptive, depriving China of the time to bring that massive scale-to-bear. Put another way, Air Force leaders want the service to become the “Mike Tyson of counter-punchers” to keep China regularly off balance.

The services need to be able to bring into the force in real-time emerging commercial technologies, without the traditional acquisition “Valley of death.” Faster buying must then be paired with innovative concepts of operation and a hefty amount of testing, evaluating and training.

--Mackenzie Eaglen is a resident fellow at the American Enterprise Institute

Top admiral: 'No condition' where US should conduct nuclear test 'at this time'

https://thehill.com/policy/defense/516897-top-general-no-condition-where-us-should-conduct-nuclear-test-at-this-time?utm_source=&utm_medium=email&utm_campaign=33244

BY [REBECCA KHEEL](#) for THE HILL // 09/17/20 12:51 PM EDT

The top military officer in charge of the U.S. nuclear arsenal said Thursday there is “no condition” right now where he would recommend conducting an explosive nuclear test, though that could change in the future.

“At this time, there is no condition — nothing has changed, right — there is no condition where I would recommend the need for nuclear testing,” Adm. Charles Richard, commander of U.S. Strategic Command, told the Senate Armed Services Committee at a hearing. “But I would say though that it is important for the nation to maintain an ability to do a nuclear test should an issue arise in the future, and I’ve been formally documented in making that recommendation,” he added.

Richard’s comments come as lawmakers are [preparing to reconcile](#) competing versions of the annual defense policy bill that take opposite approaches to nuclear testing. The Senate’s version of the National Defense Authorization Act (NDAA) includes \$10 million to “carry out projects related to reducing the time required to execute a nuclear test if necessary.” The House’s NDAA, however, would prohibit funding from being used “to conduct or make preparations for any explosive nuclear weapons test that produces any yield.”

A conference committee to reconcile the two bills has not been formally convened, but staffers on the House and Senate Armed Services committees have been conducting informal negotiations since the chambers passed their bills in July. The idea of the United States conducting its first explosive nuclear test in decades became a flashpoint after reports that the Trump administration raised the possibility of performing a test as a negotiating tactic in arms talks.

The administration is seeking a new arms control agreement with Russia and China to replace an expiring arms treaty between Washington and Moscow known as New START. Beijing has repeatedly rejected joining the talks. Opponents of the House language argue it is too restrictive, preventing any tests that might be necessary in an emergency and thereby emboldening U.S. enemies.

But opponents of resuming nuclear testing argue doing so would trigger an arms race and be detrimental to human health and the environment while providing no practical benefit because the safety and reliability of the U.S. nuclear arsenal is checked with other technology. Meanwhile, Republicans on the Senate Armed Services Committee also fumed at Thursday’s hearing about several other proposed changes to budgeting for the Nuclear Weapons Council (NWC) and National Nuclear Security Administration (NNSA) in the House NDAA, as well as in the House version of the annual Energy Department spending bill.

Among the changes at issue, the House-passed Energy Department spending bill would block funding for the NWC “to guide, advise, assist, develop or execute a budget for the National Nuclear Security Administration.” Senate Armed Services Committee Chairman [James Inhofe](#) (R-Okla.), who has advocated for increasing the role of the Pentagon-led NWC in developing the NNSA’s budget, railed against the proposed changes, accusing the Energy Department of conspiring with House Democrats to “undermine” the NNSA’s relationship with the Defense Department.

“Recently, I’ve learned that individuals from the Department of Energy have worked behind the scenes with House Democrats on ill-advised legislation that would: bury the Nuclear Weapons Council in unneeded bureaucracy and bring its decision-making process to a grinding halt; prohibit all cooperation between NNSA and the NWC for maintaining the safety and security of our nuclear weapons; destroy the NNSA’s congressionally-mandated independence and drag us back to the dysfunction of the Clinton years; and do lasting and possibly irreversible harm to the President’s efforts to preserve and improve our deterrent — an effort even former President Obama understood was necessary,” Inhofe said.

Inhofe [also released a letter](#) from Defense Secretary [Mark Esper](#) that warned proposals in the House NDAA and Energy Department bill would “put modernization of the United States’ nuclear deterrent at unacceptable risk.”

Here’s how Global Strike Command is shifting its focus to China, Russia

Air Force Times, 13 Sep 20

Stephen Losey

Unlike the wars the nation has fought over the past two decades against terrorists and violent extremist groups, the next one — potentially against China or Russia — threaten the nation’s survival, said Gen. Timothy Ray, head of Air Force Global Strike Command.

Those potential adversaries are modernizing in a way that the United States is not, Ray said Sept. 11 in an emailed response to questions. Those peer nations have modernized their nuclear weapons and systems to deliver them, Ray said.

To keep pace, he said, the United States needs to modernize its network of bombers, submarines and intercontinental ballistic missiles, in part by developing new technologies. This is how Global Strike plans to respond to Chief of Staff Gen. Charles “CQ” Brown’s recent call for the Air Force to “accelerate change or lose,” Ray said.

The Air Force is already working on this by developing the B-21 Raider bomber. But until enough B-21s are ready, the Air Force will need to keep sustaining and modernizing the existing — and aging — B-1, B-2 and B-52 bomber fleet, he said.

The Air Force awarded a contract to Northrop Grumman Sept. 8 to build the next generation of ICBM, the Ground-Based Strategic Deterrent. This will replace the 50-year-old Minuteman III ICBM, Ray said, which was originally only meant to serve a decade.

“Our contribution to the joint fight, and frankly national-level power, is not a birthright and must be continuously invested in and evolved,” Ray said. “We must keep our nuclear modernization and investments in long-range strike stable and on time to ensure we’re positioned for the 21st century.”

The Air Force will continue to invest in long-range strike. In fact, it has “no substitute ... regardless of what you hear to the contrary,” he said.

“No matter where you look, the Air Force has proven time and again that rapid, flexible power projection — anywhere and anytime — is one of our bread-and-butter mission sets, and the premium on those attributes increases as we look ahead,” Ray said.

Global Strike’s ability to keep operating during this year’s COVID-19 pandemic, with just a small number of cases, was one of the things of which he is most proud.

ICBM airmen began pulling two-week alerts, he said, the longest in history. And in January, Global Strike began conducting tabletop exercises, worked with local civilian agencies and reached out to academia and business to create real-time models to map the spread of the virus around bases.

That predictive modeling gave wing commanders data they needed to make accurate, timely decisions to protect bases without applying a “one-size-fits-all” solution, Ray said. Commanders had the ability to dial up or down protective measures as they saw fit, he said.

“We never faltered,” Ray said. “The nation expects us to be ready under all conditions. ... The coronavirus has not, and will not, stop us.”

As the pandemic spread across the planet, Global Strike Command kicked off a series of engagements and training missions by sending bombers and their crews to the Western Pacific, Europe and the Arctic, Ray said.

These Bomber Task Force missions — including the recent “Allied Sky” mission, in which six B-52s from Minot Air Force Base in North Dakota flew over all 30 NATO countries in Europe in a single day — helped build relationships with allies and partner nations, he said.

Global Strike also focused on trying to fix its ailing B-1B Lancer fleet, Ray said, by preparing a two-year “roadmap to recovery.” Some B-1s have taken part in deployments to the Pacific region, he said, showing the fleet’s improving health. However, some B-1s still need “significant structural repairs,” and Global Strike is working to retire 17 that have most frequently been flown in ways they weren’t designed for in the Middle East, he said.

In December, Global Strike stood up Detachment 7 at Duke Field in Florida to prepare to receive the MH-139A helicopter, known as the Grey Wolf, Ray said. This will replace the UH-1N fleet, and provide security and support for ICBM fields in Wyoming, Montana, North Dakota, Colorado and Nebraska.

Over the next year, Ray said, he hopes Global Strike will continue improving its culture, by dealing with issues of race, diversity and inclusion.

And, he said, Global Strike will continue moving forward with programs such as the B-21, the B-52 modernization, the GBSD missile, and the Grey Wolf helicopter.

“We’re building an enterprise that is naturally inclined to innovate while moving forward,” Ray said. “These airmen will be the ones who will preserve and perfect the production of American air and space power, in the same way our airmen accomplish this today.”

U.S. Air and Space Forces are accelerating innovation to deter and defend the American way of life

Secretary of the Air Force Public Affairs, 14 Sep 20

Secretary of the Air Force Barbara Barrett

ARLINGTON, Va. -- This week, U.S. Air Force and U.S. Space Force leadership will gather for the Air Force Association 2020 Virtual Air, Space and Cyber Conference, an annual showcase for the services’ latest thinking.

This year we welcome four Department of the Air Force leaders in their new roles: Gen. CQ Brown, Jr., the Air Force Chief of Staff, CMSgt. JoAnne S. Bass, Chief Master Sergeant of the Air Force, Gen. John “Jay” Raymond, the first Chief of Space Operations, and CMSgt. Roger A. Towberman, Senior Enlisted Advisor of the United States Space Force.

Gen. Brown brings a wealth of experience, from leading the air campaign against ISIS to his most recent assignment as commander of Pacific Air Forces. For the past two years, Gen. Brown has countered the challenge of a rising Chinese military threat. Both Gen. Brown and CMSgt. Bass keenly understand the urgency of accelerating change to improve how we operate, train, and equip our nation’s Air Force.

Gen. Raymond and CMSgt. Towberman are building the U.S. Space Force to maintain national security. Under their leadership, Space Force is moving boldly to defend and advance U.S. and allied interests in the increasingly competitive space domain. The Space Force mission is critical to the American way of life. Every day, the Nation depends upon space-provided navigation, information, and communication.

American capabilities in air and space are under threat. Both Russia and China are investing significantly to negate American defenses, from the development of anti-satellite weapons to standing up formidable anti-aircraft networks.

U.S. Air and Space Forces are developing game-changing technologies, including artificial intelligence-driven systems, low-cost “attritable” aircraft, and a real-time information-sharing network to reinforce deterrence, expand defenses, and keep American military forces one-step ahead of adversaries.

There is more to do. The Department of the Air Force is accelerating innovation to equip U.S. Air and Space Forces to deter and, if necessary, defeat aggression. The Department will collaborate with Congress to fund new systems and capabilities to deter future conflict in air, space, and cyberspace and maintain peace.

To respond effectively to the threats of tomorrow, the National Defense Strategy requires us to accelerate force modernization today.

--Barbara Barrett is Secretary of the Air Force

Air Force seeks a radical shift in how jets, missiles and satellites are designed

Washington Post Online, 15 Sep. 20

Aaron Gregg and Paul Sonne

When Will Roper, the top acquisition and technology official at the Air Force, first saw how Boeing and Saab came up with the design for the Air Force's new training jet, he realized the way the military devises new weapons, planes, satellites and missiles needed to change.

When designing the T-7 Red Hawk trainer aircraft, Boeing and Saab relied heavily on computer models to test system designs and iron out inconsistencies, a far less time-consuming approach, Boeing executives said in an interview, than physically piecing together the plane's advance system. Though the company has long employed various forms of digital modeling, Boeing executives said the T-7 relied more heavily on it than any of the company's previous aircraft.

Now Roper wants to make this sort of process a requirement for companies building any of the Air Force's premier systems in the future. He is hoping to usher in a new era of weapons development in which computer-generated models — owned by the government and enabled by artificial intelligence technology — can test millions of possible designs in a virtual format before ever creating a prototype.

In this case, the outcome that seemed to impress him the most was the plane's low price. Boeing's Arlington-based defense division is known in the aerospace world for underbidding its rivals.

"For me, the Sputnik moment was looking under the hood at T-7," Roper said. "The airplane came in at a much lower cost than we expected, which begs the question: How? That took me on the odyssey of how it was designed and assembled."

What surprised Roper about the design process for the T-7 was the use of what's known as "digital threading," in which designers created a digital twin for the jet before manufacturing it. Starting in a virtual format means they can modify and test the plane's systems with various configurations over the course of its design.

For Boeing, seeing a top Air Force official hold up the T-7 as a model for aircraft design should come as a welcome reprieve at a difficult time. The company's reputation for sound engineering has been called into question over design flaws in the 737 Max commercial jetliner, which went undiscovered until a pair of plane crashes killed 346 people. Boeing's defense and space division, despite problems with the KC-46 tanker and the Starliner capsule, has been more stable by comparison.

Roper recognized that a mostly digital design process represented a significant departure from the traditional way of doing things.

"There is an old adage in defense acquisition called 'fly before you buy.' It's a caution that you ought to build something and test it out before you commit to buying it," Roper said. "Today, you can digitally buy and fly before you even commit to buying that first prototype. Let's do that in the military and then we can design things more frequently."

Using a digital thread in the design process allows automated checks to happen in the background as the product is modified, essentially ensuring that as different parts of a plane or missile system are designed, they all fit together and don't face integration problems.

Roper said that in the past, with the manual design of aircraft, small differences in parts that don't fit together well can end up becoming big problems — like when you are trying to put together a piece of furniture from Ikea and for some reason the holes don't line up. Even a variance of a thousandth of an inch within a complicated system can create expensive headaches.

Mechanics can also learn how to assemble the plane digitally. For the Red Hawk, Roper said, mechanics were trained in a simulator to build the aircraft before it was ever put together in the real world.

"They achieved the same quality on their first airplane that would normally be achieved on the hundredth," Roper said, because they came with the experience of having built the plane digitally.

Because of the approach, Roper said, the Air Force has been able to complete assembly and subsequent maintenance of the T-7 in record time, which he described as "off the charts, not near any other airplane in recorded history."

It remains to be seen whether the T-7 will live up to expectations. It's possible the low price and faster assembly process could entail trade-offs in other areas.

The U.S. Space Force, which was created out of the Air Force last year, also will apply this method to new system designs, including the missile system that will replace the Minuteman III ICBM fleet. Roper said Northrop Grumman created a digital twin and tried out over 6 billion different variants of the new ICBM using artificial intelligence and machine learning to weigh the trade-offs between cost and different possible characteristics.

It is also employing it to design a futuristic fighter jet meant to follow current aircraft such as the F-35 Joint Strike Fighter, under a program called Next Generation Air Dominance, or NGAD. That program has progressed to the point where a physical prototype — already designed, assembled and tested in a virtual system — has been flown, Roper said Tuesday.

If this approach is expected to become the norm, it will require a significant shift for U.S. weapons makers. An Air Force spokeswoman said the department does not yet have a written policy requiring digital design processes but is working on one. Roper says he considers the new approach to be a mandate for which any exception requires his personal sign-off.

This kind of process shift — particularly the related requirement that the digital technology be fully owned by the government — could be controversial for large defense companies that prefer to own and profit from the intellectual property underlying their products.

Hawk Carlisle, a retired Air Force general who now leads the National Defense Industrial Association, said a range of proprietary digital engineering efforts are already underway. He added that the defense industry on the whole would do well to transform its development process accordingly.

With digital engineering, "you can produce an airplane that is much faster, has fewer challenges in the manufacturing process, and is much more accurate and perfect. This is the way we have to go, and it's about getting speed and capability out to the warfighter quickly," he said

Esper Downplays Russia's Threat: Not a Challenge in the Future

<https://www.usnews.com/news/world-report/articles/2020-09-16/defense-secretary-esper-downplays-russias-threat-not-a-challenge-in-the-future>

Esper's deriding comments – akin to those that have infuriated Vladimir Putin the past – come amid a new Pentagon shift to focus primarily on China.

By [Paul D. Shinkman](#), Senior Writer, National Security for US News // Sept. 16, 2020, at 4:41 p.m.

THE SECRETARY OF defense on Wednesday dismissed Russia as unable to present persistent dangers to the U.S., marking a notable shift in the Pentagon's view of the global threats for which it must prepare.

"China has a vast population, its resources, its vast dynamism of its economy," Defense Secretary Mark Esper said at an event organized by the RAND Corporation in California, "very different from Russia in terms of demographics." "We see Russia as a challenge right now, but in the future, less so." Esper's comments mirror the kind of American denigration for the former Soviet republic that has reportedly [infuriated Russian President Vladimir Putin](#) in the past, including in 2014 when then-President Barack Obama referred to Russia as a "regional power."

Though Russia's economic and military might cannot compete with the size and scope of the U.S or China, it has proven successful in some instances at undermining American interests around the globe. Moscow's decision to prop up the Assad regime in Syria prolonged the civil war there and the terrorist threats that thrived within it. That strategy preceded the current dwindling U.S. presence in the northeastern reaches of the country with [little influence on events there](#). Russia has also seen similar successes in influencing the [ongoing fighting in Libya](#).

Whether or not Russia [paid bounties to the Taliban](#) to kill Americans, its [documented financial support](#) for the insurgent network has derailed years of U.S. attempts to extract itself from the same warzone that stymied the Soviets. And Russia remains a [persistent danger to U.S. elections](#), both through its sophisticated [propaganda campaigns](#) along with American intelligence concerns of pernicious [cyber attacks](#).

In his prepared remarks, Esper did not mention Russia's nuclear forces, but made a passing reference to the need to improve America's own nuclear weapons and defenses. The secretary – who has reportedly [fallen out of favor](#) with President Donald Trump – did cite the instability Moscow has sowed in recent years through its military interventions into Georgia in 2008 and Ukraine in 2014 and its "blatant disregard for international rules and norms."

"These revisionist powers are using predatory economics, political subversion, and military force in an attempt to shift the balance of power in their favor, and often at the expense of others," Esper said, referencing Russia and China. The secretary spoke at RAND during a broader trip to California this week to inspect the private industries that support U.S. defense, including helping to expand the Department of the Navy to meet what the Trump administration considers a growing threat from China.

Esper said among his chief goals is now "to focus the department on China," building bureaucracy to better understand its military threats and how to counter them and bolstering alliances with countries in the region – [principally India](#). Pentagon officials including Esper have previously described

the current Defense Department strategy as one focused on "near-peer adversaries" to include both China and Russia, in addition to peripheral threats from rogue states with greater nuclear ambitions such as Iran and North Korea as well as from terrorist groups.

On Wednesday, Esper said the Indo-Pacific region is now "our priority theater." "Not only is this region important because it is a hub of global trade and commerce, it is also the epicenter of great power competition with China," Esper said.

US threatens sanctions for China and Russia over Iran arms deals

<https://www.msn.com/en-us/news/world/us-threatens-sanctions-for-china-and-russia-over-iran-arms-deals/ar-BB19778N?ocid=msedgdhp>

By: Joel Gehrke for the Examiner // 13 hrs ago

Chinese and Russian defense companies that strike weapons deals with Iran will suffer the “very full force” of U.S. sanctions, according to the State Department, despite Western disagreements about the legality of President Trump’s move to renew an [international arms embargo](#).

“It’s the position of the United States that the arms embargo should be extended, and had it been extended, we would not have had to snap back to restore the full panoply of U.N. sanctions,” State Department special representative Elliot Abrams, the lead official for Iran, told reporters Wednesday. “So, one practical effect, we believe, will be to say to arms manufacturers and traders around the world that if you engage in business with Iran, very full force of these new, or rather restored, sanctions will be felt immediately, they will be placed on you.”

That threat raises the specter of a U.S. crackdown on China and Russia, which American officials [describe](#) as eager to sell high-end weapons systems to the rogue regime. The degree to which European allies would coordinate in that effort remains in doubt, because most Western countries reject the legitimacy of Secretary of State Mike Pompeo’s decision to invoke the “snapback” mechanism of the 2015 Iran nuclear deal that triggers the renewal of the arms embargo and the rest of the sanctions waived by the pact.

“We’ll do all the things we need to do to ensure that those sanctions are enforced,” Pompeo said Wednesday while recalling that the renewal of U.S. economic sanctions on Iran after the 2018 exit from the deal proved efficacious despite European political objections. “I think anyone who has stared at the state of the Islamic Republic of Iran’s financial situation today [can see] we’ve been very successful in spite of what the world said would happen if we made the decision the president made rightly back in May of 2018.”

European powers broke with the U.S. last month at a pair of high-profile junctures at the United Nations Security Council, first by [abstaining](#) from a vote over a U.S. resolution to extend the expiring arms embargo (a doomed effort, in their eyes, given Russia and China’s ability to veto the resolution) and then by arguing that the U.S. [surrendered](#) the prerogative to trigger the Iran deal snapback when Trump withdrew from the pact in 2018.

Still, British Foreign Secretary Dominic Raab downplayed the disagreement Wednesday after his private meeting with Pompeo. “We share the U.S. concerns about Iran and the Iranian threat both on the nuclear side of things but also the wider destabilizing activities in the region,” he told reporters at the State Department. “Our ambition for a broader rapprochement, a more comprehensive deal is, I think, in exactly the same place as the U.S.

And frankly, all of the other issues, the means by which we get there, there may be shades of difference, but we always manage them as constructively as we have to this point.” European leaders have emphasized their opposition to the expiration of the arms embargo despite their refusal to back U.S. maneuvers at the U.N., and the European Union currently maintains its own arms embargo on Iran. Abrams touted that “separate EU arms embargo” as a potential basis for cooperation, even while emphasizing that the U.S. wants compliance at the U.N. level as well.

“They could maintain an EU arms embargo on Iran, and they could do that indefinitely,” he said. “They should take action to ensure, first, that no EU country engages in an arms sale to Iran. And secondly, they should be helping us to enforce the U.N. sanctions. And I do think that if the EU joined us in maintaining those sanctions, obviously, it would have an impact on companies that were contemplating the sale.”

US Secretary of State says 'tide has turned' and the world increasingly regards China as a threat

<https://news.yahoo.com/us-secretary-state-says-tide-093000831.html>

By: Mark Magnier for the [South China Morning Post](#) // September 16, 2020

A growing number of people internationally are recognising China's selfishness and bid for global dominance, leading more countries to side with Washington's view of the world over Beijing's, America's top diplomat said Tuesday.

In recent months, as relations between the two superpowers have imploded, US Secretary of State Mike Pompeo - known as the Trump administration's "attack dog" on China - has stepped up his verbal salvos at Beijing's governance, state-led economic system, espionage activities and handling of the pandemic. "The world has awakened and my view is that the tide has turned," Pompeo told the Atlantic Council, an international affairs think tank in Washington. "I think these are powerful shifts in the world view of the threat from the Chinese Communist Party."

Get the latest insights and analysis from our [Global Impact newsletter](#) on the big stories originating in China. Even as the Trump administration has belatedly vied for global hearts and minds, it's been accused of squandering one of its greatest assets: America's history of working closely with allies in addressing shared frustrations with Beijing, including intellectual property theft; forced technology transfer; unbalanced trade; and island building in the contested South China Sea.

According to the Soft Power 30 index - which tracks countries' use of persuasion rather than coercion in achieving objectives - the US fell to fifth place globally in 2019, the latest data, down from third place in 2017 when Donald Trump became president. China's soft-power ranking also declined to 27 in 2019, from 25 in 2017, according to the index, compiled by the Portland consultancy and the University of Southern California. France ranked first in both years.

And a Pew Research poll released Tuesday in 13 advanced European, Asian and North American nations found that just 15 per cent of respondents thought the US dealt well with the pandemic. This compared with 37 per cent who thought China handled the pandemic well and 64 per cent the World Health Organisation - both accused by the Trump administration of fanning the virus. Among Trump's first actions on becoming president was to pull the US out of the Trans-Pacific Partnership, a grouping aimed at working together on common challenges related to China.

Since then, he has launched trade wars with Japan, South Korea, Canada and the European Union, among others, embarrassed their leaders publicly and too often viewed foreign relations as a zero-sum game, critics say. "I've seen that critique," Pompeo said, but added that the administration's greatest priority has been helping Americans understand the threat that China represents to their economic and national security.

"Tens of millions of jobs have been stolen through the Chinese Communist predatory economic activity here in the United States," which cannot continue, he said. Turning to the battle for telecommunications supremacy, Pompeo said that Western competitors to Huawei would strengthen and become the global industry standard. "I am confident that there will be cost-effective deliverables from Western trusted vendors that can deliver the same services or better services," Pompeo said, even as he conceded that beating Chinese prices would remain tough, citing Chinese state subsidies.

"We always joke about the battle between Airbus and Boeing being state-subsidised," he went on, referring to the European and US aircraft manufacturers. "That is child's play compared to what the Chinese Communist Party does." China's economic model has been built on state-backed companies "stealing American technology, bringing it back to the homeland, and then turning around and dumping it in the United States of America and around the world", Pompeo said.

Despite Trump's "America First" policy, however, critics say Beijing has often failed to capitalise. Global suspicion toward China has increased under President Xi Jinping as Beijing has ramped up territorial disputes with India and Japan, drilled for oil in contested Southeast Asian waters and tightened its grip over Xinjiang, Hong Kong, Tibet and Inner Mongolia. In recent months, international criticism has increased over China's early handling of the coronavirus and its subsequent global distribution of sometimes flawed medical equipment, amid reports of Beijing's demands for praise and veiled economic threats.

And a growing number of US allies, including Britain, Germany, Australia, Japan and India, have taken steps to limit Huawei Technologies equipment in their 5G networks, wary of data theft that the company denies. The Chinese embassy in Washington did not respond to a request for comment, but foreign ministry officials in Beijing have repeatedly slammed Pompeo's volleys. "It is Pompeo's day-to-day work to lie about China," spokesman Zhao Lijian said on Friday. "No matter how they carry on bragging, facts will reduce them all to a laughingstock."

As the US and China flex their economic and political muscles, some see a growing risk of a misstep as communication between the giants falters, suspicion grows and the US prepares for a presidential election that's seen both major political parties criticise China. "It's the risk of a military clash, particularly between the US and China in the South China Sea, that might start with a conflict or contingency with the Philippines, or Vietnam," Greta Nabbs-Keller, a research fellow at Australia's University of Queensland said Monday at the Centre for Strategic and International Studies. Even a relatively minor clash could have severe reverberations across the Asian region, she added.

Increasingly tense US-China relations and more warships and military aircraft leave less margin of error in potential flashpoints, said Amanda Hsiao, Beijing-based project manager with the Switzerland-based Centre for Humanitarian Dialogue. "There is just a greater chance for an accidental collision or an incident that might accelerate to a point that neither side wants to see," Hsiao said, an "unintended incident that then escalates into something much greater".

Americans ‘not fully conscious’ of Chinese military threat to US, commander says

https://www.stripes.com/news/pacific/americans-not-fully-conscious-of-chinese-military-threat-to-us-commander-says-1.645054?utm_source=Sailthru&utm_medium=email&utm_campaign=EBB%2009.15.20&utm_term=Editorial%20-%20Early%20Bird%20Brief

By [CAITLIN M. KENNEY](#) | STARS AND STRIPES // Published: September 14, 2020

WASHINGTON — Americans do not understand the severity of the military threats posed by China, particularly its ability to strike the U.S. mainland with a nuclear weapon, a top U.S. commander said Monday.

“I get apprehensive that we are not fully conscious as a nation of the threats that we face. China now has the capability ... to directly threaten our homeland from a ballistic missile submarine. That’s a pretty watershed moment,” said Adm. Charles Richard, commander of U.S. Strategic Command, which has a mission to protect the country by deterring such attacks and, if that fails, prepare to respond.

Richard’s comments follow the release earlier this month of the Pentagon’s annual report to Congress on China’s military power, which states the country now has the largest navy in the world and is planning to grow its nuclear weapons arsenal. The estimated number of nuclear warheads that China has is “in the low 200s,” according to the report. “Over the next decade, China will expand and diversify its nuclear forces, likely at least doubling its nuclear warhead stockpile,” according to the 200-page report.

Despite China’s increased military ability to strike the U.S., Richard said the American people do not grasp the threat against them like they did during the Cold War. “So we knew there was a threat to us that might require us to respond strategically. We don’t even think about that anymore. We take strategic deterrence for granted in a lot of cases,” he told reporters at the Pentagon. “Not acknowledging the fact that we have never had a nuclear attack on the nation and haven’t had a great-power war in 70 years was not just some accidental fate in history ...

It was a lot of hard work by a lot of people to maintain systems ready to go, so that we deterred that from happening.” The Pentagon’s 2018 National Defense Strategy also shifted the U.S. military’s focus from counterterrorism operations to “great-power competition” with China as well as Russia. The economic policies of China and its militarization of the South China Sea and Russia’s efforts to undermine NATO and its nuclear arsenal are major concerns for the U.S. military, according to the National Defense Strategy.

The Pentagon report also states that China’s leaders want to develop their military to be “world-class” by 2049, which the Pentagon interprets to mean to be on par or better than other world powers such as the U.S. Richard added Monday that China’s plan to increase its nuclear capabilities “is increasingly inconsistent with a stated No First Use policy.” “It’s not my place to judge whether they intend to honor that or not. What I can tell you is that they certainly have the capabilities to execute any number of deterrent or employment strategies that are seemingly inconsistent with a No First Use policy,” he said.

Chinese Nuke Arsenal Next on Beijing’s ‘To-Do’ List, US Commander Warns

https://www.voanews.com/usa/chinese-uke-arsenal-next-beijings-do-list-us-commander-warns?utm_source=Sailthru&utm_medium=email&utm_campaign=EBB%2009.15.20&utm_term=Editorial%20-%20Early%20Bird%20Brief

By Carla Babb for VOA News // September 14, 2020 04:25 PM

WASHINGTON - The commander in charge of the U.S. military's nuclear arsenal has warned that increasing China's nuclear stockpile is "next" on Beijing's "to-do list."

Speaking Monday to reporters at the Pentagon, U.S. Strategic Command chief Adm. Charles Richard said that while the United States has "no margin" of error left to start recapitalizing its nuclear force, China has a proven record of steadily building its military. He cited the example of how Beijing has built more than 250 ships for the country's newly established coast guard in just the past seven years.

"When China sets its mind to something, they are very impressive in their ability to go accomplish it," Richard said. "Their strategic forces are next on their to do list, right, and I'm trying to posture us for the threat that we're going to face, not the one that we have today." The U.S. can deliver a nuclear strike by sea, air and land through submarines, aircraft and intercontinental ballistic missiles, a capability often referred to as the nuclear triad.

Earlier this month, a Pentagon report raised concern about China's pursuit of a nuclear triad while predicting that Beijing will "at least double" the size of its nuclear warhead stockpile over the next decade. There was no response from the Chinese government. According to the Pentagon's annual "China Military Power" report to Congress, which was released September 1, in the past 15 years the Chinese navy has constructed 12 nuclear submarines, six of which provide China's first "credible, sea-based nuclear deterrent." By the mid-2020s it will likely build a new, guided-missile nuclear attack submarine that could provide a secret land-attack option if equipped with land-attack cruise missiles.

'Watershed moment'

"I get apprehensive that we are not fully conscious as a nation of the threats that we face. China now has the capability ... to directly threaten our homeland from a ballistic missile submarine. That's a pretty watershed moment," Richard said Monday. China lacks the ability to launch nuclear weapons from the air, but the Pentagon report said the Chinese People's Liberation Army (PLA) publicly revealed the H-6N bomber as its first nuclear capable air-to-air refueling bomber late last year.

The report disclosed that the number of Chinese nuclear warheads is currently estimated to be slightly more than 200 and includes those that can be fitted to ballistic missiles capable of reaching the United States. It was the first time the Pentagon has stated a specific number of Chinese warheads. The Federation of American Scientists says an estimated 3,800 warheads are in active status in the U.S. nuclear arsenal. The number would still dwarf the Chinese arsenal.

China's nuclear arms buildup 'inconsistent' with no-first-use policy, Stratcom chief says

<https://www.msn.com/en-us/news/world/chinas-nuclear-arms-buildup-inconsistent-with-no-first-use-policy-stratcom-chief-says/ar-BB191KTS?ocid=uxbndlbing>

By: Abraham Mahshie for the UK Examiner // 16 hrs ago

China's nuclear weapons buildup is "inconsistent" with a declared no-first-use policy, making more urgent American nuclear modernization efforts, **U.S. Strategic Command's Adm. Charles Richard** said Monday.

“It's not where they are, it's where they're going,” the combatant commander told Pentagon reporters, warning that China intends to double its nuclear warheads by 2030. “When China sets its mind to something, they are very impressive in their ability to go accomplish it,” he said. “We're going to have to move equally as fast in order to pace that threat.” Nuclear modernization figures prominently in the 2020 National Defense Authorization Act, whose differing versions have passed both houses of Congress and await reconciliation.

Richard referenced the recently released Pentagon [China Military Power Report](#), which speaks about China harnessing 200 nuclear weapons within five years and doubling that number by the end of the decade. In Monday's briefing, the commander overseeing America's nuclear triad warned that China has streamlined bureaucracy and demonstrated that it can quickly create the industrial base to meet its ambitions.

“We are going into a very different world,” Richard said of America's imperative to deter two nuclear-armed great power rivals, China and Russia. “China in particular is developing a stack of capabilities that, to my mind, is increasingly inconsistent with a stated no-first-use policy,” he said. The Military Power Report also noted that China is developing its own nuclear triad. “China's nuclear forces will significantly evolve over the next decade as it modernizes, diversifies, and increases the number of its land-, sea-, and air-based nuclear delivery platforms,” the report states.

New developments also indicate that China is moving to a launch-on-warning posture with an expanded silo-based force. China can already hit U.S. with ballistic missiles. With a submarine force of 65 to 70 submersibles roaming the Pacific, Richard said China has already reached a “watershed” moment. “China now has the capability ... to directly threaten our homeland from a ballistic missile submarine,” he said. “I get apprehensive that we are not fully conscious as a nation of the threats that we face.”

Chief among the dangers in China's military ambition is a government system that allows it to build its capabilities quickly, the commander said. Richard used the example of the Chinese Coast Guard, which was only stood up in 2013 and now fields 255 ships. Separately Monday morning, Air Force Chief of Staff Gen. Charles Brown said China is on pace to exceed American, ally and partner platforms in the Pacific by 2025.

“We are outnumbered,” he told a virtual gathering of the Air Force Association. “If we don't start doing things a bit faster, we're going to be behind.” Brown called for the elimination of bureaucratic hurdles so the United States can make acquisitions faster and keep up with great power competitors. Richard said there is no more time to wait. “As a military commander, what I look at more is another nation's capabilities, less about what their stated intentions are, and I see China developing a stack of capabilities,” he said. “We have to go recapitalize our strategic triad.”

He added: “There's no margin left.”

Military Must Continue Progress to Deter Competitors

<https://www.defense.gov/Explore/News/Article/Article/2345179/military-must-continue-progress-to-deter-competitors/>

BY [JIM GARAMONE](#), for DOD NEWS // SEPT. 11, 2020

The U.S. military has seen tremendous progress in readiness, equipment, processes and personnel over the past five years, and the United States must continue on that road in order to deter Russia and China, a top Defense Department official said.

Deputy Defense Secretary David L. Norquist told attendees of the virtual Defense News Conference yesterday. He spoke about the changing threats, U.S. military moves and what the future may hold. Russia and China saw America's preoccupation with violent extremism after the events of 9/11 as a "strategic opportunity" to catch up to the United States military, Norquist said. "China and Russia noted how we fought and began designing their militaries and capabilities to counter our strengths and exploit our weaknesses," he said.

And they have closed the gap. China invested heavily in its army, increasing the budget by an average of 10 percent per year. Since 2001, China has launched its first domestic aircraft carrier; demonstrated the ability to shoot down satellites; modernized and expanded its nuclear capabilities; successfully tested a hypersonic glide vehicle; and fielded short-, medium-, and long-range missiles in volume, Norquist said.

China has also exerted growing power in Asia, Africa, Oceania and in cyberattacks worldwide. In 2015, China's President Xi Jinping pledged not to militarize the artificial islands China had built in the South China Sea. He broke that pledge, Norquist said. China is also working to weaken America's web of allies and partners in the Indo-Pacific region. Russia is playing the same game. In 2008, Russia invaded Georgia and still occupies two provinces.

In 2014, Russia annexed Crimea by force — something we had not seen in Europe since World War II — and entered combat against Ukrainian forces in Eastern Ukraine. Russia seeks every opportunity to weaken [NATO](#). "Our goal over the next decade is to maintain a force strong enough to deter aggression and, should deterrence fail, to prevail in any conflict," Norquist said. "This requires us to continue adapting and changing."

The United States is concentrating on leap-ahead technologies like artificial intelligence and hypersonic weapons. But the nation is also investing in the people needed to use these new capabilities, he said. The new technologies only go so far. They must be fielded in a way "to make the sum greater than the parts," he said. Norquist chaired a Future Naval Forces Study. "We examined ships and Marine units we have, and those we might build by 2045," he said.

"We looked at their costs, their analytical capabilities, and we war-gamed different combinations of ships and Marine forces against different future missions and challenges." The results of this study will be used to build the fleet and forces needed over the next 25 years. He noted that the Joint Staff is developing a draft Joint Warfighting Concept to align personnel, equipment, organizations, training and doctrine as the military transitions to all-domain operations.

"Over the next four years, we will fly over 40 flight tests in order to develop and transition a family of hypersonic weapons to our warfighters," Norquist said. "While we focus on accelerating the development of our own capabilities, we remain aware of what our near-peer competitors are doing," he said. "Just as China and Russia watched us closely, we are watching them." All of this does require investment. He called on Congress to continue adequate, timely funding.

Budget cuts, as some propose, will endanger the United States and cause a reversal of readiness, he said. "Warfighting is in a new era," Norquist said. "In four years, we have become more lethal, a stronger partner and a wiser spender. But despite our progress, we cannot stop here. China's plans are ambitious, and we need to keep making strides."

News & Opinion

UK 'could face threat of Russian nuclear-powered missile that can fly around the Earth for years'

<https://news.sky.com/story/uk-could-face-threat-of-russian-nuclear-powered-missile-that-can-fly-around-the-earth-for-years-12070875>

Lieutenant General Jim Hockenhull says the West is having to keep up with countries that do not play by the rules.

By: [Tania Snuggs](#) News reporter [@news_snuggsy](#) for Sky News // Monday 14 September 2020 08:33, UK

The UK could face the threat of a ready-for-action Russian nuclear-powered missile that can fly around the Earth for years in the coming decades, the chief of defence intelligence has warned.

Lieutenant General Jim Hockenhull says the West is having to keep up with countries that do not play by the rules, such as [Russia](#) and [China](#), who continually challenge nations without prompting direct conflict. "Whilst conventional threats remain, we have seen our adversaries invest in artificial intelligence, machine learning and other ground-breaking technologies, whilst also supercharging more traditional techniques of influence and leverage," he told The Sunday Telegraph.

Lt Gen Hockenhull said Russia is "pushing the boundaries of science and international treaties", and that a nuclear-powered missile could have "a near-indefinite loiter time". He added: "Moscow is testing a subsonic nuclear-powered cruise missile system which has global reach and would allow attack from unexpected directions. "As we have seen in Salisbury, hostile states are willing to take incredible risks.

"We must make sure that we have both the intent and the capability to ensure that such wanton acts of irresponsibility will not go unpunished." Britain has long accused Russia of using the Soviet-era nerve agent novichok on former double agent [Sergei Skripal](#) in Salisbury in 2018. The 69-year-old and his daughter Yulia were two of five people exposed to the substance. Dawn Sturgess, 44, from Amesbury, Wiltshire, died in July that year after coming into contact with a perfume bottle thought to originally contain the poison - while her partner, Charlie Rowley, spent nearly three weeks in hospital.

Last month, German doctors said Russian opposition politician [Alexei Navalny](#) was "[without a doubt](#)" poisoned with novichok after falling ill on an internal flight in Russia. The 44-year-old is reportedly able to [speak again](#) as he continues to make progress in his recovery.

The Nuclear Weapons Council and Its Critical Role in Developing a Budget for Nuclear Warhead Activities

https://www.realcleardefense.com/articles/2020/09/16/the_nuclear_weapons_council_and_its_critical_role_in_developing_a_budget_for_nuclear_warhead_activities_577588.html?utm_source=Sailthru&utm_medium=email&utm_campaign=EBB%2009.17.20&utm_term=Editorial%20-%20Early%20Bird%20Brief

By [Patty-Jane Geller](#) for Real Clear Defense // September 16, 2020

Recent [debates on nuclear modernization](#) have focused on hot-button issues like [nuclear testing](#) and low-yield nuclear weapons. But one issue flying under the radar is [the role the Nuclear Weapons Council \(NWC\) plays in developing the annual budget](#) for the National Nuclear Security Administration (NNSA). Recent legislative proposals would change both the council's structure and its role in ways that could jeopardize the functionality of America's nuclear enterprise and diminish the nuclear deterrent in the future. The United States is already late in embarking on a

nuclear modernization effort. It [does not have margin for delay](#). Congress should act to enhance, rather than impinge on, the council's ability to function effectively and perform its intended role.

The Nuclear Weapons Council's Important Role

Both the [National Nuclear Security Administration](#) and the Defense Department [oversee](#) the U.S. nuclear enterprise. The Pentagon designs, develops, and deploys the delivery systems – whether intercontinental-range or sea-launched ballistic missiles, bombers, or air-launched cruise missiles. The NNSA, a semi-autonomous agency within the Department of Energy, maintains the stockpile of nuclear warheads, making sure it meets military requirements such as quantity of weapons or yield. For this reason, the Defense Department is often described as the “customer” of the agency.

Congress established the joint Defense Department/Energy Department [Nuclear Weapons Council](#) in 1986 as a senior-level body to coordinate nuclear warhead development, production, and support activities between the two departments. It is tasked with developing stockpile weapons options and overseeing management of the nuclear stockpile to ensure its safety and reliability. The Under Secretary of Defense for Acquisition and Sustainment, currently the Hon. Ellen Lord, chairs the council, which also includes four other senior Pentagon officials plus the National Nuclear Security Administrator, currently the Hon. Lisa Gordon-Hagerty.

The council's role takes on heightened importance now, as the United States undergoes an urgently-needed effort to modernize its nuclear force and facilities. After [decades of deferment](#), all three legs of the nuclear triad, the hardened communications networks on which they rely, the warheads in the stockpile, and their supporting infrastructure must be recapitalized. These systems have already been extended far beyond their original design lives, and [officials have repeatedly stated](#) that any additional delay in the modernization effort risks seeing the nation's nuclear capabilities age out before their replacements are ready.

As part of the modernization drive, the NNSA and the Pentagon are pursuing a number of programs in parallel. For instance, the NNSA is currently developing the [W87-1](#) warhead that will be deployed on the Ground Based Strategic Deterrent (the replacement to the Minuteman III missile) being developed by the Air Force. It's also working on the [W80-4](#) warhead that will be deployed on the Pentagon's proposed Long Range Standoff weapon (the successor to the Air Launched Cruise Missile). In both cases, the NNSA and the Defense Department must synchronize the development of delivery systems with the warheads they will carry.

Coordination on budget formulations is also critical to the success of the joint effort. Spending levels proposed by the NNSA for its various warhead programs will directly impact the timing and quantity of available warheads. For this reason, the Nuclear Weapons Council is required [by law](#) to certify annually that the NNSA's budget is adequate to meet nuclear stockpile requirements.

The [report](#) accompanying the law even specifies that the council must “take an active role in shaping and reviewing the NNSA budget as it is prepared for submission to Congress and negotiated with the Office of Management and Budget during the budget review process.”

This makes intuitive sense. Delay in the development of a missile or its associated warhead will mean the desired capability will not be available when needed. Missiles without warheads have no deterrent value—and vice versa. It is vital that both agencies submit budgets that support the same work schedules and the same delivery dates.

Congressional Debate over the Nuclear Weapons Council

Concerns about coordination between the Pentagon and the NNSA emerged publicly this year in the council's annual certification [letter](#) to Congress. The council informed lawmakers that it was unable to certify the NNSA's budget because it had not received detailed budget information needed to support certification in advance of the budget release. This revelation came shortly after [reports](#) of controversy over the NNSA budget topline, where the Office of Management and Budget apparently proposed cutting about \$2.5 billion from the level sought by Gordon-Hagerty.

In a Senate Armed Services Committee budget hearing in March, Sen. Deb Fischer (R-Neb.), who chairs the Subcommittee on Strategic Forces, [highlighted](#) this failure to enable the council to do its work. Responding to her questioning, Defense Secretary Mark Esper reiterated the importance of letting the council look at the NNSA budget early on, and said that he wants “to make sure that we are prioritizing the right things so that we have a capable strategic deterrent.”

Legislative responses to this issue went in wildly different directions. The Senate Armed Services Committee, in its version of the Fiscal Year 2021 [National Defense Authorization Act](#), proposed a number of changes to the NNSA's budget process. Most of those changes were [discarded](#) when the bill went to the Senate floor. A provision relating to the council's role in the budget process was retained, but this largely amounts to a more specific expression of what current law already requires the council to do.

On the opposite side of the spectrum, the Fiscal Year 2021 [Energy and Water Development Appropriations bill](#) passed by the full House would prohibit funds for being used “in furtherance of working through the Nuclear Weapons Council to guide, advise, assist, develop, or execute a budget for the National Nuclear Security Administration,” effectively prohibiting any coordination between the two on budgetary matters. Without explanation in its accompanying committee [report](#), it's difficult to understand the reasoning behind forbidding the council's involvement in NNSA budgeting.

It's possible this provision was intended as negotiating tactic – staking out an extreme position with an eye toward negotiating a more reasonable one at later stages of the legislative process in exchange for concessions elsewhere. Other commentators have [portrayed](#) it as an effort to limit Pentagon influence in the development of nuclear weapons capabilities, suggesting that the Defense Department, through the council, is encroaching on the NNSA's budget and inserting undue military control over a civilian agency.

In any event, such a blanket prohibition defies basic logic and runs completely counter to the intent of Congress when it established the Nuclear Weapons Council for the very purpose of ensuring coordination between the Defense Department and the NNSA. As discussed earlier, this coordination is absolutely vital to the success of the nuclear modernization effort. Prohibiting it invites delay, mismanagement, unnecessary costs, and could put at risk the nation's ability to field an effective nuclear deterrent in the future.

Lucas Polakowski, the nominee to be assistant secretary of defense for nuclear, chemical, and biological programs, put it well when he [testified](#) that, as the possible future [staff director](#) of the Nuclear Weapons Council, being prevented from seeing the NNSA budget before submission to Congress “would severely impair not only our existing triad but our modernization efforts going forward in the future and in fact could potentially jeopardize our national defense.”

Separately, the House proposed an additional change in its version of the defense authorization bill, inserting an amendment that would establish the Secretaries of Defense and Energy as co-chairs of the Nuclear Weapons Council. Unlike the House appropriations' provision, this change ostensibly has a noble [goal](#), to provide “Cabinet-level visibility and accountability of our nuclear deterrent.”

However, this structural change introduces two problems detrimental to management of the nuclear enterprise. First is the addition of the Secretary of Energy as a co-chair. This change would put the Energy Secretary in a position to veto decisions that relate exclusively to Defense Department capabilities. As the NNSA's “customer” and the party ultimately responsible for fielding an effective nuclear deterrent, the Defense Department should continue to lead the council, as it does in close coordination with the NNSA Administrator.

Second are the practical effects that accompany such a change. In general, elevating a particular responsibility means adding an additional layer of bureaucracy which, in turn, slows decision-making and reduces effectiveness. Splitting decision-making authority can have similar effects. For these reasons, both Congress and the Defense Department have consistently emphasized establishing clear lines of authority and [divesting authority down](#) the chain of command to build [a more agile Pentagon](#) in order to address our eroding technological advantage vis-à-vis Russia and China.

While it may be seductive to assume that moving decisions up the chain of command will elevate the importance and prestige of nuclear weapons activities, this idea does not stand up to any scrutiny against the backdrop of lessons learned about effective bureaucratic reform. Nor is prestige-enhancement a sound basis for bureaucratic change. Instead, it is far more prudent and realistic to vest decision-making authority in those who have the expertise and time to give the nuclear enterprise the leadership and direct attention it deserves. Secretary Lord, working closely with Administrator Gordon-Hagerty, has proven herself to be that leader.

Furthermore, Congress should be mindful of the disruptive effect inherent in bureaucratic change—especially as our modernization effort can afford no margin for error. Legislative solutions and structural changes, though often tempting, should be options of last resort. Instead, Congress should use its oversight role to ensure cooperation and coordination throughout the nuclear weapons modernization process. In this case, the House's proposal to restructure the National Weapons Council could risk plunging a functioning organization into a bureaucratic mare's nest at a time when effectiveness and agility are desperately needed. It should be rejected.

Conclusion

The National Defense Strategy's top priority—to defend the homeland—rests on strong nuclear deterrence, for which effective and timely nuclear modernization is critical. Throughout the modernization process, the NNSA and Defense Department must be in lock step to align their joint efforts. Limiting the National Weapons Council's involvement in the NNSA budget development process would only exacerbate a disconnect between the latter and its customer.

To guarantee that the NNSA can maintain a nuclear stockpile capable of providing a credible nuclear deterrent requires Defense Department input, which is provided through the council. While making the Secretaries of Defense and Energy co-chairs of the council might meet this goal on paper, this change in reality will hinder effective management of the nuclear enterprise. For the sake of the U.S. nuclear deterrent, Congress must ensure that the National Weapons Council keeps its existing structure and can perform its required oversight work on the National Nuclear Security Administration's budget.

High Speed, Low-Yield: A U.S. Dual-Use Hypersonic Weapon

<https://warontherocks.com/2020/09/high-speed-low-yield-a-u-s-dual-use-hypersonic-weapon/>

By: [Alan Cummings](#) for War on the Rocks // September 17, 2020

Should the United States put nuclear warheads on hypersonic missiles? For 20 years, Washington has answered “no” by excluding nuclear weapons from its [prompt strike](#) and [hypersonic weapons](#) programs. In order to close gaps in U.S. theater deterrence and assurance capabilities, it is time to consider a change of course. Theater capabilities currently depend too much on aircraft and low-observable technology, the advantages of which are being eroded by advancements in adversary air defenses. Meanwhile, low-yield Trident missiles invite escalation and put strategic deterrence assets at risk.

One U.S. hypersonic program — the [Common Hypersonic Glide Body](#) — relies on neither aircraft nor low-observability. It ought to be a prime candidate for becoming a dual-use weapon with conventional and low-yield nuclear variants. There are counterarguments, which I will address and welcome others to raise, but even once they are fairly considered, the case for nuclear-tipped hypersonic missiles is persuasive. It would serve U.S. interests — namely, by improving U.S. theater deterrence, diversifying its assurance capabilities, and gaining leverage for future arms control agreements.

The Hypersonic Connection

Concerns about using hypersonic weapons for nuclear delivery often focus on the strategic level of war, where fears of large-scale instability and national vulnerability reside. However, the numerous intercontinental delivery systems already possessed by China, Russia, and the United States mean [strategic hypersonic missiles produce only a marginal change](#) in each other's strategic vulnerability. While the Kremlin cites U.S. missile defenses as motive for its [Avangard](#) missile and other programs, [the performance](#) and [cost realities](#) of U.S. missile defenses make effective interdiction unrealistic for any large-scale nuclear strike, whether delivered by hypersonic or ballistic warheads.

[China is less transparent but has similar motivations](#), with added concerns rooted in its smaller arsenal and perceptions of U.S. ambiguity on mutual vulnerability — a condition that Beijing may try to impose with an Avangard-like system, as mentioned by [Gen. Terrence O'Shaughnessy](#). Against the fear of a first strike, each of the three nations cultivates second-strike capabilities that may be more vulnerable to [widespread cyber attack](#) than a finite number of long-range hypersonic weapons. Even if one concedes [a stabilizing role](#) for strategic hypersonic weapons in China and Russia, adding them to an already robust U.S. modernization plan seems unnecessary given limited resources.

There is a more compelling case for the significance of hypersonic weapons at the theater level, where the logic of speed and defeating air and missile defenses applies to everyone. History has shown the enduring value of [rapid effects delivered from multiple firing positions](#) and in conjunction with other forces. This is certainly true for conventional munitions, as well as theater nuclear delivery and therefore deterrence. It is reflected in Russia's avowedly dual-capable [Kinzhal](#) and, potentially, its [Tsirkon](#), as well as perhaps [China's DF-17](#). In contrast, the United States has ruled out nuclear hypersonic capabilities for a variety of reasons, including presumptions of U.S. conventional dominance and theater nuclear

sufficiency as well as programmatic momentum. This conventional-only approach was the right decision in the early 2000s, but that restraint may no longer be in the best interests of the United States and its allies.

Gaps in U.S. Theater Nuclear Deterrence

Theater deterrence is not just a microcosm of strategic deterrence. It involves U.S. interests alongside those of regional nations, which are both party and victim to potential conflicts. Escalation concerns are prominent and nuanced, incentivizing in-theater capabilities in order to forgo launching strikes from one's homeland and risking retaliation there. This includes "low-yield" weapons. Although not formally defined, the phrase is useful in classifying weapons whose explosive power is generally tens of kilotons in TNT equivalent or less. To be clear, the bombs at [Hiroshima](#) and Nagasaki were estimated at [16 kilotons and 21 kilotons](#), respectively, making both "low-yield" weapons in today's parlance. Low-yield weapons are clearly still [devastating](#), which is why [former Secretary of Defense James Mattis told Congress](#) that there is no "such thing as a 'tactical nuclear weapon.'

Any nuclear weapon used any time is a strategic game-changer." While [critics disagree](#), proponents argue that low-yield weapons facilitate deterrence by presenting adversaries with [a more credible threat](#). This logic vis à vis [Russia's particular dedication](#) to low-yield weapons is why they escaped complete elimination from the U.S. inventory before being reinvigorated by the [2018 Nuclear Posture Review](#). The United States currently has three low-yield weapons for theater nuclear deterrence: the [B61](#) gravity bomb, one type of [air-launched cruise missile](#), and the [low-yield W76-2 warhead](#) on Trident submarine launched ballistic missiles. The U.S. nuclear modernization plan will replace its air-launched cruise missiles from the 1970s with the [Long-Range Standoff weapon](#) and will see the return of a nuclear [sea-launched cruise missile](#). These new delivery systems reflect a broader modernization theme: The United States does not need more nuclear weapons. It needs better ones, suitable for 21st century deterrence. However, the current approach perpetuates three vulnerabilities in U.S. theater deterrence.

The first is dependence on low observability (i.e., stealth) technology and tactics. Delivering a B61 or an air-launched cruise missile relies on the aircraft, the weapon, or both staying off an enemy's radar. The same may be true for future sea-launched cruise missiles. Low-observable techniques are effective today and for the immediate future, but they are increasingly jeopardized by advanced air defense systems from [Russia](#) and [China](#), along with the future systems they will inevitably deploy. The ongoing battle between signature and sensor will eventually meet an irreducible minimum, likely in favor of the sensor, at which point low observability may become moot.

The second is the escalatory problem of using U.S. [strategic Trident missiles for theater purposes](#). Aside from the [W76-2's potential vulnerability](#) to missile defenses, using a Trident means adversary leaders will not know if their country has been targeted with a high-yield or low-yield weapon until after impact. This action thus entails gambling, or at best an educated guess, on whether those decision-makers will wait that long before initiating their own retaliatory actions. Third, U.S. theater deterrence and assurance are overly reliant on aircraft and easily targeted airfields. Until 2019, the Intermediate-Range Nuclear Forces Treaty prohibited development of [relevant ground-based weapons](#).

At sea, decommissioning the nuclear Tomahawk variants removed attack submarines and surface warships from the deterrence chessboard. The W76-2 is responsive to this but with the escalatory issues mentioned above. So are future sea-launched cruise missiles, but potentially beholden to low-observable designs. With U.S. ballistic missile submarines rarely visiting foreign ports and new nuclear-armed maritime cruise missiles still [up](#)

[to 10 years away](#), in-theater manifestations of U.S. nuclear assurances are limited to [U.S. aircraft in allied airfields or air space](#) willing to permit them.

A New Role for the Common Hypersonic Glide Body

Although U.S. doctrine retains the prerogative of nuclear first use in defense of vital interests, a limited retaliatory action remains the most probable scenario. This makes it critical that low-yield delivery systems succeed when only one or a few weapons must be guaranteed to reach their objective. Among U.S. hypersonic programs, the Common Hypersonic Glide Body is the best option for a dual-use design that closes gaps in U.S. theater deterrence. This leaves the [Air-launched Rapid Response Weapon](#) to continue on track as a conventional system and likely the first U.S. weapon to become operational. It also may provide more payload capacity compared to the [Hypersonic Air-breathing Weapon Concept](#), another air-launched missile. Furthermore, cooperative development of the Common Hypersonic Glide Body by the Army and Navy facilitates joint familiarity, logistics, and options for [conventional-nuclear integration](#) within theater contingency plans.

Target Access

Rather than stealth, hypersonic missiles defeat air defenses through a combination of speed, trajectory, and maneuverability. Even when [hypersonic defense](#) becomes feasible (at costs potentially unbearable for China and Russia), short flight times mean successful interception requires a nearly flawless detect-to-engage sequence. Against future air defenses, the Common Hypersonic Glide Body would be more credible for theater nuclear delivery than slower, low-observable cruise missiles while saving dual-capable aircraft for future missions, to include a potentially ongoing conventional fight. Additionally, the [high-energy impact physics](#) of hypersonic glide vehicles mean it would likely exceed the [penetration capability](#) of a B61 without relying on a ballistic trajectory. While its accuracy has not been disclosed, its origin in delivering precise conventional effects means it is surely accurate enough for low-yield weapons.

Scalable Presence

A dual-use approach capitalizes on the ground and maritime integration already planned for the Common Hypersonic Glide Body, diversifying U.S. theater deterrence and assurance capabilities with non-aircraft options. [Virginia-class submarines](#) and [potentially Zumwalt-class destroyers](#) offer high-mobility options for unilaterally deploying these weapons to either the European or Pacific theater. This is already planned for conventional variants as part of the Navy's [Intermediate Range Conventional Prompt Strike program](#). With allied coordination, port visits from these vessels could help signal U.S. commitment to extended deterrence while alleviating the [political burdens allies would face](#) in permanently hosting U.S. weapons. Should an ally see that burden become more tolerable or more necessary, ground-mobile firing units armed with this system atop the Army's [Long Range Hypersonic Weapon](#) would provide options [not constrained to airfields](#). Even if not immediately dispatched, simply having this family of deployable systems could help in assuring allies and cautioning adversaries, or [reinforcing a secondary theater](#) while the United States fought a major conflict elsewhere.

Safeguarding Trident

Low-yield variants of the Common Hypersonic Glide Body aboard Virginia-class submarines should be a replacement capability for low-yield W76-2 warheads. Retiring the W76-2 would return U.S. Trident missiles to their strategic-only role aboard Ohio- and Columbia-class submarines. This would reduce escalatory risks by alleviating ([though not eliminating](#)) an adversary's Trident discrimination problem. It would also reduce an adversary's incentives to target U.S. strategic platforms in pursuit of its own theater objectives, helping safeguard U.S. ballistic missile submarines as

the most survivable leg of the country's strategic triad. The United States could then credibly assert that attacks on these submarines would be considered attacks on its strategic deterrent. While similar benefits could accrue from sea-launched cruise missiles, the Common Hypersonic Glide Body does not rely on low-observable designs and may be able to reach initial operational capability faster and more efficiently.

Concerns

Making a bold course change like the one suggested here warrants careful consideration of the risks for both action and inaction. The risk of inaction is straightforward: a potential deterioration in U.S. deterrence and assurance capabilities (the same sentiment that has motivated broader U.S. modernization efforts). The risks of action, however, are more specific when it comes to adopting a dual-use Common Hypersonic Glide Body.

Entanglement and Escalation

[Entangling conventional and nuclear capabilities](#) comes with risks. For one, exquisite weapons make exquisite targets in a crisis. Some fear that an agitated adversary might purposefully or inadvertently strike a nuclear-armed hypersonic missile, prompting the United States to cross the nuclear threshold first. Second, dual-use hypersonic missiles replace an adversary's Trident discrimination problem with one of [pre-launch ambiguity between nuclear and conventional](#) warheads — a problem complicated by the compressed decision timeline of hypersonic flight. These issues lead to further concerns that hypersonic weapons will incentivize postures and reactions that heighten escalation risks.

However, like dual-use cruise missiles and aircraft, the Common Hypersonic Glide Body is a theater system that is more resilient against the use-it-or-lose-it fears underpinning that argument. Strikes against it would garner a strong response, but U.S. strategic deterrence would not be jeopardized and theater deterrence would be sustained by the portfolio of theater weapons that this hypersonic capability is meant to complement. Moreover, Russia has already introduced this threat, and the United States should turn its attention to deterring Moscow from leveraging it as an asymmetric, potentially coercive, advantage. Warhead ambiguity may even be beneficial by providing political flexibility to allies hosting these systems or inducing hesitancy in an adversary considering whether to strike a potential nuclear weapon, thus enhancing deterrence. Alternatively, ambiguity can be sacrificed to mitigate these concerns by restricting nuclear capabilities to identifiable units (especially on land).

Strategic Overlap

U.S. adversaries may still perceive dual-use hypersonic missiles as threatening their strategic deterrence capabilities. Similar arguments could be mounted for many theater deterrence weapons the United States has previously deployed, from cruise missiles to W76-2s. This is one among many reasons China, Russia, and the United States safeguard their second-strike capabilities. It is also a reason theater deterrence relies on a different set of weapons and targets: to keep the cataclysmic power of strategic forces in reserve, and to keep national leaders in command. Furthermore, [Moscow](#) and [Beijing](#) already seem to fear U.S. conventional hypersonic weapons, which they believe convey first-strike advantages unencumbered by the nuclear taboo. Adding a low-yield capability to the Common Hypersonic Glide Body adds little on the margin of concerns driven by its conventional attributes but adds much to the ledger for deterring conflict overall.

Costs

Making the Common Hypersonic Glide Body a dual-use system is a more efficient use of limited funds as well as common infrastructure and logistics once operational. [Gen. Dave Goldfein, who will retire on Oct. 1, recently stated](#) that this is the first time the United States is modernizing its nuclear and conventional enterprises at the same time, and that “[t]he current budget does not allow you to do both.” Adding a proposal like this runs

the risk of being a fiscal non-starter. However, the Common Hypersonic Glide Body is not a new program — it already has development funding for the delivery systems and a conventional warhead. The new component would be integrating a low-yield capability. Given the expected capabilities of its naval variant, one solution may be to forgo [developing a replacement](#) for nuclear sea-launched cruise missiles and utilize those funds to cover nuclear integration. It would also be a potentially less expensive route to strengthening theater deterrence compared with [increasing the U.S. bomber fleet](#) beyond original modernization requirements.

Arms Control and Arms Racing

Shifting to a dual-use design should be acknowledged for what it is: a failure of arms control and an incremental step of arms racing prompted by U.S. adversaries. It reflects the fact that the United States is already engaged in deterring a [Russian force](#) that has retained, modernized, and produced so many low-yield weapons that they allegedly outnumber the United States' [eight to one \(1,830 to 230\)](#). Russia [broke faith with the Intermediate-Range Nuclear Forces Treaty](#) long before the Trump administration was elected, and has repeatedly rejected attempts to negotiate arms control parameters for its low-yield weapons. In the Pacific, reports that [China is expanding its arsenal](#) are pulling an ever-present nuclear subtext to the foreground and raising questions about [what capabilities may yet](#) come to underscore Beijing's revisionist foreign policy.

U.S. low-yield weapons responsive to threats posed by Russia do risk being seen as a threat that Beijing must in turn respond to. Rather than counting on endless restraint by the United States, Chinese leaders should see this as a natural consequence of the multipolar world they themselves advocate and be willing to safeguard their regional interests through arms control. Yet Beijing has completely refused official engagement and at this point, [“countless Track II dialogues with China are not a substitute.”](#) After 20-plus years of a worthy and laudable arms control effort, the reality of this situation should be acknowledged and reflected in the U.S. force posture before progress can be made. As [Lt. Gen. Robert P. Ashley Jr.](#) noted, “the resurgence of great power competition is a geopolitical reality. It is the mindset Russia and China have embraced, the mindset that is guiding their approach to nuclear modernization and investment.”

The United States does not need to engage in an open-ended, expensive race to superiority. But in order to deter, it needs to ensure that its arsenal is fit for purpose in defeating an adversary locally. Both Russia and China would likely object to dual-use hypersonic missiles, calling their adoption a destabilizing move by the United States. This argument is hypocritical and false but expected — and to some degree desired: Washington should want Moscow and Beijing to react with some apprehension. Their reaction would acknowledge Washington's signal of commitment to deterring their revisionist ambitions and defending U.S. allies. Their reaction would also reflect the fact that assured delivery for the United States means assured risk to their interests and security, giving both of them increased incentives to come to the negotiating table. This pressure point alone might not be decisive, but using it to complicate their decision space would be useful in pursuing trilateral arms control solutions to replace the Intermediate-Range Nuclear Forces Treaty or respond to the low-yield lacunae in New START — solutions that are beneficial to the stability and security of all three nations.

To Hype or Not to Hype (America's Nuclear Arsenal)?

A dual-use Common Hypersonic Glide Body would close gaps in U.S. theater deterrence capabilities and offer scalable deployment options to assure allies. It would give the United States a tool for assured delivery of conventional and low-yield warheads that hedges against erosion of U.S. advantages in low-observable technology. Both variants could be deployed unilaterally and clandestinely at sea aboard submarines, or overtly in

cooperation with allies. With its ground and maritime variants, shifting the Common Hypersonic Glide Body to a dual-use design would provide the United States with leverage and flexibility for future arms control efforts.

Just as President Vladimir Putin and [General Secretary Xi Jinping](#) learned important lessons through the 1990s and early 2000s, their future successors are learning lessons now that will shape their ambitions and policy preferences for the 2030s and beyond. Statecraft remains the preferred solution, but the United States should back its diplomats with the right military tools so that they can navigate today's competitive environment and shape the future of European and Pacific deterrence.

Alan Cummings is a recent master's graduate from Tufts University's Fletcher School of Law and Diplomacy and a 2020 member of the Center for Strategic and International Studies Nuclear Scholars Initiative. He served over 10 years on active duty with the U.S. Navy before transitioning to the Navy Reserve. The views expressed here are his own and in no way represent any institution with which he is affiliated.

The U.S. Must Resume Nuclear Testing

September 23, 1992—date of the last U.S. nuclear test—28 years ago.

By: Dr. Peter Vincent Pry, September 2020

Nuclear weapon scientists and strategists are increasingly concerned about the safety and reliability of U.S. nuclear weapons, none tested in nearly three decades, obeying the unratified Comprehensive Test Ban Treaty (CTBT).

CTBT was the bright idea of President Bill Clinton and anti-nuclear ideologues, increasingly dominant in a radicalized Democratic Party that would have the U.S. lead the way toward President Obama's "world without nuclear weapons" even though Russia, China, North Korea and Iran are not following. Decades late, State Department finally admits Russia and China are violating CTBT, conducting low-yield nuclear tests ("Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments" April 2020).

Defense Intelligence Agency Director, Lt. General Robert Ashley, on May 29, 2019 warned: "Our understanding of nuclear weapon development leads us to believe Russia's testing activities would help it to improve its nuclear weapon capabilities. The United States, by contrast, has forgone such benefits by upholding a 'zero-yield' standard." Consequently, Russia and China are probably decades ahead in developing advanced nuclear weapons.

Accordingly, President Trump and Senate Republicans wisely include funding in the new defense bill to de-mothball U.S. capabilities to perform nuclear testing. Yet, despite nuclear testing by Russia, China, and North Korea, House Democrats oppose funding even preparations to resume U.S. nuclear testing in an emergency. They would bind the U.S. to the CTBT and an obsolescing nuclear deterrent forever.

Democrats and their anti-nuclear allies in the Department of Energy (DOE) argue so-called "science-based nuclear stockpile stewardship" relying on computer models and engineering judgment is adequate to sustain the safety and reliability of U.S. nuclear weapons--without testing. Democrats and the press trumpet recent testimony, supposedly supporting their "no testing" policy, before the Senate Armed Services Committee by chief of U.S. Strategic Command, Admiral Charles Richard: "At this time, there is no condition...where I would recommend the need for nuclear testing."

However, Admiral Richard also testified: “But I would say though that it is important for the nation to maintain an ability to do a nuclear test should an issue arise in the future.” Admiral Richard surely knows that a recommendation to immediately resume nuclear testing would guarantee rabid opposition and no funding from congressional Democrats. Left-stream media mischaracterize President Trump’s support for nuclear testing as merely a negotiating ploy.

They often belittle the President for exaggerating U.S. nuclear capabilities and asserting the existence of secret nuclear superweapons superior to those of Russia and China. Public admission by President Trump and U.S. Strategic Command that America’s nuclear deterrent is obsolete and outclassed could invite World War III. U.S. nuclear capabilities must deter, not Nancy Pelosi and House Democrats, but Vladimir Putin, Xi Jinping, and Kim Jong-un—whose nuclear arsenals are proven by testing.

24 years ago, the late great Floyd Spence, then Chairman of the House National Security Committee, warned cessation of nuclear testing could eventually result in U.S. unilateral nuclear disarmament in “The Clinton Administration and Nuclear Stockpile Stewardship: Erosion By Design” (HNSC October 30, 1996). Time has proven Chairman Spence was right. John Hopkins and David Sharp, former senior scientists in the Los Alamos stockpile stewardship program, call for resumption of nuclear testing.

See “The Scientific Foundation for Assessing the Nuclear Performance of Weapons in the U.S. Stockpile Is Eroding” Issues in Science and Technology (Winter 2019): --“Nuclear tests gave decisive, direct evidence about the behavior of new weapons destined for the stockpile...Virtually no comparable data exist on the nuclear performance of stockpiled weapons in their current state.”

--“Nuclear testing provided a solid foundation for the development and evaluation of scientific judgment because it unequivocally tested performance predictions.”

--“Confidence that today’s nuclear weapons will perform properly is predicated on the assumption that there will be no surprises...The history of testing complex systems, nuclear and nonnuclear, is punctuated by unpleasant surprises.”

--“The above arguments are not ones that proponents of a continuing test moratorium or a Comprehensive Test Ban Treaty wish to hear.”

DOE is trying to crush such “politically incorrect” thinking and hamstring the National Nuclear Security Administration (NNSA) and Nuclear Weapons Council (NWC), according to Senate Armed Services Committee Chairman James Inhofe: “Recently, I’ve learned that individuals from the Department of Energy have worked behind the scenes with House Democrats on ill-advised legislation that would bury the Nuclear Weapons Council in unneeded bureaucracy and bring its decision-making process to a grinding halt; prohibit all cooperation between NNSA and the NWC for maintaining the safety and security of our nuclear weapons; destroy the NNSA’s congressionally-mandated independence and drag us back to the dysfunction of the Clinton years; and do lasting and possibly irreversible harm to the President’s efforts to preserve and improve our deterrent...”

Dr. Mark Schneider, former senior Pentagon nuclear strategist, observes: “Today, we do not have ‘science-based stockpile stewardship,’ but more like ‘political science-based stockpile stewardship’ while, conversely, Russia has science-based development of new and improved nuclear weapons” (“Yes, the Russians Are Testing Nuclear Weapons and it is Very Important” RealClearDefense.com August 14, 2019). **The U.S. must resume nuclear testing.**

NNSA team improves model to pinpoint nuclear testing locations

<https://www.energy.gov/nnsa/articles/nnsa-team-improves-model-pinpoint-nuclear-testing-locations>

From Energy.Gov // SEPTEMBER 16, 2020

RSTT computes seismic travel times from its earth models in milliseconds, capturing the major effects of 3-D structure in the crust and upper mantle.

A three-lab NNSA team recently made a major upgrade to the software for understanding and utilizing the structure of Earth's crust and upper mantle, which may allow researchers to better locate nuclear detonations. The model could more accurately geolocate clandestine underground nuclear tests by measuring how long it takes seismic waves to travel from one point on the globe to another.

If you have a more accurate seismic event location, you can use the other tools in your toolbox to determine whether or not a suspicious event was a clandestine nuclear test. DR. BRENT PARK -- NNSA DEPUTY ADMINISTRATOR FOR DEFENSE NUCLEAR NONPROLIFERATION The team, from Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Sandia National Laboratories, recently delivered a revision of the Regional Seismic Travel Time (RSTT) monitoring technology [to a division of the Comprehensive Nuclear-Test-Ban Treaty Organization \(CTBTO\) in Vienna](#).

The improved software was the result of years of development and includes almost a decade's worth of new data on the geophysical model of Earth's crust and upper mantle. The data set now includes information spanning all seven continents and ocean floor areas where earthquakes and other seismic events occur, providing more detail and improving the confidence in locations the system identifies.

"This is a great example of U.S. technical leadership helping the world," said Dr. Brent Park, NNSA Deputy Administrator for Defense Nuclear Nonproliferation. "If you have a more accurate seismic event location, you can use the other tools in your toolbox to determine whether or not a suspicious event was a clandestine nuclear test." One such tool that can help confirm nuclear blasts is detecting radioactive noble gases, which are created during nuclear explosions and are difficult to hide.

By providing a high-confidence seismic source location, RSTT helps the world's noble gas detection experts focus their efforts on a specific area, enhancing accuracy. RSTT was originally developed by the National Laboratories in the late 2000s, and they have helped hone the model and software ever since. Because of its utility in nuclear explosion monitoring, the U.S. government shared it with the CTBTO in 2012, where it has become a mainstay of the organization's operations.

RSTT is publicly available for download at <https://www.sandia.gov/rstt/>.

Will Russia Further Lower Its Nuclear Weapons Use Threshold?

https://www.realcleardefense.com/articles/2020/09/19/will_russia_further_lower_its_nuclear_weapons_use_threshold_577995.html

By [Mark B. Schneider](#) for Real Clear Defense // September 19, 2020

In August 2020, noted Russian journalist Pavel Felgenhauer warned, "The Kremlin is constantly playing the deterrence game by trying to scare the West. But this situation has two dangerous ramifications. First, the nuclear threshold is becoming lower: in any serious skirmish, the Russian Navy

would either need to go nuclear or risk being sunk. And second, while the Russian leadership believes it has surpassed the West militarily thanks to its dazzling superweapons, Moscow's threshold for employing military force in conflict situations may also drop [further](#).” Indeed, Putin’s new superweapons are all nuclear-armed or nuclear-[capable](#). For over twenty years, Felgenhauer, who has warned about the risk posed by Russian, first use of [low-yield](#) nuclear [weapons](#), continues to believe that Russia might use nuclear weapons in very limited conflicts.[\[i\]](#)

It is noteworthy that Putin’s 2017 decree on the Russian Navy directed that concerning non-strategic naval nuclear forces, “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 non-strategic nuclear [weapons](#).” Since NATO navies do not have naval tactical nuclear weapons, this directive relates to nuclear warfighting and to the advantage that tactical nuclear weapons give Russia, rather than deterrence. Russia has a wide variety of naval [non-strategic nuclear weapons](#).[\[ii\]](#) In 2015, the Russian Ambassador to Denmark stated, “if Denmark joins the American-led missile defense shield. If they do, then Danish warships will be targets for Russian nuclear [missiles](#).”

We are now seeing a large increase in Russian military exercises and training. In late June 2020, Russia’s Defense Minister General of the Army Sergei Shoigu said, “During it [the summer training period], over 15,500 various combat training measures are planned. Special attention will be paid to the preparations for the Kavkaz-2020 strategic command and staff [exercise](#).” In December 2019, General Shoigu said that in 2019 Russia had “over 18,500 drills and [exercises](#).” This is significantly higher than what General Shoigu indicated in December 2018 when he said that in 2019 there would be, “Over 4,000 various types of drills and nearly 8,500 practical combat training [events](#)...” As noted British analyst Roger McDermott pointed out in September 2020, “Despite the global COVID-19 pandemic, the Russian Armed Forces have vigorously pursued the summer combat training schedule throughout the country’s five military [districts \(MDs\)](#).”

Two weeks before Felgenhauer’s article appeared, Russia announced a “snap drill” ordered by President Putin -- a no notice large-scale military exercise, which is particularly threatening to NATO because it demonstrates that Russian mobilization capabilities are much faster than NATO’s 30-30-30 plan (mobilizing 30 battalions, 30 fighter squadrons and 30 warships), which is not yet functional. The Russian Defense Ministry said:

In accordance with the decision of the Supreme Commander-in-Chief of the Armed Forces of the Russian Federation, a surprise inspection of the troops of the Southern and Western military districts, separate formations of the central subordination, airborne troops and marines of the Northern and Pacific fleets is being conducted . . . During the inspection, 56 tactical-level exercises are planned to be conducted with the troops. Thirty-five grounds and training fields are being used, as well as 17 sea ranges of the Black and Caspian seas. In total, 149,755 military personnel, 26,820 weapons and military equipment, 414 aircraft, 106 ships and support vessels were involved in the sudden [check](#).

The day before the snap drill was announced, the Russian Defense Ministry indicated there would be a drill involving the Iskander-M nuclear-capable missile system in the Southern Military [District](#), which is one of the areas for the snap drill. In August 2020, Russia announced a “special tactical exercise,” which involved simulated Iskander missile launches and the inspection of the “special hardware of the missile [formation](#).” “[Special](#)” is a word used in Russia to describe nuclear [weapons](#).

In late July 2020, the Russian nuclear-armed ICBM force (the RVSN) staged a major exercise involving operations in a nuclear war, including radiological decontamination of the ICBM launchers, which were on “combat patrol [routes](#).” They were clearly fighting a mock nuclear war. In late

June, July and August 2020, there were also threatening flights by [Russian](#) nuclear-capable bombers and [other aircraft](#) near the U.S., NATO allies, Ukraine and Finland. In August 2020, on the same day as the Iskander exercise involving “special weapons,” General Shoigu participated in an exercise of the mobile ICBM force.[\[iii\]](#)

The Caucasus 2020 (Kavkaz 2020) exercise, the largest planned exercise for 2020, will be, according to the Russian Defense Ministry and its Chief of the General Staff General of the Army Valery Gerasimov, a “special exercise.” The Russian Defense Ministry announced that the exercise will involve 80,000 troops, but Russia will not honor the Vienna document’s mandatory inspection provisions because of a contrived [interpretation of this agreement](#). The probability of Russian simulated nuclear weapons use in such an exercise is very high. Kavkaz-2016 reportedly simulated the Russian launch of cruise missiles carrying non-strategic nuclear [weapons](#).

In August 2020, Russia conducted a major naval exercise near Alaska, involving 50 ships and 40 aircraft, which involved [cruise missile launches](#).

This pattern of preparation for war will likely continue and involve nuclear-capable forces.

In June 2020, Russia released a decree by President Putin on Russian nuclear deterrence policy, the first of its kind made public, which indicated a much lower threshold for nuclear weapons first use than was evident in the unclassified military doctrine publications released in 2010 and [2014](#). While much of the substance of Putin’s nuclear decree apparently goes back a long time, it clearly has new elements in it. Secretary of the Security Council of Russia Nikolay Patrushev has characterized it as a “new [Doctrine](#).” As Dr. Stephen Blank observed over 20 years ago, in Russian military doctrine, “Essentially there is no clear firebreak between conventional and nuclear scenarios in the open [sources](#).” The 2020 decree presents a major but incomplete victory for the most hardline elements in the Russian military. The most fanatic of Russia’s generals want an open declaration of nuclear preemption as Russian strategy. In November 2018, the Russian Federation Council voted to urge the Kremlin to adopt a pre-emptive nuclear strike strategy against NATO and [authorized it](#). (It already was secret Russian policy).

Putin’s decree indicates that Russian state-run [RT](#) (formerly *Russia Today*) and the independent *Interfax*[\[iv\]](#) 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*.” [\[v\]](#) (Emphasis in the original). 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 an armed conflict by preventing the escalation of military activities and ending them on conditions acceptable to the Russian Federation and (or) its [allies](#).”[\[vi\]](#)

In reviewing Putin’s decree, Russian expatriate Dr. *Nikolai Sokov* has pointed out, “Today, it is also easy to imagine a situation when the “existence” of Russia would not be threatened, but its ‘territorial integrity’ would—for example, an attempt to use force to return Crimea to Ukraine. The change of language may be explainable, but the presence of two very different definitions of nuclear threshold is [not](#).” It actually is. The decree is not the entire Russia nuclear weapons use policy, which has always been included in classified documents.

In 2014-2015, there were a number of high level Russian nuclear threats relating to [Ukraine](#), which were inconsistent with the announced Russian nuclear doctrine. Dmitry Adamsky of the Lauder School of Government, Diplomacy and Strategy noted regarding Ukraine that Russia was “...engaged in nuclear signaling aimed to distance Western support out of fear of escalation, possibly also to soften further [sanctions](#).” In 2015, President Putin said that during the Crimea crisis, he would have put Russian nuclear forces on [alert](#) if it were [necessary](#). In July 2014, Russian Foreign Minister Sergei Lavrov made a nuclear threat relating to Crimea by referencing their nuclear [doctrine](#). In September 2014, then-Ukrainian Minister of Defense Colonel General Valeriy Heletey wrote, “The Russian side has threatened on several occasions across unofficial channels that, in the case of continued resistance, they are ready to use a tactical nuclear weapon [against us](#).”

The importance of these nuclear threats is that they were made to support blatant Russian aggression. Putin’s justification for the possible use of nuclear weapons in the Crimea crisis was that Crimea “is our historical territory. Russian people live there. They were in danger. We cannot abandon [them](#).” As Dr. Stephen Blank has pointed out, protection of ethnic Russians was the rationale for Russian military intervention in Georgia, Crimea, Donbas, and [Moldova](#). In 2015, Putin linked the protection of ethnic Russians to nuclear weapons use. Thus, the territorial integrity of Russia was changed to include the just conquered territory. In June 2017, Putin declared Russia would defend Crimea “with all means available to us.”^[vii] The reason these statements appear to go beyond published Russian nuclear doctrine at that time is that the published version was never complete. It still isn’t complete, but it is apparently closer to it than ever before.

Russian linkage of nuclear weapons first use to “sovereignty” is very disturbing because of the ambiguous nature of this concept and its potential permissiveness. In 2008, General of the Army Yuriy Baluyevskiy, then-Chief of the General Staff, declared 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](#).” In 2007 Putin declared, “The nuclear weapons remain the most important guarantee of Russia’s sovereignty and territorial integrity, and play a key role in maintaining the regional balance and [stability](#).” Putin has said some amazing things about the sovereignty and territorial integrity of Russia, making these criteria potentially very permissive. President Putin has characterized cyber espionage (**not cyber-attack**) as “a direct violation of the state’s [sovereignty](#)...” In August 2020, President Putin stated that the Union State Treaty with Belarus obliges the parties to “to help each other protect their sovereignty, external borders and “stability. This is exactly what it [says](#).”

Paragraph 19 of Putin’s decree listed four specific conditions for nuclear weapons first use, 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](#).[\[viii\]](#)

All four of Putin's announced conditions allow for nuclear weapons first use in non-nuclear warfare. Paragraph 19(A), (B) and (C) all contain conditions for first use that are somewhat lower than even what appeared in the most alarming of the open source reports concerning Russian willingness to use nuclear weapons [first](#). The supposed limitation of nuclear weapons first use in conventional war in previous editions of Russian military doctrine to situations in which there was an existential threat to Russia turned out to be a deception since all four of the conditions allow for first use of nuclear weapons in non-nuclear [war](#).

The condition allowing for a nuclear response to the use of "other types of weapons of mass destruction..." (paragraph 19[C]) is broader than the three previous formulations in the military doctrine documents which spoke specifically about [chemical](#) and [biological attack](#). This is clearly a change in declaratory policy. Michael Kofman from the Center for Naval Analysis has pointed out it is "...unclear how weapons of mass destruction are defined, some Russian military writing posits conventional capabilities as having strategic effects similar to nuclear [weapons](#)." There are other possibilities, such as a very damaging cyber-attack.

The condition on the use of nuclear weapons in response to non-nuclear attacks on "nuclear forces" rather than "strategic nuclear forces" in 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.[\[ix\]](#) The Russians are trying to use the threat of nuclear escalation to negate effectively our conventional and cyber capabilities. If they impose this targeting constraint upon us, we lose the war. Kofman's suggestion that this is limited to cyber-attacks on nuclear command and [control facilities](#) contradicts the plain meaning of the provision. It clearly includes nuclear delivery vehicles and weapons. The provision can also be read to include cyber-attacks, but it certainly is not limited to cyber-attacks on nuclear command and control, which are not even mentioned. State documents on nuclear weapons use issues that do not contain "sloppy language." Russian doctrinal writing in 1999 indicated that a nuclear strike might be used in response to conventional attacks on targets that are not even [military](#).

The implicit meaning of the condition in paragraph 19(A) is that the launch of a single ballistic missile at Russia would be a justification for a Russian nuclear strike even before it was known what type of warhead the missile [carried](#). This was made explicit in August 2020 when two senior officers of the Russian General Staff, Major General Andrei Sterlin and Colonel Alexander Khryapin, writing in the official newspaper of the Defense Ministry *Red Star*, noted that "... there will be no way to determine if an incoming ballistic missile is fitted with a nuclear or a conventional warhead, and so the military will see it as a nuclear attack." They added, "Any attacking missile will be perceived as carrying a nuclear warhead" and, "The information about the missile launch will be automatically relayed to the Russian military-political leadership, which will determine the scope of retaliatory action by nuclear forces depending on the evolving [situation](#)."

This is [irresponsible](#) in light of the potential consequences to Russia, but it is classic Putin. Indeed, in 2015, Putin declared that "Fifty years ago, the streets of Leningrad taught me one thing: If a fight's inevitable, you must strike [first](#)." Applying street fighting tactics to nuclear war is not the smartest thing to do if a nation wants to survive. Yet, In March 2018, Alexander Velez-Green of the Harvard Belfer Center wrote, "*Military Thought* has published at least 18 articles in support of preemption against NATO from 2007 to [2017](#)." *Military Thought* is the journal of the Russian General Staff. In 2014, Dr. Sokov wrote that "nuclear exercises have been conducted with targets in Europe, the Pacific, Southeast Asia, the Indian Ocean,

and even the continental United States,” further adding that, “...all large-scale military exercises that Russia conducted beginning in 2000 featured simulations of limited nuclear [strikes](#).” In January 2016, the annual report by the Secretary General of NATO indicated Russia in its Zapad (West) exercises not only simulated nuclear attacks against NATO but that in 2013 Russia simulated nuclear attacks against [Sweden](#), which is not a NATO nation. This is inconsistent with Russia’s declaratory policy concerning so-called negative [assurances](#). Negative assurances pledge no nuclear weapons use against non-nuclear nations that are not allied with a nuclear power.

This emphasis on pre-emption is particularly dangerous because Russia plans to use nuclear weapons, including nuclear armed ICBMs, as part of its “[escalate to de-escalate](#)” or “escalate to win” strategy.[\[x\]](#) Part of it is the concept of “escalation [dominance](#).” According to Dr. Blank, “arguably [escalation dominance] is merely a part of a much broader nuclear strategy that relies heavily upon the psychological and intimidating component of nuclear [weapons](#).” In 2009, Lieutenant General Andrey Shvaychenko, then-Commander of the Strategic Missile Force (RVSN), outlined the role of the nuclear ICBM force in conventional war. He said, “In a conventional war, [the nuclear ICBMs] ensure that the opponent is forced to cease hostilities, on advantageous conditions for Russia, by means of single or multiple preventive strikes against the aggressors’ most important facilities.”[\[xi\]](#) The most amazing thing about this statement is the implication that the introduction of strategic nuclear weapons in conventional war would not start a nuclear war.

In 2017, then-Defense Intelligence Agency Director Lieutenant General Vincent Stewart affirmed that 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...”[\[xii\]](#) He also said that he had seen no evidence that this policy was changing.[\[xiii\]](#)

Despite what Russia says about its possible response to the launch of even a single Western ballistic missile, Russia will clearly be launching [nuclear-capable](#) Kinzhal [ballistic missiles](#) against NATO in the event of a war. Paragraph 19(A) and (C) may be intended to deter conventional attacks on Russian territory in the event of a Russian invasion of NATO Europe. Paragraph 19(C) can justify a nuclear response to a conventional attack on almost any Russian military facility because [virtually](#) all [Russian forces](#) are nuclear-[capable](#). Indeed, in 2018, President Putin stated Russia is developing nuclear weapons for “all types of [forces](#).”

Putin’s decree contained [implicit nuclear](#) attack threats directed against NATO. In August 2020, the government-owned Russian newspaper *Rossiyskaya Gazeta* made these threats explicit:

We will not analyse what kind of warheads they have, nuclear or not, and in any case, at the time of launch, decision will be made on a retaliatory strike to deliver a missile strike on the territory of the state from which the launch was carried out in our direction,” said military analyst Alexander Perendzhiev, member of the Officers of Russia expert council. Moreover, according to him, we are talking not only about countries where such missiles are produced but also about the countries that have allowed to host such missiles.[\[xiv\]](#)

Putin’s June 2020 nuclear decree clearly is not the entirety of Russia’s nuclear first use strategy. It did not supersede Putin’s 2017 decree on the Russian Navy. There are classified elements, including provisions for pre-emptive nuclear strikes. (Russian announced in 2009 that it was classifying its nuclear doctrine. Putin’s 2020 decree appears to be a partial reversal of this policy.) [\[xv\]](#) In September 2014, General of the Army (ret.) Yuriy Baluyevskiy, 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.”[\[xvi\]](#) In 2003, then-Russian Minister of Defense Colonel General Sergei Ivanov explained why these plans were kept secret. He told a reporter:

What we say is one thing. That sounds cynical, but everything that we plan does not necessarily have to be made public. We believe that from the foreign policy viewpoint, it is better to say that. But what we actually do is an entirely different [matter](#).

There are certainly other secret aspects of Russian nuclear weapons use doctrine. According to state-run *RT*, “It follows from the document that nuclear deterrence is aimed at ensuring that the potential adversary understands the inevitability of retaliation in the event of aggression against Russia and its allies.” This is more permissive than Paragraph 19. In March 2020, state-run *Sputnik News* said that Russian nuclear doctrine provided for nuclear first use “...in response to large-scale conventional [aggression](#).” This could allow a nuclear response to a conventional attack that would not be a threat to Russia's existence. Moreover, what Russia is really talking about is not a response to aggression against Russia but a counterattack against Russian aggression, as was indicated in their nuclear threats related to Ukraine.

A hardline but very well-connected Russian journalist, Colonel (ret.) Nikolai Litovkin talked about what it would take for Russia to “**push the button**.” (Emphasis in the original). He wrote that while Russian strategy was defensive:

At the same time, a number of scenarios have been identified in which Russia could deploy nuclear weapons.

First, this pertains to the “build-up of general forces, including nuclear weapons delivery vehicles, in territories adjacent to the Russian Federation and its allies, and in adjacent offshore areas.”

Second, the “deployment of anti-ballistic missile defense systems and facilities, medium- and shorter-range cruise and ballistic missiles, precision non-nuclear and hypersonic weapons, strike drones, and directed-energy weapons by states that consider the Russian Federation to be a potential adversary.”

Third, the “creation and deployment in space of anti-ballistic missile defense facilities and strike systems.”

Fourth, the “possession by countries of nuclear weapons and (or) other types of weapons of mass destruction able to be used against the Russian Federation and (or) its allies, as well as the means to deliver them.”

Fifth, the “uncontrolled proliferation of nuclear weapons, their means of delivery, and technologies and equipment for their manufacture.”

And sixth, the “deployment of nuclear weapons and their delivery vehicles in non-nuclear states.”

Moscow also sets forth additional situations in which it is ready to take “extreme measures.” Among them is the “receipt of reliable information about the launch of ballistic missiles attacking the territory of Russia and (or) its allies,” as well as the “enemy deployment of nuclear or other weapons of mass destruction against Russia and (or) its allies.”

Furthermore, the command to deploy nuclear weapons will be given in the event of an “enemy attack on critical state and military facilities of the Russian Federation which, if incapacitated, would disrupt a nuclear response,” as well as “aggression using conventional weapons that threatens the existence of the Russian [state](#).”

According to Marek Menkiszak, head of the Russian Department at Poland’s Centre for Eastern Studies in Warsaw, “...the list of moves which could fall under the Russian definition of ‘threatening’ is impressive, and contains both offensive and defensive actions by a potential [adversary](#).” The Litovkin version of Russian nuclear first-use policy indicates that these “concerns” are really conditions for “pressing the button.” He is apparently saying that in addition to Paragraph 19 criteria in the Putin decree, just about any serious threat to Russia justifies first use of nuclear weapons. Moreover, it appeared in Russian state media without any disclaimer concerning whether or not this is state policy. Litovkin’s conditions for nuclear weapons’ first use are actually similar to Russia’s [nuclear missile](#) targeting threats, which have involved [missile defense](#) facilities, [troop deployments](#) and non-existent U.S. [INF missile](#) deployments in [Europe](#). Russia, including President Putin, has even threatened nuclear decapitation attacks against the U.S. with hypersonic [missiles](#). Under Putin’s information warfare policy, nuclear threats are used “to achieve immediate strategic [advantage](#).”

An August 2020 *Red Star* article, attributed to the [General Staff](#), characterized the four conditions in the Putin decree as “[redlines](#).” It also indicated that the political leadership would determine the scale of the nuclear response before they knew if the ballistic missile attack against Russia was nuclear. The response to a single missile launch against Russia, even without knowing the kind of warhead it carried, “will no doubt be crushing.”[\[xviii\]](#) Again, this is monumental stupidity because the consequences to Russia are ignored. This is irresponsibility turned into an art form.

The strong emphasis on escalation control in the original public discussion of nuclear first use [in 1999](#) may be eroding, although there is still a considerable difference on initial nuclear first use. Keep in mind that the description of Russian targeting by General Shvaychenko cited above involves nuclear ICBM attacks “against the aggressors’ most important facilities.” This sounds more Soviet-like than the description of escalation in the doctrinal literature of 1999, which said Russia would “not to provoke the aggressor into escalating the use of nuclear weapons without a justified reason,” according to a First Deputy Defense [Minister](#).

The new Russian nuclear doctrine in the context of massive modernization of Russian nuclear forces and constant nuclear first use exercises is very disturbing. It makes it critically necessary to modernize the U.S. nuclear deterrent capability.

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.

The new U.S. Air Force chief has a reputation of only asking for what he needs. He’s going to need a lot.

Defense News Online, 11 Sep 20

Valerie Insinna

WASHINGTON -- In September 2016, when the U.S. Air Force’s new chief of staff, Gen. Dave Goldfein, took the stage at the service’s largest conference, he spoke of the heavy responsibility of leading the service. He said the portraits of former chiefs had eyes that followed him like “a Harry Potter movie,” and he recounted his own experience as a young F-16 pilot in combat for the first time during Desert Storm.

Then he used the speech, like his predecessors had, to lay out his goals for the Air Force.

He wanted to reinvigorate squadrons where pilots had become overloaded with administrative work. He wanted to improve joint operations in the face of emerging Russian and Chinese threats. Perhaps, most ambitiously, he wanted to create a new command-and-control enterprise that would connect the military's legacy platforms and inject new technologies like data fusion and artificial intelligence.

"What you need to know about me is that I am into evolution, not revolution. I am not coming in with full guns blazing," Goldfein said then.

For his successor, Gen. Charles "CQ" Brown, who will make his first address to the service during the Air Force Association's Air, Space and Cyber Conference this Monday, coming in "guns blazing" might be the only option.

The contrast between the future that Goldfein faced and the one that Brown must now confront is stark. After several years of budget growth, slight increases to the number of active-duty troops in the Air Force and improvements in the readiness of today's forces, the service is likely heading toward stagnant or decreased budgets that will make further expansion all but impossible.

The service can no longer count on the money necessary to grow the Air Force, Brown wrote in "Accelerate Change or Lose," an Aug. 31 paper where he outlined his strategy for the service. To win in a future war with Russia and China, the service must shed legacy missions and equipment, and cancel programs that will not help the Air Force counter future threats.

"Likely future budget pressures will require the most difficult force structure decisions in generations. We cannot shy away from these decisions," Brown wrote, adding that previous decisions "do not deliver the outcomes we need today due to the rapidly-changing elements of the competitions with China and Russia."

A future war against a near-peer nation won't be like the wars of the past two decades, Brown warned. "Future warfare will not remain far from our shores," he wrote, and the service "must be prepared to fight through combat attrition rates and risks to the Nation that are more akin to the World War II era."

Brown is expected to detail his marching orders to the service Sept. 14. Should the Air Force move too slowly, it will eventually risk mission failure and loss of life, he wrote.

In short: The Air Force must make changes, and quickly, if it stands a chance of winning.

Under Goldfein, the Air Force spearheaded an effort to increase the size of the service from 312 to 386 operational squadrons by 2030 — an attempt to convince Congress to put more money into expanding and modernizing the service.

Goldfein “was there at a time where there was the potential to grow the size of the Air Force,” said Todd Harrison, director of defense budget analysis at the Center for Strategic and International Studies. “Now ... the Air Force has no chance of 386 squadrons. That’s gone. Now, it’s really looking at: how can we make the best of what we have?”

“It’s not about growth,” he added. “It’s about trade-offs.”

A ‘quiet giant’

Brown took command as the Air Force’s 22nd chief of staff on Aug. 6. The ceremony at Joint Base Andrews, Maryland, took place in front of a P-51 Mustang — a symbolic link between Brown as the U.S. military’s first Black service chief and the iconic Tuskegee Airmen, who flew red-tailed P-51s during World War II as the first Black fighter pilots.

Inside the Pentagon, Brown had been considered a lock for the position for months ahead of his nomination. He had a reputation as a thoughtful but decisive leader, and he held a long list of command positions overseas. As head of U.S. Air Forces Central Command from 2015 to 2016, he was charged with running the air war against the Islamic State group. He then took over as deputy commander of U.S. Central Command and was named to the top job at Pacific Air Forces in 2018.

“I don’t think there’s anybody that has a Rolodex that’s thicker,” Goldfein said of Brown in an interview with Defense News in July. “Not only that, he’s just a brilliant strategic thinker.”

Retired Gen. Herbert “Hawk” Carlisle, the former head of Air Combat Command, has known Brown for roughly 30 years and described him as a humble leader who would take on the hardest tasks. When Brown was the deputy commander of CENTCOM and Carlisle was head of ACC, Carlisle knew “if [Brown] asked for something, it was something he really needed,” he said.

“He’s one of those ‘quiet giant’ kind of guys,” Carlisle said. “He’s not the loud guy in the room. But he’s the guy that when he says something everyone stops and listens to him.”

Former Air Force Secretary Heather Wilson met Brown during his interviews to become the commander of Pacific Air Forces.

“I was always very impressed by him, his thoughtfulness, the depth of his experience,” she said. “In a room with the four stars of the Air Force, he would not be the first one to speak, but when he spoke, other people listened. He was respected.”

Over the past decade, China has emerged as the most advanced threat to U.S. national security. At a time when the Air Force needs to pivot from the fight against terrorist groups to competing against a near-peer nation, Brown’s experience at the helm of Pacific Air Forces — as well as in the Middle East and Europe — make him uniquely qualified to drive changes inside the Air Force. He’s also well set up to establish partnerships with international air forces that are seen as key for deterring Russia and China, agreed Wilson and Carlisle said.

But doing so won't be easy.

“His challenge is not going to be with the service itself,” Wilson said. “His challenge is going to be more in Washington than it is with the force itself. And he will need allies in doing that, including the Secretary of Defense and the other members of the Joint Chiefs, as well as the secretary of the Air Force.”

Most difficult will be getting members of Congress onboard with any plans to retire legacy aircraft —particularly if there's not an equivalent replacement on the way. The Air Force has repeatedly tried to shed some of its oldest force structure since the signing of the Budget Control Act of 2011, which mandated across-the-board spending cuts for defense.

The service proposed retiring the A-10 Warthog, the U-2 spyplane and the RQ-4 Global Hawk surveillance drone, but was rebuffed each time.

More recent efforts in the fiscal 2021 budget to retire some of the Air Force's oldest B-1 bombers and aging KC-135 and KC-10 tankers have been met with less opposition from lawmakers, but it won't be clear whether Congress will allow those changes until a final defense policy bill passes.

Most of the lawmakers on the congressional defense committees represent states and districts with military bases that increase employment and help stimulate the local economies. Calls to divest aircraft from a base without replacing them with a new platform is typically seen by Congress as a threat to constituents' jobs.

According to Mackenzie Eaglen, a defense strategy and budget expert with the American Enterprise Institute, there's a perception that the Air Force has problems, doesn't advocate for itself well and doesn't have "friends on the Hill.”

“[But Brown] is pretty upfront about needing different and better relationships with stakeholders,” Eaglen explained.

The general spent a year building the Air Force's classified budget as part of its programming arm in the early 2000s, and Carlisle — his boss at the time — recalled Brown's presentation to Air Force leadership as exceptionally thoughtful and comprehensive.

But Brown has no experience with the high pressure and sometimes combative interrogations with Congress in which Air Force leaders frequently find themselves during budget hearings. If he is looking for allies, he might find them among the young junior members of the House Armed Services Committee, many of which have shown a deep interest in national security matters or have formerly served in the military, said Wilson.

But Brown will need to provide a compelling, logical case to opposing arguments from lawmakers who believe the retirement of legacy aircraft could endanger the Air Force bases in their backyards — and economic boon that comes with those installations, Harrison said.

“If you're going to ask Congress to make painful changes, to do things to Congress has been loath to do, you've got to start by explaining the alternative and give it to them in dire terms,” he said. “If we can't make some hard choices, if we can't endure some pain, the alternative is even more painful.”

Bills, bills, bills

Brown will also be responsible for navigating the Air Force through other potential tensions. For one, as the Space Force stands up under the Department of the Air Force, it will require continued advocacy and support.

“The Space Force is, and will continue to be, very small,” Wilson said. “It is structurally and institutionally, not very strong. And over the long term, I think, I worry what happens when it’s no longer the new shiny object and it has to fight for support.”

During Brown’s tenure, the Air Force will have to pay two massive bills: one for nuclear modernization as the B-21 bomber begins flight tests and fielding, and the other as Northrop Grumman continues development of the next-generation intercontinental ballistic missile, known as the Ground Based Strategic Deterrent.

Lawmakers with ties to the nuclear enterprise may be natural allies of the Air Force in the coming years as it seeks financial support for those programs, Wilson said. It may even be necessary for Congress to create a separate funding account for ICBM and bomber modernization — similar to the National Sea-Based Deterrence Fund established to fund the Columbia-class ballistic missile submarine — in order to prevent other spending priorities from curtailing their progress.

“The Air Force budget alone cannot sustain the modernization of the nuclear deterrent, that must be done above the Air Force top line,” Wilson said. “There are advocates for continued strong nuclear deterrence in the Congress and more broadly who understand the importance of deterrence. And that alone, that decision to fund the modernization of the nuclear deterrent outside of the Air Force’s budget, is probably strategically one of the most important things that can be accomplished.”

Over the coming years, the Air Force could find itself in competition with the Army for financial resources and key missions like long-range strike, a role that the Air Force has typically accomplished but that the Army increasingly wants to do on its own, Eaglen said.

In the Aug. 31 document, Brown supported the Joint All-Domain Command and Control concept that was Goldfein’s major priority, but the Air Force needs to prove that its Advanced Battle Management System program is a technically feasible option for connecting the military’s sensors and shooters, as well as get buy-in from Congress for funding.

“There’s this sense [from the Army] that’s like: ‘Hey, knock yourselves out. If it works, we’ll come on over, you know? But in the meantime, we’re going to develop our own just in case you fail,’ ” Eaglen said. “But that doesn’t work. There isn’t enough money.”

In the document, Brown said he hopes to take “a renewed look at service-assigned roles and missions,” which could mean he will advocate starting a Pentagon-wide review of how the military divides its missions among the service branches.

“Each of the services is going to have to prioritize among their mission areas. And so they need to have a frank discussion around among one another on who’s going to do what,” Harrison said. “That can allow you to make those trade offs.”

Brown won’t be able to win every fight, Carlisle said, but if he cultivates relationships early on and keeps building on his message, he stands a better chance of transforming the Air Force so that the next time a major war happens, it’s ready.

“I think his intent now is to go to the administration, [the Office of the Secretary of Defense], Congress, the American people, the defense industrial base, academia, and go: ‘OK, here’s where we’re at,’ ” Carlisle said. “Here’s what we have to do. You know it. I know it. So let’s stop being parochial and start doing what’s right.”

STRATCOM preparing for China to join Russia as U.S. nuclear peer adversary

InsideDefense.com, 14 Sep 20

Jason Sherman

China's military modernization -- particularly development of its strategic forces -- is driving the U.S. military to begin preparing for the advent of Beijing as a nuclear competitor on par with Russia, a development that will require a different deterrence strategy from the playbook the Defense Department has long maintained to counter Moscow, according to a senior U.S. military official.

U.S. Strategic Command chief Adm. Chas Richard, speaking to reporters today at the Pentagon, also said China's strategic forces modernization appears at odds with its stated "no-first-use" policy -- and that this drives an imperative for the United States to modernize its offensive strategic forces as soon as possible.

"We are on a trajectory for the first time in our nation's history to face two peer nuclear-capable competitors who have to be deterred differently," Richard said. "And we're working very hard to meet that challenge."

According to Pentagon assessments, China aims to double the size of its nuclear stockpile by the end of the decade, including fielding a survivable nuclear triad as well as a host of weapon systems to challenge the U.S. military's ability to project power in the Indo-Pacific region. These developments include fielding of the H-6N Badger bomber, the DF-41 intercontinental ballistic missile, the DF-17 medium-range ballistic missile, and improved submarine-launched ballistic missiles.

"I'd ask you to consider that just measuring a nation's stockpile is a relatively crude measure of their capabilities, you have to look at the totality of the delivery systems, what they're capable of, what their readiness is," Richard said. "And China in particular is developing a stack of capabilities that in my mind is increasingly inconsistent with a stated no first-use policy."

The Pentagon's most recent annual report on China's military strength states range limitations on the JL-2 submarine-launched ballistic missile require the Jin-class submarines to sail in waters north and east of Hawaii in order to target the U.S. east coast.

"And I would actually pay more attention to their JL-3 missiles that they're working on, which gives them a greatly expanded range," Richard said. "I get apprehensive that we are not fully conscious as a nation of the threats that we face. China now has the capability . . . to directly threaten our homeland from a ballistic missile submarine. That's a pretty watershed moment. And that's why when I come up here and say that we need to maintain the forces that give us a deterrence capability against that, why we have to go recapitalize our strategic triad, why I say that there's no margin left and why that's the most important mission in the Department of Defense."

Richard said that he is thinking about capabilities that China's strategic forces could field in a decade -- noting that Beijing in 2013 set out to create a coast guard and has since fielded a fleet of 255 ships for the new organization.

"I just think strategic forces are next on their 'to do' list," the admiral said. "I'm trying to posture us for the threat we're going to face -- not the one that we have today."

Richard said he was recently meeting with Air Force officials and Northrop Grumman representatives in charge of the Ground Based Strategic Deterrent program to discuss the new ICBM program; the Air Force earlier this month awarded Northrop, the sole bidder, a \$13 billion contract to develop the new offensive strike weapon. The admiral said he is "very impressed" with "the cutting-edge ways that the GBSD program [is] going about accomplishing the acquisition tasks they've been handed."

In particular, the admiral highlighted what he sees as the GBSD program's ability to move quickly.

"If you asked me what keeps me up at night, it is our ability to move fast," he said, noting China's ability to field a new maritime fleet. "We're going to have to move equally as fast in order to pace that threat."

"In the end, it is time for us to start getting some of our bureaucracy out of our way," Richard continued. "I think that is the fundamental thing that slows us down; I pointed the GBSD program as a pathfinder in terms of how to achieve the old standard by a new way."

Iran's Secret Space Program Poses Security Threat, Expert Says

https://freebeacon.com/national-security/irans-secret-space-program-poses-security-threat-expert-says/?utm_source=actengage&utm_campaign=FreedomMail&utm_medium=email

By: [Jack Beyrer](#) for the WFB // SEPTEMBER 18, 2020 5:05 PM

Iran has quietly been developing a dangerous, militaristic space program, an Israeli defense expert [said](#) Friday.

While China and Russia have made [headlines](#) for their development of satellite fleets, anti-satellite missile production, and burgeoning strategic partnership in space, Iran has developed its own growing space program below the international radar. According to missile defense expert Dr. Uzi Rubin, Iran's rapid progress in developing its civilian and military space programs is a real concern, with 2020 being a watershed year for Iran's space designs.

In April, Iran [launched](#) its first military satellite into orbit, which the Pentagon cited as an example of Iran's aggressive behavior. "We want to make sure that they can never threaten the United States," U.S. Air Force general John Hyten, vice chairman of the Joint Chiefs of Staff, said in April when asked about the satellite launch. The launch revealed that there are two space programs developing in parallel in Iran:

The already-known Iranian Space Agency program, but also a program developed under the auspices of Iran's Islamic Revolutionary Guard Corps (IRGC), which the Trump administration designated as a terrorist organization in 2017. "The very fact that the IRGC was authorized by Iran's Supreme Leader to reveal that it has been running a space program of its own—and that it has its own industries, and research and development centers, to be able to do so—is indicative of an upgrading in the IRGC's stature within the regime," Rubin said.

"The IRGC's air and space force has scored several noticeable successes." By its own classification, the United States is now dealing with a terrorist organization with space-related aspirations. "The space program is ... a crucial building block of its own in establishing a global range nuclear missile force as befits a global power, which Iran clearly aspires to be," Rubin said. "Iran's space program merits constant and detailed scrutiny no less than the missile program does."

A senior Pentagon official [shared](#) similar observations on China with the Washington Free Beacon earlier this month, saying that China aspires to "space great power" status, using investment in space as another tool of statecraft to reshape the American-led international order. Accordingly, revamping the American strategy in space has been a major feature of the Trump administration's defense planning.

"In the years ahead, wars will not just be fought on land and sea like they have for thousands of years, or in the air as they have for the past century, but also in outer space and cyberspace in unprecedented ways," Secretary of Defense Mark Esper said in a Wednesday [speech](#). Our adversaries, Esper said, have turned space into a "warfighting domain." "They have weaponized space through killer satellites, directed energy weapons, and more in an effort to exploit our systems and chip away at our military advantage," Esper added. To combat these developments, the Pentagon now boasts the largest research and development budget in its history as well as the establishment of the U.S. Space Force during the Trump administration.

Head of US Nuclear Forces Warns of Growing, Modernizing Chinese Nuclear Threat

<https://thediplomat.com/2020/09/head-of-us-nuclear-forces-warns-of-growing-modernizing-chinese-nuclear-threat/>

Admiral highlights new missiles capable of hitting the U.S. and expects Chinese arsenal to double.

By [Steven Stashwick](#) for The Diplomat // September 17, 2020

Earlier this week the commander of the U.S. Strategic Command, responsible for the United States' nuclear arsenal, [warned](#) that modernizing its own arsenal was next on China's "to-do list." Admiral Charles Richard highlighted his concerns that there was no margin of error for the United States to modernize its massive nuclear arsenal to respond to China's moves. The Pentagon's [annual report](#) on China's military released in August provided some of the most specific information on China's nuclear arsenal ever released by the U.S. government.

The most respected open-source estimates of China's arsenal in recent years from the Federation of American Scientists assess that China has a little over 300 nuclear warheads. The Pentagon's new report puts the number of warheads closer to 200 and expected it to double over the next decade. By

comparison, the United States has close to 4,000 nuclear warheads in its arsenal, with 1,600 deployed strategic weapons atop intercontinental ballistic missiles in silos and ballistic missile submarines, or ready to be dropped by air force bombers.

Despite the United States' massive advantage in the size and capability of its nuclear arsenal, Richard is worried about China's new and anticipated capabilities. "China now has the capability ... to directly threaten our homeland from a ballistic missile submarine. That's a pretty watershed moment," Richard told reporters. China's land-based nuclear missiles have been capable of targeting the United States for decades.

But China's fleet of Type 094 nuclear missile submarines remains small at four, with two more being completed. The range of the missiles on those submarines is also relatively limited. The Pentagon believes that to threaten the continental United States, those submarines would need to travel more than halfway across the Pacific Ocean to the east and north of Hawaii. The island geography around China that those submarines would need to pass through to reach those patrol areas off Hawaii presents a significant challenge to remaining undetected by the U.S. Navy.

China's next generation of nuclear missile submarines, the Type 096, and an advanced new missile they are expected to carry, will be able to target the United States from just off its own shores, potentially reducing the risk of being tracked. In earlier [remarks](#) to a policy institute closely aligned with the U.S. Air Force, Richard was more specific about his worries that China's new nuclear capabilities would challenge the United States' ability to deter what he described as China's increasing aggression.

"China is on a trajectory to be a strategic peer to us by the end of the decade. So, for the first time ever the U.S. is going to face two peer-capable nuclear competitors [Russia and China] who are different, who you have to deter differently. We have never faced that situation before." But even if China's military approaches greater parity with the United States in coming years, it will remain a drastically different strategic challenge than the United States faces with Russia.

China's People's Liberation Army has grown and modernized with stunning rapidity in the last 20 years, but even if it doubles, its nuclear arsenal will still be tiny compared to the thousands of warheads maintained by the United States and Russia. Implied in the Pentagon report and Richard's concerns is a worry that if China can use its nuclear arsenal to effectively deter the United States' own nuclear weapons, there may be little to stop the two from fighting a destructive conventional war.

Steven Stashwick is an independent writer and researcher based in New York City focused on East Asian security and maritime issues.

High Speed, Low-Yield: A U.S. Dual-Use Hypersonic Weapon

<https://warontherocks.com/2020/09/high-speed-low-yield-a-u-s-dual-use-hypersonic-weapon/>

By: [Alan Cummings](#) for War on the Rocks // September 17, 2020

Should the United States put nuclear warheads on hypersonic missiles? For 20 years, Washington has answered "no" by excluding nuclear weapons from its [prompt strike](#) and [hypersonic weapons](#) programs. In order to close gaps in U.S. theater deterrence and assurance capabilities, it is time to consider a change of course. Theater capabilities currently depend too much on aircraft and low-observable technology, the advantages of which are being eroded by advancements in adversary air defenses. Meanwhile, low-yield Trident missiles invite escalation and put strategic deterrence assets at risk.

One U.S. hypersonic program — the [Common Hypersonic Glide Body](#) — relies on neither aircraft nor low-observability. It ought to be a prime candidate for becoming a dual-use weapon with conventional and low-yield nuclear variants. There are counterarguments, which I will address and welcome others to raise, but even once they are fairly considered, the case for nuclear-tipped hypersonic missiles is persuasive. It would serve U.S. interests — namely, by improving U.S. theater deterrence, diversifying its assurance capabilities, and gaining leverage for future arms control agreements.

The Hypersonic Connection

Concerns about using hypersonic weapons for nuclear delivery often focus on the strategic level of war, where fears of large-scale instability and national vulnerability reside. However, the numerous intercontinental delivery systems already possessed by China, Russia, and the United States mean [strategic hypersonic missiles produce only a marginal change](#) in each other's strategic vulnerability. While the Kremlin cites U.S. missile defenses as motive for its [Avangard](#) missile and other programs, [the performance](#) and [cost realities](#) of U.S. missile defenses make effective interdiction unrealistic for any large-scale nuclear strike, whether delivered by hypersonic or ballistic warheads.

[China is less transparent but has similar motivations](#), with added concerns rooted in its smaller arsenal and perceptions of U.S. ambiguity on mutual vulnerability — a condition that Beijing may try to impose with an Avangard-like system, as mentioned by [Gen. Terrence O'Shaughnessy](#). Against the fear of a first strike, each of the three nations cultivates second-strike capabilities that may be more vulnerable to [widespread cyber attack](#) than a finite number of long-range hypersonic weapons. Even if one concedes [a stabilizing role](#) for strategic hypersonic weapons in China and Russia, adding them to an already robust U.S. modernization plan seems unnecessary given limited resources.

There is a more compelling case for the significance of hypersonic weapons at the theater level, where the logic of speed and defeating air and missile defenses applies to everyone. History has shown the enduring value of [rapid effects delivered from multiple firing positions](#) and in conjunction with other forces. This is certainly true for conventional munitions, as well as theater nuclear delivery and therefore deterrence. It is reflected in Russia's avowedly dual-capable [Kinzhal](#) and, potentially, its [Tsirkon](#), as well as perhaps [China's DF-17](#). In contrast, the United States has ruled out nuclear hypersonic capabilities for a variety of reasons, including presumptions of U.S. conventional dominance and theater nuclear sufficiency as well as programmatic momentum. This conventional-only approach was the right decision in the early 2000s, but that restraint may no longer be in the best interests of the United States and its allies.

Gaps in U.S. Theater Nuclear Deterrence

Theater deterrence is not just a microcosm of strategic deterrence. It involves U.S. interests alongside those of regional nations, which are both party and victim to potential conflicts. Escalation concerns are prominent and nuanced, incentivizing in-theater capabilities in order to forgo launching strikes from one's homeland and risking retaliation there. This includes “low-yield” weapons. Although not formally defined, the phrase is useful in classifying weapons whose explosive power is generally tens of kilotons in TNT equivalent or less. To be clear, the bombs at [Hiroshima](#) and Nagasaki were estimated at [16 kilotons and 21 kilotons](#), respectively, making both “low-yield” weapons in today's parlance. Low-yield weapons are clearly still [devastating](#), which is why [former Secretary of Defense James Mattis told Congress](#) that there is no “such thing as a ‘tactical nuclear weapon.’”

Any nuclear weapon used any time is a strategic game-changer.” While [critics disagree](#), proponents argue that low-yield weapons facilitate deterrence by presenting adversaries with [a more credible threat](#). This logic vis à vis [Russia’s particular dedication](#) to low-yield weapons is why they escaped complete elimination from the U.S. inventory before being reinvigorated by the [2018 Nuclear Posture Review](#). The United States currently has three low-yield weapons for theater nuclear deterrence: the [B61](#) gravity bomb, one type of [air-launched cruise missile](#), and the [low-yield W76-2 warhead](#) on Trident submarine launched ballistic missiles. The U.S. nuclear modernization plan will replace its air-launched cruise missiles from the 1970s with the [Long-Range Standoff weapon](#) and will see the return of a nuclear [sea-launched cruise missile](#). These new delivery systems reflect a broader modernization theme: The United States does not need more nuclear weapons. It needs better ones, suitable for 21st century deterrence. However, the current approach perpetuates three vulnerabilities in U.S. theater deterrence.

The first is dependence on low observability (i.e., stealth) technology and tactics. Delivering a B61 or an air-launched cruise missile relies on the aircraft, the weapon, or both staying off an enemy’s radar. The same may be true for future sea-launched cruise missiles. Low-observable techniques are effective today and for the immediate future, but they are increasingly jeopardized by advanced air defense systems from [Russia](#) and [China](#), along with the future systems they will inevitably deploy. The ongoing battle between signature and sensor will eventually meet an irreducible minimum, likely in favor of the sensor, at which point low observability may become moot.

The second is the escalatory problem of using U.S. [strategic Trident missiles for theater purposes](#). Aside from the [W76-2’s potential vulnerability](#) to missile defenses, using a Trident means adversary leaders will not know if their country has been targeted with a high-yield or low-yield weapon until after impact. This action thus entails gambling, or at best an educated guess, on whether those decision-makers will wait that long before initiating their own retaliatory actions. Third, U.S. theater deterrence and assurance are overly reliant on aircraft and easily targeted airfields. Until 2019, the Intermediate-Range Nuclear Forces Treaty prohibited development of [relevant ground-based weapons](#).

At sea, decommissioning the nuclear Tomahawk variants removed attack submarines and surface warships from the deterrence chessboard. The W76-2 is responsive to this but with the escalatory issues mentioned above. So are future sea-launched cruise missiles, but potentially beholden to low-observable designs. With U.S. ballistic missile submarines rarely visiting foreign ports and new nuclear-armed maritime cruise missiles still [up to 10 years away](#), in-theater manifestations of U.S. nuclear assurances are limited to [U.S. aircraft in allied airfields or air space](#) willing to permit them.

A New Role for the Common Hypersonic Glide Body

Although U.S. doctrine retains the prerogative of nuclear first use in defense of vital interests, a limited retaliatory action remains the most probable scenario. This makes it critical that low-yield delivery systems succeed when only one or a few weapons must be guaranteed to reach their objective. Among U.S. hypersonic programs, the Common Hypersonic Glide Body is the best option for a dual-use design that closes gaps in U.S. theater deterrence. This leaves the [Air-launched Rapid Response Weapon](#) to continue on track as a conventional system and likely the first U.S. weapon to become operational. It also may provide more payload capacity compared to the [Hypersonic Air-breathing Weapon Concept](#), another air-launched missile. Furthermore, cooperative development of the Common Hypersonic Glide Body by the Army and Navy facilitates joint familiarity, logistics, and options for [conventional-nuclear integration](#) within theater contingency plans.

Target Access

Rather than stealth, hypersonic missiles defeat air defenses through a combination of speed, trajectory, and maneuverability. Even when [hypersonic defense](#) becomes feasible (at costs potentially unbearable for China and Russia), short flight times mean successful interception requires a nearly flawless detect-to-engage sequence. Against future air defenses, the Common Hypersonic Glide Body would be more credible for theater nuclear delivery than slower, low-observable cruise missiles while saving dual-capable aircraft for future missions, to include a potentially ongoing conventional fight. Additionally, the [high-energy impact physics](#) of hypersonic glide vehicles mean it would likely exceed the [penetration capability](#) of a B61 without relying on a ballistic trajectory. While its accuracy has not been disclosed, its origin in delivering precise conventional effects means it is surely accurate enough for low-yield weapons.

Scalable Presence

A dual-use approach capitalizes on the ground and maritime integration already planned for the Common Hypersonic Glide Body, diversifying U.S. theater deterrence and assurance capabilities with non-aircraft options. [Virginia-class submarines](#) and [potentially Zumwalt-class destroyers](#) offer high-mobility options for unilaterally deploying these weapons to either the European or Pacific theater. This is already planned for conventional variants as part of the Navy's [Intermediate Range Conventional Prompt Strike program](#). With allied coordination, port visits from these vessels could help signal U.S. commitment to extended deterrence while alleviating the [political burdens allies would face](#) in permanently hosting U.S. weapons. Should an ally see that burden become more tolerable or more necessary, ground-mobile firing units armed with this system atop the Army's [Long Range Hypersonic Weapon](#) would provide options [not constrained to airfields](#). Even if not immediately dispatched, simply having this family of deployable systems could help in assuring allies and cautioning adversaries, or [reinforcing a secondary theater](#) while the United States fought a major conflict elsewhere.

Safeguarding Trident

Low-yield variants of the Common Hypersonic Glide Body aboard Virginia-class submarines should be a replacement capability for low-yield W76-2 warheads. Retiring the W76-2 would return U.S. Trident missiles to their strategic-only role aboard Ohio- and Columbia-class submarines. This would reduce escalatory risks by alleviating ([though not eliminating](#)) an adversary's Trident discrimination problem. It would also reduce an adversary's incentives to target U.S. strategic platforms in pursuit of its own theater objectives, helping safeguard U.S. ballistic missile submarines as the most survivable leg of the country's strategic triad. The United States could then credibly assert that attacks on these submarines would be considered attacks on its strategic deterrent. While similar benefits could accrue from sea-launched cruise missiles, the Common Hypersonic Glide Body does not rely on low-observable designs and may be able to reach initial operational capability faster and more efficiently.

Concerns

Making a bold course change like the one suggested here warrants careful consideration of the risks for both action and inaction. The risk of inaction is straightforward: a potential deterioration in U.S. deterrence and assurance capabilities (the same sentiment that has motivated broader U.S. modernization efforts). The risks of action, however, are more specific when it comes to adopting a dual-use Common Hypersonic Glide Body.

Entanglement and Escalation

[Entangling conventional and nuclear capabilities](#) comes with risks. For one, exquisite weapons make exquisite targets in a crisis. Some fear that an agitated adversary might purposefully or inadvertently strike a nuclear-armed hypersonic missile, prompting the United States to cross the nuclear

threshold first. Second, dual-use hypersonic missiles replace an adversary's Trident discrimination problem with one of [pre-launch ambiguity between nuclear and conventional](#) warheads — a problem complicated by the compressed decision timeline of hypersonic flight. These issues lead to further concerns that hypersonic weapons will incentivize postures and reactions that heighten escalation risks.

However, like dual-use cruise missiles and aircraft, the Common Hypersonic Glide Body is a theater system that is more resilient against the use-it-or-lose-it fears underpinning that argument. Strikes against it would garner a strong response, but U.S. strategic deterrence would not be jeopardized and theater deterrence would be sustained by the portfolio of theater weapons that this hypersonic capability is meant to complement. Moreover, Russia has already introduced this threat, and the United States should turn its attention to deterring Moscow from leveraging it as an asymmetric, potentially coercive, advantage. Warhead ambiguity may even be beneficial by providing political flexibility to allies hosting these systems or inducing hesitancy in an adversary considering whether to strike a potential nuclear weapon, thus enhancing deterrence. Alternatively, ambiguity can be sacrificed to mitigate these concerns by restricting nuclear capabilities to identifiable units (especially on land).

Strategic Overlap

U.S. adversaries may still perceive dual-use hypersonic missiles as threatening their strategic deterrence capabilities. Similar arguments could be mounted for many theater deterrence weapons the United States has previously deployed, from cruise missiles to W76-2s. This is one among many reasons China, Russia, and the United States safeguard their second-strike capabilities. It is also a reason theater deterrence relies on a different set of weapons and targets: to keep the cataclysmic power of strategic forces in reserve, and to keep national leaders in command. Furthermore, [Moscow](#) and [Beijing](#) already seem to fear U.S. conventional hypersonic weapons, which they believe convey first-strike advantages unencumbered by the nuclear taboo. Adding a low-yield capability to the Common Hypersonic Glide Body adds little on the margin of concerns driven by its conventional attributes but adds much to the ledger for deterring conflict overall.

Costs

Making the Common Hypersonic Glide Body a dual-use system is a more efficient use of limited funds as well as common infrastructure and logistics once operational. [Gen. Dave Goldfein, who will retire on Oct. 1, recently stated](#) that this is the first time the United States is modernizing its nuclear and conventional enterprises at the same time, and that “[t]he current budget does not allow you to do both.” Adding a proposal like this runs the risk of being a fiscal non-starter. However, the Common Hypersonic Glide Body is not a new program — it already has development funding for the delivery systems and a conventional warhead. The new component would be integrating a low-yield capability. Given the expected capabilities of its naval variant, one solution may be to forgo [developing a replacement](#) for nuclear sea-launched cruise missiles and utilize those funds to cover nuclear integration. It would also be a potentially less expensive route to strengthening theater deterrence compared with [increasing the U.S. bomber fleet](#) beyond original modernization requirements.

Arms Control and Arms Racing

Shifting to a dual-use design should be acknowledged for what it is: a failure of arms control and an incremental step of arms racing prompted by U.S. adversaries. It reflects the fact that the United States is already engaged in deterring a [Russian force](#) that has retained, modernized, and produced so many low-yield weapons that they allegedly outnumber the United States’ [eight to one \(1,830 to 230\)](#). Russia [broke faith with the Intermediate-Range Nuclear Forces Treaty](#) long before the Trump administration was elected, and has repeatedly rejected attempts to negotiate arms control

parameters for its low-yield weapons. In the Pacific, reports that [China is expanding its arsenal](#) are pulling an ever-present nuclear subtext to the foreground and raising questions about [what capabilities may yet](#) come to underscore Beijing's revisionist foreign policy.

U.S. low-yield weapons responsive to threats posed by Russia do risk being seen as a threat that Beijing must in turn respond to. Rather than counting on endless restraint by the United States, Chinese leaders should see this as a natural consequence of the multipolar world they themselves advocate and be willing to safeguard their regional interests through arms control. Yet Beijing has completely refused official engagement and at this point, “[countless Track II dialogues with China are not a substitute](#).” After 20-plus years of a worthy and laudable arms control effort, the reality of this situation should be acknowledged and reflected in the U.S. force posture before progress can be made. As [Lt. Gen. Robert P. Ashley Jr.](#) noted, “the resurgence of great power competition is a geopolitical reality. It is the mindset Russia and China have embraced, the mindset that is guiding their approach to nuclear modernization and investment.”

The United States does not need to engage in an open-ended, expensive race to superiority. But in order to deter, it needs to ensure that its arsenal is fit for purpose in defeating an adversary locally. Both Russia and China would likely object to dual-use hypersonic missiles, calling their adoption a destabilizing move by the United States. This argument is hypocritical and false but expected — and to some degree desired: Washington should want Moscow and Beijing to react with some apprehension. Their reaction would acknowledge Washington's signal of commitment to deterring their revisionist ambitions and defending U.S. allies. Their reaction would also reflect the fact that assured delivery for the United States means assured risk to their interests and security, giving both of them increased incentives to come to the negotiating table. This pressure point alone might not be decisive, but using it to complicate their decision space would be useful in pursuing trilateral arms control solutions to replace the Intermediate-Range Nuclear Forces Treaty or respond to the low-yield lacunae in New START — solutions that are beneficial to the stability and security of all three nations.

To Hype or Not to Hype (America's Nuclear Arsenal)?

A dual-use Common Hypersonic Glide Body would close gaps in U.S. theater deterrence capabilities and offer scalable deployment options to assure allies. It would give the United States a tool for assured delivery of conventional and low-yield warheads that hedges against erosion of U.S. advantages in low-observable technology. Both variants could be deployed unilaterally and clandestinely at sea aboard submarines, or overtly in cooperation with allies. With its ground and maritime variants, shifting the Common Hypersonic Glide Body to a dual-use design would provide the United States with leverage and flexibility for future arms control efforts.

Just as President Vladimir Putin and [General Secretary Xi Jinping](#) learned important lessons through the 1990s and early 2000s, their future successors are learning lessons now that will shape their ambitions and policy preferences for the 2030s and beyond. Statecraft remains the preferred solution, but the United States should back its diplomats with the right military tools so that they can navigate today's competitive environment and shape the future of European and Pacific deterrence.

Alan Cummings is a recent master's graduate from Tufts University's Fletcher School of Law and Diplomacy and a 2020 member of the Center for Strategic and International Studies Nuclear Scholars Initiative. He served over 10 years on active duty with the U.S. Navy before transitioning to the Navy Reserve. The views expressed here are his own and in no way represent any institution with which he is affiliated.

China and Russia 'have weaponised space with killer energy weapon satellites'

<https://www.dailystar.co.uk/news/world-news/china-russia-have-weaponised-space-22697271>

[China](#) and Russia have successfully weaponised space by deploying killer satellites with “directed-energy weapons”, United States Secretary of Defense Mark Esper has claimed.

Esper issued the stark warning at the Air Force Association’s Virtual Air, Space & Cyber Conference on Wednesday (September 16). He claimed the US’s long-standing adversaries “seek to erode our long-standing dominance in air power”. “In space, Moscow and Beijing have turned a once peaceful arena into a war-fighting domain,” he said. “They have weaponised space through killer satellites, directed energy weapons and more in an effort to exploit our systems and chip away at our military advantage.

“Furthermore, our competitors and adversaries exploit cyberspace to undermine our security without confronting our conventional strains. “They do this all in an increasingly grey zone of engagement that keeps us in a perpetual state of competition.” In an effort to combat these threats and maintain America’s “military edge”, Esper said the Air Force is “advancing critical technologies”.

These include developing “hypersonic weapons, directed energy and autonomous systems”, he added. Last year, US President Donald Trump founded the United States Space Force – a branch of the Air Force. As outlined in the United States Space Force Act, it’s two functions are to “provide freedom of operation for the United States in, from, and to space” as well as providing “prompt and sustained space operations”.

Tensions over space superiority have risen this year, after the US and UK [accused Russia of testing a weapon-like projectile](#) above Earth. China, meanwhile, is determined to replace the US as the dominant power in space, according to Defense News.

EMP - When will they ever learn?

By: Amb. [Henry F. Cooper](#) // Posted on September 14, 2020

“The current vulnerability of our critical infrastructures can both invite and reward attack if not corrected. Correction is feasible and well within the nation’s means and resources to accomplish.”[Emphasis Added.] ~ Congressional EMP Commission Executive Report, 2004

[Click here](#) for this over 16-year-old report from the Congressional Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack. The above is the final sentence of the Abstract. Note the members of the Commission and their qualifications in Appendix B. To understand the origin and significance of this important report, you should go back to the mid-1990s and in particular to Rep. Roscoe Bartlett (R-MD), an accomplished scientist, engineer and inventor with over 20 patents, and his efforts to awaken the congress and the American people to the existential EMP threat.

As a member of the House Armed Services Committee (HASC), he was well aware of the Department of Defense (DoD) classified activities for protecting our most important military systems against the EMP threat — and he became concerned that nothing was being done also to protect our critical civil infrastructure against this threat. He liked to tell the story of Vladimir Lukin, former Russian Ambassador to the United States and Duma member, warning a congressional delegation that if they really wanted to hurt the United States in retaliation for NATO’s bombing of

Yugoslavia, Russia could fire a submarine-launched ballistic missile (SLBM) and detonate a single nuclear warhead at high-altitude over the United States — and the resulting EMP would shut down the U.S. economy.

And he would then say that another Duma member, Alexander Shabonov, added that if one missile would not do the job, Russia had many more on hand. Shortly afterward and with strong support from HASC Vice-Chairman Rep. Curt Weldon (R-PA), he introduced legislation forming the EMP Commission that became law when signed by President George W. Bush in 2001 — and the afore referenced 2004 Executive Report was published along with a classified briefing to a Closed Session of Congress.

Congress re-authorized the EMP Commission and continued its work, while publishing additional open-source reports and making clear the reality of the EMP threat and that Russia, China, North Korea and Iran all pose existential threats to the American people. The Obama administration's Strategic National Risk Assessment included EMP among the greatest threats against which the United States must prepare.

Due largely to redistricting, Roscoe Bartlett lost his seat in 2012, but his concern for EMP continued, especially under the EMP Caucus co-chaired by Rep. Trent Franks (R-AZ) and Rep. Yvette Clark (D-NY) until 2017, when Rep Franks retired from congress and his co-chairman role was assumed by Rep. Doug Lamborn (R-CO). Essentially concurrent with Rep. Franks' retirement, the HASC eliminated support for continuing the EMP Commission, leading former HASC Vice-Chairman Curt Weldon, one of the Commission's founders to write in The Hill on September 19, 2017:

“Only Washington bureaucrats could be so stupid that they would terminate the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, also known as the Congressional EMP Commission — just when North Korea threatened to attack the United States with EMP.” [Click here](#) for my October 10, 2017 Newsmax article, “Lapsed EMP Commission Puts US in Danger — It Must Be Restored,” that linked to Mr. Weldon's The Hill article and argued that the EMP Commission should be reinstated.

That did not happen...and the Washington bureaucracy has continued its dysfunctional meandering while alleging to address the EMP threat, leaving the American people vulnerable to the currently existing existential EMP threat long included in the military doctrine of Russia, China, North Korea and Iran. Then, the Federal Government did not even provide public access to the products of the EMP Commission. Thus, the EMP Commission Chairman for 17 years, Dr. William R. Graham, paid to establish a website for the important unclassified reports at <http://www.firstempcommission.org/>. These are still the most authoritative reports addressing this important existential threat, and how to protect against it.

President Trump had recognized the existential EMP threat in his campaign and highlighted its importance in his December 18, 2017 National Security Strategy. Since then, he has issued several Executive Orders and signed into law National Defense Authorization Acts directing the Federal Bureaucracy to address this existential threat. But the Federal bureaucracy's response has since been ineffective, to say the least.

[Click here](#) for my July 14, 2020 message “On Washington's Stumbling, Fumbling, Bumbling Responses to the Existential EMP Threat.” That title was triggered by a 13-page report issued by the President's Science Advisor and Director of the White House Office of Science and Technology Policy (OSTP) — that absurdly claimed we need more studies. My message discussed the lethargic (to be generous) response of the Secretary of

Energy, who is supposed to be leading a “whole of government” response to the May 1, 2020 Executive Order 18920, supposedly to secure the electric bulk power grid against cyber-attack. Note: The EMP Commission warned that the most comprehensive cyber-attack is an EMP attack.

Regrettably, this response is not surprising, because DOE actions have long opposed addressing the EMP threat, no doubt contributing to the termination of the EMP Commission. [Click here](#) for the EMP Commission Chairman’s April 20, 2017 letter to Secretary of Energy Rick Perry, listing a half dozen important issues of concern re. the DOE. Dr. Graham never received any response from Secretary Perry, or senior DOE staff, regarding his succinctly stated concerns.

Nor from other alleged responsible government officials that he also informed of critically important facts, largely being ignored. Moreover, [click here](#) for my previous discussion of Dr. Graham’s important related video presentation to many local and state officials and concerned citizens at the National Guard Headquarters on Capitol Hill and around the nation. He began this briefing by discussing the high altitude nuclear test data available as benchmarks to guide our understanding of EMP, as he well understands as one of the original technical investigators in the early 1960s seeking to understand the “surprise” from our high altitude tests in the South Pacific.

Because we discovered our strategic systems were vulnerable to EMP, the subject became highly classified and only those most important military systems were protected, leaving other military systems and especially our critical civil infrastructure unprotected — which is still the current condition. And now we have a second discouraging report, this one from the Department of Homeland Security (DHS). [Click here](#) for my last week’s message discussing this latest inept report in the context of recent evidence of Iran’s existential EMP threat — announced by Iran itself.

[Click here](#) for this latest delinquent, very disappointing DHS report, dated August 17, 2020 and titled “Electromagnetic Pulse (EMP) Program Status Report.” And bear in mind that a report of this title was called for in the President’s March 26, 2019 Executive order — and it was due on March 26, 2020. [Click here](#) for the Homeland Security Today article on this 4-page, 6-month late report that alleges to respond to the March 26, 2019 Executive Order 13865 call for a substantive report. It, in fact, is little more than a self-aggrandizing recipe for more studies, with consequent more delays in addressing the existential EMP threat.

Is President Trump aware of how poorly his administration is responding to his 2016 campaign pledge, his December 18, 2017 National Security Strategy, his March 26, 2019 Executive Order 13865, his April 17, 2020 Executive Order 13920, and no doubt other directives intended to fulfill his campaign promise to address the existential threat of an EMP attack that is included in the military doctrine of Russia, China, North Korea and Iran?

As my High Frontier readers know, I have long been very concerned about this vulnerability of the American people to the existential electromagnetic pulse (EMP) threat. And I am very frustrated by the seemingly unending studies of the threat and what to do about it, with little or no action — especially given the above briefly recounted, but long-standing, history of our knowledge of the threat and how to protect against it.

In spite of President Trump’s most welcome Executive Orders, these recent administration reports indicate little notable improvement to at best sluggish and ineffective bureaucratic processes. I have a recommendation for making a significant improvement — beginning now, by supporting “bottom-up” efforts at the local level rather than continuing to wait on these obviously ineffective “planning” efforts in Washington.

Our Lake Wylie Pilot Study validated many months ago the EMP Commission's claim that WE KNOW HOW TO PROTECT THE GRID AND IT IS QUITE AFFORDABLE TO DO SO. Sixteen years have passed since the first EMP commission reported this condition, and numerous more recent Commission reports have reinforced this view, but little has happened within the Federal bureaucracy to protect our critical civil infrastructures, especially the electric grid.

[Click here](#) and [here](#) for my two messages immediately following my May 4, 2017 testimony before the Energy and Natural Resources Committee about how this frustrating situation led a couple of years earlier to the Lake Wylie Pilot Study in York County, SC to prove that affordable protection is possible by addressing the problem from the “bottom up.” For five years, I have worked with key local and state leaders to use the unclassified assessment methods and hardening standards that protect our most important military systems also to protect the key components of the York County Distribution Grid. Last year, we found the one-time cost would be less than \$100 per York County citizen — less than the monthly medical insurance for an average family.

This investment would assure that York County citizens and their businesses, hospital, water-wastewater, key communications, emergency management, and other key infrastructure could function effectively with electricity received from Duke Energy, which is also examining the costs of protecting its critical infrastructure including power plants and high voltage transmission lines. Limited additional annual costs would be required to assure that the grid is maintained in that condition.

[Click here](#) for my most recent (August 25, 2020) related discussion with more details and our plans for next steps, provided availability of the necessary funds. See the following figure from that discussion. York County includes Rock Hill, South Carolina's fourth largest city and a suburb of Charlotte — home of the corporate Headquarters of Duke Energy, one of the nation's largest Energy companies.

Since we began the Lake Wylie Pilot Study, Duke Energy engineers have worked with Rock Hill and York County municipal utility and cooperative company leaders, engineers and emergency managers in conducting this pilot study — and the SC Adjutant General and his staff have cooperated with us from the outset and, with funding help from Washington, stand ready to export the lessons-learned throughout South Carolina and beyond.

In my opinion, Washington should fund such efforts to be led by the nation's Governors and, through the Adjutants General, the National Guard. I'm confident South Carolina's Adjutant General will support such an effort. But thus far, Washington has ignored our results and recommendations, while continuing to study the problem.

Bottom Lines.

I often refer to Senator Ron Johnson (R-Wisconsin) — Chairman of the Senate Homeland Security and Governmental Affairs Committee as our strongest advocate in congress. I can't help but quote him again to end this message: Regrettably, the Federal Government has not been responsive to his February 17, 2019 assessment following an important hearing on the EMP threat:

“ . . . [W]e establish commissions and study panels, conduct research, and develop plans to develop strategies. It is way past time to stop admiring this problem, and actually begin to do something concrete to protect our vulnerable electrical grid, control systems, and the ever-increasing array of electronic devices our society has become dependent upon.”

~ Senator Ron Johnson (R-WI)

I can't help but recall that Peter, Paul and Mary 1960s classic, "Where have all the flowers gone?" It ends wistfully with "When will they ever learn?" [Click here](#) This was about the graves from Viet Nam ... If we don't get our act together, there will be many, many more graves after we experience an EMP attack.

China's growing military reach -- what newly released Pentagon maps reveal

<https://www.msn.com/en-us/news/world/what-newly-released-pentagon-maps-reveal-about-china-s-growing-military-reach/ar-BB18Zeek?ocid=msedgdhp>

- The US Defense Department's latest China Military Power Report details Beijing's expansion of its armed forces, describing their growing reach.
- Below, you can see some of the maps included in the report and what they illustrate about China's increasingly powerful military.

By: Benjamin Brimelow insider@insider.com // 8 hrs ago

Last week, the Pentagon [released](#) its annual China Military Power Report, which detailed the ongoing transformation of China's military, officially known as the People's Liberation Army (PLA), into a modern force.

The report contains facts that will unnerve US policymakers and defense officials: China now has the world's largest navy, is expanding its already massive and advanced missile arsenal, and has the capability to seize Taiwan's outlying islands. China has "marshaled the resources, technology, and political will over the past two decades to strengthen and modernize the PLA in nearly every respect," the report states, adding that "China is already ahead of the United States in certain areas." This point is made clear in six maps showing the positioning of PLA forces and ranges of its missiles.

People's Liberation Army ground forces

The first map shows the locations of the headquarters of the PLA Ground Forces (identified in the report as the PLA Army or PLAA), as well as the general positions of their group armies. The map shows their placement within the PLA's five theater commands: Northern, Central, Eastern, Southern, and Western. There are also two more military commands in China's outlying provinces, Xinjiang and Tibet. The report claims the PLAA is the world's largest standing ground force, with 915,000 active-duty personnel in 13 group armies, one of which is roughly the size of a US Army Corps — 20,000 to 45,000 troops.

A group army is made up of 78 combined-arms brigades, each of which can have as many as 5,000 soldiers. The brigades are organized into three categories: heavy (tanks and tracked armored vehicles), medium (wheeled armored vehicles), and light (infantry, air assault, mountain, and motorized). Interestingly, the map includes the PLA's Airborne Corps, which is actually part of China's air force. The Corps is made up of six airborne combined-arms brigades, at least one of which is mechanized with an air-droppable armored infantry fighting vehicle, the ZBD-03.

People's Liberation Army Navy (PLAN)

The next map focuses on the China's Navy, the PLAN. It is the largest navy in the world with 350 vessels, and is "largely composed of modern multi-role platforms featuring advanced anti-ship, anti-air, and anti-submarine weapons and sensors." The vessels are part of three fleets based in the PLA's Northern, Eastern, and Southern theaters.

The map shows the makeup of all fleets, with the Eastern and Southern Fleets having the most vessels. The PLAN also includes [six marine corps brigades](#) and a small but growing air force. Though the PLAN shows clear signs of global ambitions, its main focus is to dominate the areas along the First Island Chain, stretching from Kyushu to the waters around Vietnam. A major flashpoint along this route is Taiwan, which Beijing sees as a breakaway province. It is believed that [in the event of war with Taiwan](#), the ships of the Eastern and Southern theaters will be directly involved around the island, while Northern Theater ships will protect sea approaches to China.

People's Liberation Army Air Force (PLAAF)

According to the report, the PLAAF, combined with the PLAN's air wing, is the largest air force in the region and the third largest in the world. "The PLAAF is rapidly catching up to Western air forces across a broad range of capabilities and competencies," the report notes. More than 800 of China's 1,500 fighter jets are considered fourth-generation, on par with fighters in Western inventories. The PLAAF also has a stealth fighter in service and a stealth bomber in development. The map shows the approximate locations of each of the PLAAF's/PLAN Aviation theater headquarters as well as multiple air bases. Importantly, it also shows which bases house the PLAAF's bomber and transport division HQs.

Last October, China unveiled the H-6N bomber, its first nuclear-capable bomber able to conduct aerial refueling. This marks the return of the airborne leg of China's nuclear triad. With development of an air-launched nuclear ballistic missile possibly underway, China could soon have a complete and viable nuclear triad for the first time. The map also notes special mission aircraft, which handle electronic warfare and aerial refueling. They are important force-multipliers and are essential for a modern and dominant air force. Most of China's airbases are in the country's south and east. Its airbases in the west are considerably far from India, limiting PLAAF capabilities in the [tense region](#).

Chinese missile ranges

Three maps show the devastating potential of what may be the PLA's most important weapons: ballistic and cruise missiles. China has one of the world's largest and most diverse [missile arsenals](#). The first missile map shows the range of China's conventional missiles, almost all capable of reaching the Second Island Chain over 2,000 km away.

Particularly worrying are the DF-26 and DF-21. Both are mobile ground-launched intermediate-range ballistic missiles that are expected to target US carriers and their escort ships. The DF-26, which can carry conventional and nuclear warheads, is known as the "Guam killer" because of its ability to reach US bases in Guam. H-6J bombers from the PLAAF, capable of carrying six YJ-12 anti-ship missiles, extend the PLA's anti-ship capabilities even further. The second missile map, depicting China's ICBM ranges, is more daunting. It shows that China's ICBMs can reach 1,750 km to 13,000 km.

The CSS-4 Mod 2/Mod 3 (also known as the DF-5) and the DF-41 are especially feared. Both can reach almost all of the continental US, and the DF-41, unveiled for the first time last October, can carry up to 10 multiple independently targetable reentry vehicles — 10 warheads, each capable of hitting different targets, that are released when the missile reaches its apex. China is increasing its investment in missile technology. The report says that, in 2019, the PLA Rocket Force (PLARF) "launched more ballistic missiles for testing and training than the rest of the world combined." The final map shows the range of China's anti-air, anti-ship, and short-range ballistic missiles as they relate to Taiwan. Nearly all of the island is covered from the mainland, and PLAN ships are more than capable of filling in any gaps.

There are still important differences in the quality and capabilities of Chinese troops and weapons in comparison to the US. The US military has [much more combat experience than the PLA](#) (which hasn't fought a major war since 1979) as well as powerful assets like dedicated carrier task groups. The US also has a number of allies in the region that it has worked with extensively. The PLA also still faces challenges, such as its [difficulty](#) producing high-quality engines and in dealing with [corruption](#) and [infighting](#) within the Chinese Communist Party. But the maps drive home the point of the report: China's military is a massive and modern force that is only getting stronger.

Read the original article on [Business Insider](#)

China's worrisome edge toward a 'launch-on-warning' nuclear posture

<https://thehill.com/opinion/national-security/515243-chinas-worrisome-edge-toward-a-launch-on-warning-nuclear-posture>

BY JAMES R. HOLMES, OPINION CONTRIBUTOR — 09/10/20 10:30 AM EDT

The Pentagon's latest annual [report on Chinese military power](#) serves a reminder that the world has embarked on a second nuclear age, following the first one that began at Hiroshima and Nagasaki 75 years ago.

The good news is that arms-control accords slashed the number of weapons built for the Cold War. The bad news is that the nuclear club now includes far more countries than before. New members come in many shapes and sizes, with varying economic and military potential. Some border one or more potential antagonists. Some newcomers are building up their [inventories](#) while old-timers from the first nuclear age cut back or hold them steady.

In other words, the new order features less destructive power but more complexity and instability than during the Cold War, when more or less symmetrical alliances faced off for 40 years.

There is no guarantee atomic deterrence will hold in this brave new world. That's why the China report makes for troubling reading. The report's authors forecast that the People's Liberation Army (PLA) will at least double its stockpile of nuclear arms over the coming decade.

That means China's doomsday arsenal will expand from 200 warheads or thereabouts to 400 or more. The PLA is diversifying its inventory, for instance by [putting to sea](#) its first working class of nuclear-powered ballistic-missile submarines (SSBNs). These "boomers," as they're known colloquially in the U.S. Navy, constitute an invulnerable second-strike capability. That is, they can vanish into the depths and strike back at a foe with nuclear-tipped missiles even if China suffers a disarming first strike against its ground-based forces.

The ability to reply with a devastating counterstrike is the gold standard for nuclear deterrence, which is why U.S. Navy grandees sound so [adamant](#) about replacing the navy's fleet of Ohio-class boats in the coming years. Constructed to wage the Cold War, the Ohios are swiftly aging out of their service lives. Without the dozen new SSBNs of the Columbia class, for which shipbuilders first [cut steel](#) last year, the United States would lose its own second-strike capability. These are hulls the navy cannot do without.

The raw numbers from the China report aren't that worrisome in themselves. Even if the PLA does double the warhead count, it will still field only a fraction of what the U.S. and Russian inventories hold. The [New START arms-control treaty](#) limits Washington and Moscow to 1,550 deployed warheads apiece, carried aboard 700 deployed missiles and bombers. What is worrisome is the report's conjecture that Beijing is edging away from its longstanding "no-first-use" policy toward a "launch-on-warning" posture.

That's what former Sen. Sam Nunn (D-Ga.), a longtime arms-control stalwart, calls a "[hair-trigger](#)" approach to releasing nuclear weapons. That would be a dramatic departure. China's leadership long contended itself with a "minimal deterrent" force composed of a few land-based ballistic missiles. It accepted a "[striking](#)" degree of vulnerability to superpower coercion while forswearing first use of nuclear arms.

By contrast, a contender that embraces a launch-on-warning policy reserves the right to cut loose with nuclear counterstrikes before an incoming raid hits home. It refuses to take the first punch before retaliating. A launch-on-warning posture raises a host of problems. It compresses the time available to frame and deliver a response. The potential for error is immense. Early-warning radars may give false indications of a strike. People may misinterpret the data under extreme stress.

Worse, data are oftentimes ambiguous. Weapons are black boxes to outside observers. It's hard to tell from a blip on a radar scope whether a ballistic or cruise missile is tipped with a conventional or nuclear warhead. Furthermore, defense manufacturers have made a habit of designing weapons to carry either type of munition. Ambiguity only compounds the retaliatory dilemma.

Small wonder launch-on-warning proved [controversial](#) among U.S. defense officials in the 1970s and 1980s, when they were debating the proper stance for releasing ground-based Minuteman ballistic missiles. Needless to say, the repercussions could be dire when two nuclear-armed adversaries that possess hard-to-decipher weapons and put themselves on hair-trigger alert square-off. Strictly speaking, China isn't a new entrant to the nuclear club.

It exploded its first atomic device in 1964 and is one of five nuclear-weapon states officially acknowledged in the [Nuclear Nonproliferation Treaty](#) of 1968. But China's nuclear strategy is undergoing a metamorphosis not unlike that of a nuclear newcomer. If the Pentagon has it right, the PLA is multiplying its arsenal by twentyfold or more, constructing a "triad" of sea-based, land-based and air-delivered armaments, and radically modifying its alert stance. Studying its evolution hints at the quandaries endemic to the second nuclear age.

What should U.S. leaders do about China's shift of stance? Well, there's only so much they can do. Keeping the U.S. deterrent strong is an obvious step. Navy leaders are not wrong to stress the importance of building Columbia-class SSBNs. A measure of empathy with Beijing also would be helpful. For example, eliminating ambiguity from U.S. weapons would ease the stress on Chinese decision-makers in times of crisis, bolstering the likelihood of sound strategic choices. That might mean designating each type of missile solely for nuclear or solely for conventional payloads and conveying that to PLA commanders.

And lastly, regular consultation is a must. Beijing may be hostile, but it is not irrational. It accepts the logic of mutual assured destruction — the cornerstone of deterrence. Because [Xi Jinping](#) & Co. are rational, they may prove receptive to relaxing the PLA's alert posture if persuaded that Washington and Moscow will do likewise.

And relaxation would be an improvement.

James R. Holmes is J. C. Wylie Chair of Maritime Strategy at the Naval War College and contributing co-editor of "[Strategy in the Second Nuclear Age](#)" (Georgetown, 2012). The views voiced here are his alone.

End of strategic ambiguity policy

<https://www.taipeitimes.com/News/editorials/archives/2020/09/10/2003743127>

By Joseph Bosco for the Taipei Times // 10 Sept 2020

Taipei Times

The decades-long debate about committing the US to defend Taiwan against communist China's aggression is approaching a resolution.

US President Donald Trump and his administration apparently have decided to end the archaic and counterproductive policy of strategic ambiguity. In a Fox News interview on Aug. 23, Trump was asked: "If China, and it looks like it's getting more belligerent, tries to either invade Taiwan or effectively take control of it and its important industries, would you let them get away with it?" "China knows what I'm gonna do. China knows," he said.

"I don't want to say I am gonna do this or I am not gonna do this. It is a very big subject. It is a very powerful subject, but I think China understands what I am gonna be doing," he added. Mindful of unvetted actions or statements by former US presidents, Trump declined to elaborate, cautioning the interviewer, and himself: "I think it's an inappropriate place to talk about it... This is just an inappropriate place to talk about it."

He was obviously aware of what happened when then-US president George W. Bush said in an unprepared remark in 2001 that he would do "whatever it took" to defend Taiwan. The Chinese communist government and the US foreign policy establishment came down hard on him for upsetting the precarious "stability" preserved by ambiguity, and officials of his administration quickly walked the statement back.

As US president-elect, Trump had his own experience straying from the path of self-restraint that US officials have followed on the delicate subject of Taiwan. After he accepted a gracious congratulatory telephone call from President Tsai Ing-wen (蔡英文) in December 2016, Beijing and the US foreign policy community erupted in their usual uproar. At first, Trump pushed back and said that he could talk to anyone he wanted to — and even disparaged the "one China" policy he was accused of undermining.

However, he was persuaded to mollify Chinese President Xi Jinping (習近平) by promising to consult with him before again talking with Tsai. No subsequent conversations between the two democratically elected presidents have been reported — not on the occasion of her re-election, her second inauguration or on the death of Lee Teng-hui (李登輝), Taiwan's first democratically elected president.

It is not known whether Trump refrained for fear of upsetting trade talks with China, or whether he checked with Xi and was denied permission. It is also possible that US Vice President Mike Pence or US Secretary of State Mike Pompeo have had discreet contact with Tsai. As for his latest remarks on defending Taiwan, for now it was an understanding between Washington and Beijing, and possibly Taipei.

It was left to US Secretary of Defense Mark Esper, days later, to edge closer to a clear public declaration. At Pearl Harbor, observing the 75th anniversary of Japan's surrender, without mentioning Taiwan by name, Esper said: "America will defend our friends."

Friends, not just allies.

During his visit to Taiwan last month, US Secretary of Health and Human Services Alex Azar said that he brought “greetings from a great friend of Taiwan: President Donald J. Trump.” Azar thanked American Institute in Taiwan Director Brent Christensen “for what he has done with Taiwan’s leaders ... to deepen our friendship.” He called Taiwan “a reliable partner ... and a treasured friend of the United States.”

Azar also said that the relationship works both ways, adding that “in these trying times, the United States knows that we will always have a friend in Taiwan.” In a CNN interview, Minister of Foreign Affairs Joseph Wu (吳釗燮) reaffirmed the solid bonds. “The message to Beijing is that we have a partner in the US, and the US has friendship in Taiwan. From Taiwan’s perspective, the better the relations are between Taiwan and the US, the better protected Taiwan will be,” Wu said.

Still, Wu said that Taiwan wants to avoid antagonizing China. “We have our own strategy in dealing with China, and our strategy is that we don’t want to get into a situation where Taiwan will be seen as a target. We don’t want to have a provocation against China,” he said. However, as Wu and Tsai have observed, weakness and indecision can also be a provocation and must be avoided. Stating that Taiwan is “on the front lines of freedom and democracy,” Tsai said that “strength can be correlated with deterrence.”

Deterrent strength requires not only military capabilities, but also political and moral resolve, which is why the US’ Taiwan Relations Act mandates that Washington not only provide Taiwan with defensive arms, but that it “maintain the capacity ... to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan.”

Recognizing the mounting danger of Chinese aggression against Taiwan, the US Congress has passed a series of measures deepening relations with Taiwan, including calling Taiwan the US’ “security partner” in the Indo-Pacific region. Now, stating that “strategic ambiguity has clearly failed,” the US Congress is moving the “Taiwan Invasion Prevention Act.” Introduced by US Representative Ted Yoho, the act would ensure that the US military is prepared to defeat a sudden Chinese attempt at a fait accompli against Taiwan.

Passage of the legislation would constitute a congressional authorization for Trump, or an administration of former US vice president Joe Biden, to use force to defend Taiwan. Since the administration of former US president Bill Clinton, strategic ambiguity has told Beijing that the US might or might not defend Taiwan “depending on the circumstances.” Trump and his national security team seem poised to define those triggering circumstances as: “You attack Taiwan, we defend it and defeat you.” It would be appropriate for the US and Taiwanese presidents to discuss the new security relationship electronically or in person.

Joseph Bosco served as China country director in the office of the US secretary of defense. He is a fellow at the Institute for Taiwan-American Studies and a member of the advisory committee of the Global Taiwan Institute

Is nuclear deterrence in the cards for India and China

<https://www.orfonline.org/research/is-nuclear-deterrence-in-the-cards-for-india-and-china/>

By: [PULKIT MOHAN](#) for the ORFONLINE // 13 Sept, 2020

The recent [Ladakh](#) military standoff between India and China has drawn significant concern and coverage due to its escalatory nature and the increasingly tense relationship between neighbors. The skirmishes resulted from Beijing’s objection to India’s construction of a road in the Galwan

valley, with tensions spiraling into an intense standoff and casualties on both sides. The standoff, which has stretched over a 100-day period, has added to the growing concern in New Delhi about an increasingly militarily aggressive China.

Given the nuclear-armed status of both India and China, there has been buzz around the possibility of nuclear escalation as a result of unresolved territorial disputes. In order to address the nuclear question, it is useful to examine both the relevance of both countries' deterrence policies to the current scenario and how these policies have played out across previous conflicts between India and China. Both countries have adopted nuclear policies of credible minimum deterrence and No First Use (NFU).

Therefore, a change in the aforementioned policies (or lack thereof) coupled with the absence of nuclear signaling and/or escalation in previous conflicts, indicates that a change in future deterrence policies by either country remains unlikely. Both countries have adopted nuclear policies of credible minimum deterrence and No First Use (NFU). Therefore, a change in the aforementioned policies (or lack thereof) coupled with the absence of nuclear signaling and/or escalation in previous conflicts, indicates that a change in future deterrence policies by either country remains unlikely.

History of the India-China Nuclear Relationship

Post-independence, China's nuclear weapons program and the 1962 border war were key [influences](#) on India's decision to enhance its own nuclear weapons capabilities. India's intent to conduct a nuclear weapons test was expedited in order to counter both China's superior geopolitical position in the region and its successful nuclear test in 1964. When India tested its own nuclear weapons in 1998, it explicitly [stated](#) that China was a factor in India developing its program. However, over the years, nuclear deterrence has not played a substantial role in the India-China security relationship.

China's nuclear weapons were [developed](#) as a response to perceived U.S. nuclear blackmail towards China resulting from U.S. policy decisions to deter China's involvement in the Korean War. China's significantly more [technologically](#) advanced nuclear arsenal (relative to India) indicate it is more focused on force modernization as a factor of the U.S.-China relationship rather than to counter New Delhi's nuclear program. Limited importance is [accorded](#) to the Indian nuclear arsenal, and ambitions in China's nuclear strategy as the primary focus for Beijing remains on the United States and, to a certain extent, Russia. As China's nuclear arsenal has remained comparatively much smaller than both the United States' and Russia's, it is important to note that China's program has evolved in order to address the geopolitical implications of nuclear weapons in the post-Cold War era.

Indian and Chinese Perceptions on Nuclear Weapons and Doctrine

In the context of India's nuclear strategy and threat perception, nuclear deterrence has focused on and intensified both instability and fraught relations with Pakistan. The tensions between the two [entered](#) the nuclear realm as recently as February 2019, during the Balakot incident. Traditionally, New Delhi's nuclear doctrine and force modernization have focused on the perceived threat from Islamabad's nuclear weapons program. India views Pakistan's nuclear program as a more immediate security threat than China's. There have been discussions in New Delhi about the role that nuclear deterrence plays in the fragile relations between the two countries.

China's increasingly aggressive military probes have led to concerns in New Delhi about the efficacy of India's deterrence posture. As a result, China has [factored](#) into India's deterrence posture to a certain extent with the deployment of INS Arihant as a possible counter to China's sea-based nuclear

deterrent, as well as Agni-V ICBM, the first of its kind capable of hitting any target in China. At present, however, the primary deterrence motivations continue to focus on Pakistan over China.

China's perception of India's nuclear capabilities is [influenced](#) by the large technological advantage it enjoys in comparison to the latter's nuclear weapons program. India's relatively slow nuclear developments have contributed to China discounting the need to respond to India's nuclear arsenal. Experts [believe](#) that China's perception of its technological superiority suggests that its nuclear arsenal will continue to be directed primarily against the United States and Russia, while India's comparatively smaller arsenal is unlikely to be factored into Beijing's strategies. Nonetheless, it is important to note that the increasingly nationalist policies of Xi and Modi have impacted the two state's economic interdependence and directly challenged this buffer to increasing strategic tensions between the two.

Therefore, it is important to note that both countries, to a large extent, have rejected the notion of possible nuclear escalation between the two at present or in the future. As mentioned, this results from differing perceptions of the role of nuclear weapons in national strategies of both countries towards each other—neither country believes the other requires much attention in terms of nuclear deterrence. Another important factor that points towards the unlikelihood of nuclear escalation as a result of border conflicts between the two are the NFU and credible minimum deterrence policies adopted by India and China. These policies suggest that both India and China see nuclear weapons as a means to safeguard their national security interests rather than as war-fighting instruments. As the term suggests, the NFU position of both countries explicitly states that neither India nor China would use nuclear weapons first in response to conventional conflict.

Similarly, the policy of credible minimum deterrence pertains to maintaining a nuclear arsenal solely for assured second strike capabilities and to deter an adversary from attacking. Given the similarity in the role and practice of nuclear deterrence in both India and China, the use of nuclear weapons in a crisis between the two remains [unlikely](#). Although nuclear escalation is commonly discussed in the case of India-Pakistan conflicts, there is a tendency to reference the possibility of nuclear escalation in the context of Sino-India relations as well. As mentioned, relative nuclear stability between the two coupled with similar doctrines of NFU and credible minimum deterrence emphasizes the implausibility of nuclear escalation. In the recent standoff at Ladakh, observers alluded to the possibility of nuclear escalation because of the deployment of the nuclear-powered INS Arihant, which was part of a larger defense deployment by India.

Manpreet Sethi rightly [points out](#) that it is normal to move navies out to their operational platforms during a crisis. Therefore, it is unlikely that New Delhi meant this move as a nuclear signal, and India is unlikely to send out an explicit nuclear signal in future scenarios. Although it would be foolish to suggest that nuclear weapons play no role in the national security and deterrence strategies of India and China, it is important to note that, at present, the priorities in terms of nuclear and deterrence strategy remain different for both India and China and nuclear escalation remains unlikely.

The Future of NFU and the India-China Nuclear Relationship

It would be disingenuous to suggest that there are no instances where doubts have been [raised](#) about a possible shift in deterrence strategies away from NFU and credible minimum deterrence and towards a more aggressive force posture by both India and China. Information regarding potential changes in nuclear posture is more readily available for India. For example, in August 2019, India's Defence Minister Rajnath Singh [stated](#) that the future of India's NFU policy is uncertain. This statement has led many experts and observers to posit that the credibility of India's NFU policy is in

question. Similarly, recent developments in India's nuclear modernization, as [noted](#) by Hans Kristensen and Matt Korda, have placed Beijing in range of ballistic missiles, which suggests that the decision to target China in New Delhi's strategic plans cannot be entirely ignored.

It is crucial for keen observers to maintain a close eye on such developments and examine their relevance to the future of Sino-Indian border relations. An emphasis, however, needs to be placed on the lack of nuclear signaling from either country towards the other in instances of tension or conflicts. These signals are readily observed in other nuclear dyads, such as during conflicts between India and Pakistan. The difference in strategic and nuclear priorities of both countries, coupled with the overarching role of NFU postures, suggests that although nuclear escalation cannot be completely refuted, the likelihood that nuclear relations will tend towards escalation remains improbable.

On August 20th, 2020, India and China [agreed](#) to resolve the border standoff expeditiously after a series of diplomatic meetings between the two countries. However, attempts to disengage through diplomatic channels have [failed](#), and tensions continue to escalate at the border. The ongoing incident constitutes an additional skirmish between New Delhi and Beijing that has remained below the nuclear realm. Although it would be foolish to suggest that nuclear weapons play no role in the national security and deterrence strategies of India and China, it is important to note that, at present, the priorities in terms of nuclear and deterrence strategy remain different for both India and China and nuclear escalation remains unlikely. Given the tense relations between the two countries, it is crucial to keenly observe developments in the military, and specifically nuclear, domain. However, it is equally essential to avoid jumping to conclusions of possible nuclear escalation. When it comes to nuclear deterrence, similar nuclear policies of NFU and credible minimum deterrence suggest that India and China's priorities are unlikely to drastically change in the near future.

The dawn of a new Middle East'

https://washingtontimes-dc.newsmemory.com/?token=5123b09e31dabc9acedffd7a64462553_5f620474_d3019ac&selDate=20200916

Trump hosts peace accord, burnishing statesman credentials

BY DAVE BOYER for THE WASHINGTON TIMES // 16 September 2020

President Trump's fresh approach to one of the world's most intractable and dangerous problems, the Palestinian-Israeli conflict, culminated Tuesday in the signing of historic agreements with Israel, the United Arab Emirates and Bahrain to normalize their diplomatic relations.

The move also burnished Mr. Trump's credentials as a statesman and a peacemaker less than two months before he faces voters for reelection. In a ceremony on the South Lawn at the White House, the president said the breakthrough cooperation between Israel and the two moderate Arab, Muslim states is a major step toward ending war in the Middle East. "We're here this afternoon to change the course of history," Mr. Trump said. "After decades of division and conflict, we mark the dawn of a new Middle East."

Under the agreement, the first of its kind in more than a generation, the three countries agreed to exchange embassies and ambassadors. They will cooperate on a broad range of trade, education and health care issues. Israel also agreed to suspend its annexation of territory in the West Bank for an undisclosed period. Shortly after the ink dried in Washington, Palestinians in the Gaza Strip fired two rockets into Israel, injuring at least six people. Israeli forces reportedly intercepted one of the rockets with its Iron Dome defense system.

By compelling Gulf states to recognize Israel instead of waiting for the Palestinians to gain their own state, U.S. officials say the agreement will put pressure on the Palestinian Authority to return to negotiations. Mr. Trump said other Gulf states soon will join the agreement, known as the “Abraham Accords” in reference to the common traditions of Islam, Judaism and Christianity. He predicted Saudi Arabia will come into the fold soon.

“Thanks to the great courage of the leaders of these three countries, we take a major stride toward a future in which people of all faiths and backgrounds live together in peace and prosperity,” Mr. Trump said, flanked by the three other leaders on the iconic Truman Balcony. Israeli Prime Minister Benjamin Netanyahu said the agreement is the “greatest diplomatic triumph” in Israel’s 72-year history.

“This day is a pivot of history,” Mr. Netanyahu said. “It heralds a new dawn of peace. This peace will eventually expand to include other Arab states. And ultimately, it can end the Arab-Israeli conflict once and for all.” The UAE’s foreign minister, Abdullah bin Zayed Al Nahyan, said of the development, “We are witnessing a change in the heart of the Middle East, a change that will send hope around the world.”

Bahrain’s foreign minister, Abdullatif bin Rashid Al-Zayani, called the agreement an “historic step on the road to genuine and lasting peace” but cautioned that hard work still lies ahead.

“It is now incumbent on us to work urgently and actively to bring about a lasting peace and security,” he said. “Our people deserve a just and comprehensive and enduring two-state solution to the Palestinian-Israeli conflict, which is the foundation, the bedrock of such peace.”

Merissa Khurma, Middle East program manager at the Wilson Center in Washington, said the agreements mark “a new and important shift in the region’s geopolitics.” “Arab-Israeli peace is no longer conditional on resolving the Palestinian-Israeli conflict and addressing the issue of Palestinian statehood, which has defined regional relations for decades,” she said. Ms. Khurma said economic and military cooperation with Israel by the UAE and Bahrain, which are adversaries of Iran, “will shift the political and security dynamics in the region, particularly vis a vis Iran.”

Jim Phillips, a Middle East specialist at the Heritage Foundation, said the agreements could lead to a broader Arab-Israeli peace agreement including Saudi Arabia, Oman, Morocco and Sudan. “It is a vindication of the Trump administration’s ‘outside-in’ negotiating strategy, which focused on pragmatic Arab states on the periphery while trying to coax the Palestinian Authority back into negotiations with Israel,” Mr. Phillips told The Washington Times.

“For Israel, Bahrain and the UAE, it clears the way for trade, investment, technological cooperation, tourism, and most importantly, strategic cooperation against Iran, regarded by all three and the U.S. as the chief threat to regional stability. “Iran’s hostility brought Israel, Bahrain and the UAE closer together, and Iran stands to be the biggest loser due to enhanced Arab-Israeli ties.” Secretary of State Mike Pompeo, speaking at a virtual event hosted by the Atlantic Council, said the administration’s approach flipped a decades-old script in Washington that had given Palestinians a “veto right” over any Middle East negotiations.

“We laid out a vision for peace that had another element — that was the deep recognition that the primary destabilizing force in the Middle East was not the conflict between Israel and the Palestinians, but was rather the threat posed by the extraterritorial ambitions of the clerical regime in Iran,” Mr. Pompeo said. “We flipped what the previous administration was doing on its head.”

A wrinkle in the negotiations was the UAE's interest in buying F-35 fighter jets from the U.S., a move opposed by Israel. Mr. Trump said he'll "work it out," noting that the UAE has fought on the side of the U.S. in four wars. "They've been very loyal," the president said. During his visit, Mr. Netanyahu also pressed the White House for \$8 billion more in military aid, including more F-35s.

When Mr. Trump took office nearly four years ago, Democrats predicted he would be a warmonger. Last week, he was nominated for the Nobel Peace Prize as a result of the Middle East agreements. The president, who pulled the U.S. out of the Obama administration's nuclear deal with Iran, said Tehran would receive more favorable treatment from Democratic nominee Joseph R. Biden if he wins the presidency.

"I'm going to make a good deal with Iran," he told reporters. "But I think they should wait until after the election. Because a dream for those countries would be 'Sleepy Joe.'" The White House invited some congressional Democrats to the ceremony, and House Foreign Affairs Committee Chairman Eliot L. Engel of New York was among those who attended. House Armed Services Chairman Adam Smith, Washington Democrat, called the agreements a "diplomatic breakthrough [that] represents a positive step that will bolster regional stability."

But he said peace in the Middle East "will only be attainable if Israeli-Palestinian negotiations restart in earnest, so as to preserve a two-state solution." House Speaker Nancy Pelosi dismissed the event as "a distraction" organized by Mr. Trump to divert voters' attention from the COVID-19 pandemic. Republican Sen. Mitt Romney of Utah, who has criticized the administration's foreign policy repeatedly, praised the president and his advisers for their "hard-won efforts."

"Forging new partnerships between our friends in the Middle East is critical to countering the region's malign actors such as Iran and is in the best interest of U.S. national security," Mr. Romney said. Said Mr. Trump, "Nobody thought of the plan that I thought of. It's going around the back door — I call it going around the smart door — and coming in a different way." "It's not something that my critics thought was possible."

Before the signing, the president hosted each of the leaders separately in the Oval Office. He gave a symbolic key to the White House to Mr. Netanyahu, calling it "the big day." "Even Bibi gets tired of war," he joked. Mr. Netanyahu told the president, "You have the key to the hearts of the people of Israel."

-

Lauren Toms contributed to this report

CONGRESSIONAL

By Susan Cornwell

HEARINGS

Thursday, September 17: SASC held a hearing on matters relating to the Budget of the National Nuclear Security Administration

Witnesses

Honorable Lisa E. Gordon-Hagerty Administrator, National Nuclear Security Administration

Honorable Ellen M. Lord Under Secretary Of Defense For Acquisition And Sustainment

Admiral Charles A. Richard, USN Commander, United States Strategic Command

Testimony can be found at the SASC website under the hearing

DEFENSE AUTHORIZATION

SASC and HASC have passed their respective Bills

- ***ALL ICBM PEs at PB***

AUTHORIZATION CONFERENCE

- **November: Tentative timeframe for markup**

DEFENSE APPROPRIATION

HAC

July 8: HAC-D Marked up the FY21 Defense Bill

- ***GBSD lost \$60M***
- ***Missile Repl/Eq Ballistic lost \$1.53M***
- ***ICBM Fuze Mod lost \$3.458M***
- ***MM Mods lost \$23.684M and transferred \$4.173 to another line***

SAC

TBD: Markup

APPROPRIATION CONFERENCE

TBD: Markup

CONTINUING RESOLUTION

Senate majority leader Mitch McConnell, R-Ky is seeking a CR that would go through mid December

Democrats are considering a CR that would go through next February or March

Defense industry worries Congress will punt budget deal into 2021

https://www.defensenews.com/congress/2020/09/16/defense-industry-worries-congress-will-punt-budget-deal-into-2021/?utm_source=Sailthru&utm_medium=email&utm_campaign=Air%20Force%20DNR%209.17.20&utm_term=Editorial%20-%20Air%20Force%20-%20Daily%20News%20Roundup

By: [Joe Gould](#) for Defense News // 1 day ago

WASHINGTON — As [Congress](#) readies a stopgap spending measure this week, the defense industry is girding for a long-term funding patch that could delay both new procurement programs and needed fiscal certainty into next year.

Democrats say they are considering whether to offer a [continuing resolution](#) that would stretch 2020 funding levels into next February or March, or whether to go along with a stopgap through mid December, as Senate Majority Leader Mitch McConnell, R-Ky., is seeking. Trade groups said this week that passing a CR by the Sept. 30 deadline is better than a [government shutdown](#), but they warned that because CR's ban most new start programs, that will add more turbulence for firms already suffering from [pandemic](#)-related economic shocks.

“As threats continue to multiply and the COVID-19 crisis continues, sustained and stable funding in national security takes on new meaning for the U.S. military and the defense industrial base that supports it,” Aerospace Industries Association President and CEO Eric Fanning, said in an email to Defense News. AIA represents roughly 340 manufacturers. “Relying on continuing resolutions, for any length of time, removes that stability, undermining the shared supply chain and endangering the solid progress made in readiness and modernization over the last several years.”

Defense advocates say continuing resolutions of any length are inefficient for government and disruptive to the budget certainty that businesses need in order to make decisions, but the pandemic and sagging economy add new wrinkles. Smaller defense firms, many hit by cash flow problems related to the pandemic, were of particular concern to shipbuilder Huntington Ingalls Industries, which was among large firms that accelerated millions of dollars in payments to help small suppliers over recent months.

“The effects of a long term continuing resolution can be harmful to the defense industrial base by delaying or prohibiting work,” HII spokesperson Beci Brenton said in an email. “Our greatest concern with a long term CR is the impact to our thousands of suppliers located in all 50 states who are already impacted by the COVID pandemic.” Despite a [longstanding deal on the budget top lines](#), only the House has passed full-year appropriations bills, which means Congress will need more time to pass an FY21 appropriations package.

Congress would likely need to draft a CR this week and pass it next week to avert a government shutdown. That's just what House Majority Leader Steny Hoyer, D-Md., told reporters this week that House leaders are planning. Treasury Secretary Steven Mnuchin and House Speaker Nancy Pelosi, D-Calif., say they have agreed to a “clean” CR, free of policy riders. It's not expected to include COVID relief funds, but further details have not been announced.

Beyond timing, the defense industry is also watching which [anomalies](#) Congress includes to permit select new start programs. The White House sent Congress a list that included the [Columbia-class submarine](#) and new W93 submarine-launched nuclear warhead, as well as funds to ramp up the new Space Force — along with select federal programs across multiple agencies. The National Defense Industrial Association's senior vice president, Wesley Hallman, said delaying new starts means delaying new revenue streams for companies and, for some, new hiring decisions.

“How many new starts are planned for 1 October, I can’t tell you, but if we go to March or February there are more new starts over that entire period,” Hallman said. “If it’s bad in October, it’s really bad if it’s going into March.” Professional Services Council president and CEO David Berteau, whose group represents services contractors across government, said his member are worried about long delays for a budget deal.

“Our members are always concerned because it slows down new contract awards, and it adds uncertainty to every program manager — not only in the Defense Department, but across the federal government — because they don’t know how much money they’re going to get or when they’re going to get it,” Berteau said. The duration of the CR has special political dimensions this year. If the bill runs through December, President Donald Trump and a Republican-controlled Senate would negotiate over the final spending package.

Depending on the outcome of the election, a CR that stretches into the next calendar year could be negotiated by a President Joe Biden or a Democratic-led Senate, which would give Democrats more leverage. Berteau was concerned that Biden, like Trump in 2017, would not enter office Jan. 20 ready to immediately hammer out a budget deal. It took until that April for Trump to sign a deal, and it took President Bill Clinton — who entered office under similar circumstances in 1993 — until that June. “If you don’t get it now, history says you won’t get it for six months,” said Berteau, “and that’s debilitating for industry.

Energy Dept. officials are ‘trying to undermine’ nuclear weapons agency, Inhofe alleges

<https://www.defensenews.com/smr/nuclear-arsenal/2020/09/17/energy-dept-officials-are-trying-to-undermine-nuclear-weapons-agency-inhofe-alleges/>

By: [Aaron Mehta](#) for Defense News // 14 hours ago

WASHINGTON — The chairman of the Senate Armed Services Committee on Thursday accused officials from the Department of Energy of performing as “rogue actors” who aim to “undermine” the agency in charge of managing nuclear warheads, which in turn could damage the Pentagon’s nuclear modernization plans.

In his opening comments, Sen. Jim Inhofe, R-Okla., cast Thursday’s committee hearing on nuclear weapons as an existential one for the National Nuclear Security Administration. “Arguably, this could go down as one of the most significant hearings we’ve ever had,” he said. “I’ve been given information that individuals from the Department of Energy have worked behind the scenes with the House Democrats on ill-advised legislation,” including adding bureaucracy to the Nuclear Weapons Council, prohibiting cooperation between NNSA and the council, and subsuming NNSA into the DOE, Inhofe added.

“It’s not surprising that opponents of nuclear weapons support these efforts — it’s what you’d expect them to do,” Inhofe continued. “What bothers me is that people who should be doing all they can to support the critical work of the NNSA are instead trying to undermine it. As chairman of this committee, I won’t stand idly by and allow this to happen. This work is too important.” Since its creation in 2002, the NNSA has lived in an uneasy location — technically part of the Department of Energy but quasi-independent, beholden in some ways to both the DOE and the Department of Defense, with oversight coming from both the defense and energy committees in Congress.

Part of the tension comes from the Nuclear Weapons Council, a Pentagon led office that provides guidance on the development and production of nuclear warheads. Chaired by Under Secretary of Defense for Acquisition and Sustainment Ellen Lord, who appeared at Thursday's hearing, the NWC — made up of five other top Pentagon officials and the NNSA administrator — has become the center of the fight between supporters of the DOE and the DoD. The hearing occurred following a number of efforts coming out of the House that Inhofe and other Senate Republicans worry will have damaging long-term impacts on America's nuclear modernization efforts.

Inhofe introduced into the record a letter from Defense Secretary Mark Esper laying out key concerns that the Pentagon chief claims would put nuclear modernization at “unacceptable” risk. **Those include:**

- Provisions in the House-passed “minibus” that covers both defense and energy appropriations, which would cut NNSA's weapons accounts by \$2 billion. According to Lord, such cuts could cause delays in the [B61-12 nuclear gravity bomb](#) and other modernization activities. Specific cuts to the [W93 nuclear warhead](#) elsewhere from the House would also imperil America's ability to work with the United Kingdom on its nuclear arsenal, she said.
- In that same minibuss, there are a number of provisions that curtail NNSA's ability to work with the Nuclear Weapons Council, or NWC. “Collectively, these sections would end the statutorily mandated NWC as an effective and useful governing body and gravely endanger the ability of DoD and DOE/NNSA to coordinate on our shared responsibilities for nuclear deterrence,” Esper wrote.
- The House's version of the National Defense Authorization Act also includes language in Section 1644 that would make the secretaries of energy and defense the co-chairs on the Nuclear Weapons Council. Such a move, would make the council “far less efficient and, I'm afraid, it might destroy the relationship right now that we have between DoD as well as NNSA,” warned Lord, currently the chair of the council.
- Language that prevents the use of money for any potential live nuclear test. The Trump administration reportedly plans to resume [nuclear weapons testing](#).

Not included in Esper's letter, but also very much on Inhofe's radar: the bipartisan Department of Energy Organization and Management Improvement Act, passed by the House Committee on Energy and Commerce on Sept. 9, [changes language](#) that made the NNSA a quasi-independent entity, and instead folds the agency more fully under DOE's control. The NNSA's awkward standing between the energy and defense committees sets up something of a jurisdictional battle in Congress, and it is unclear if the defense-focused legislators actually have a say in whether the NNSA would be disbanded or if that decision would formally fall under the purview of the energy committees.

That tension escalated earlier this year when a fight between pro-defense lawmakers and Secretary of Energy Dan Brouillette [over the NNSA's budget](#) went public. The agency eventually won a plus-up in the administration's budget request, thanks in part to Inhofe, [who told Defense News](#) that his message to Brouillette was “I won, you lost.” Then in June, Inhofe introduced language, defeated by the larger Senate, that would have [given the Nuclear Weapons Council](#) an earlier say in the NNSA's budget development. Since then, the NWC has become something of a flashpoint between the two sides.

For most of the hearing, **Lisa Gordon-Hagerty**, the head of the NNSA, tread carefully in her remarks (she reports up to both the DOE and the DoD). But while Brouillette said he is in favor of taking a co-chair role on the council, Gordon-Hagerty noted that “the system that we have in place right

now, and unless otherwise directed by Congress to change, is working well.” “It’s important that we can be [decisive], and with two Cabinet officials — they certainly are busy with the work of their respective departments,” she noted. Gordon-Hagerty later stated that, should the agency take the proposed \$2 billion budget cut, “we would not be able to meet the requirements of the Department of Defense.” A spokesperson from the Department of Energy did not respond to question by deadline.

HOUSE CALLS FOR BAN ON EXPLOSIVE NUCLEAR TESTING IN NDAA

<https://titus.house.gov/press-releases/rep-titus-house-colleagues-call-for-ban-on-explosive-nuclear-testing-in-final-ndaa>

Press Release // September 10, 2020

Washington, D.C. – Today Representative Dina Titus of Nevada’s First Congressional District led an effort with 35 of her House colleagues to call for a ban on explosive nuclear weapons testing in the finalized Fiscal Year 2021 National Defense Authorization Act. The House of Representatives passed the FY 2021 NDAA by a veto-proof majority with [language authored by Congresswoman Titus](#) to prevent the Trump Administration from conducting an explosive nuclear weapons test. The Senate version of the NDAA makes at least \$10 million available for the United States to conduct an explosive nuclear weapons test.

In a new letter to the leadership of the House and Senate Armed Services Committees, Congresswoman Titus (NV-1) and 35 of her colleagues write: “The United States conducted more than 1,000 nuclear weapons tests between 1945 to 1992. These tests produced nuclear radiation which caused cancer and premature death for thousands of Americans across the West and produced harmful, enduring impacts on the groundwater and surrounding environment. Fortunately, for the last 24 years, the Department of Energy’s National Nuclear Security Administration (NNSA) and its nuclear weapons laboratories have certified that our nuclear weapons stockpile remains safe, secure, and reliable without conducting such tests. In fact, our lab directors have assessed that the United States knows more about our nuclear stockpile through the Stockpile Stewardship Program than we did during the era of testing.”

The letter is attached and the text is below:

Dear Chairman Smith, Chairman Inhofe, Ranking Member Thornberry, and Ranking Member Reed,

As you work to finalize the Fiscal Year 2021 National Defense Authorization Act (NDAA), we urge you to retain the McAdams-Titus-Gabbard Amendment of H.R. 6395, the House-passed FY 2021 NDAA, which would prohibit funding to conduct new explosive nuclear weapons testing in Fiscal Year 2021.

As you are aware, it has been reported that, earlier this year, senior Trump administration officials discussed conducting explosive nuclear weapons tests and claimed that such a test could strengthen U.S. negotiating leverage in possible future arms control talks with Russia and China. Since 1992, Republican and Democratic administrations have abided by a moratorium on explosive nuclear testing in the United States. In 1996, the U.S. signed the Comprehensive Test Ban Treaty, committing not to conduct a nuclear weapons test of any yield. While the United States Senate has not yet ratified the CTBT, we led the adoption of United Nations Security Council Resolution 2310 in 2016, which calls upon all countries, including the United States, not to defeat the object and purpose of the CTBT by conducting a nuclear test.

The United States conducted more than 1,000 nuclear weapons tests between 1945 to 1992. These tests produced nuclear radiation which caused cancer and premature death for thousands of Americans across the West and produced harmful, enduring impacts on the groundwater and surrounding environment. Fortunately, for the last 24 years, the Department of Energy's National Nuclear Security Administration (NNSA) and its nuclear weapons laboratories have certified that our nuclear weapons stockpile remains safe, secure, and reliable without conducting such tests. In fact, our lab directors have assessed that the United States knows more about our nuclear stockpile through the Stockpile Stewardship Program than we did during the era of testing.

We must not provide foreign nations with justification to openly conduct nuclear test explosions while imposing immense financial and health costs on the American people. With the McAdams-Titus-Gabbard amendment's inclusion in the final NDAA, we can continue to ensure the safety and reliability of our nuclear stockpile without opening the door to widespread global testing. The United States will be safer for it.

AROUND THE WORLD



RUSSIA:

Russia's Avangard Glide Vehicle 'More Deterrent Weapon Than Nuclear Bomb', Chinese Media Claims

<https://sputniknews.com/military/202009121080441568-russias-avangard-glide-vehicle-more-deterrent-weapon-than-nuclear-bomb-chinese-media-claims/>

by [Oleg Burunov](#) for Sputnik News // 16:10 GMT 12.09.2020Get short URL

Late last year, Russian Defence Minister Sergei Shoigu confirmed that the country's first Strategic Missile Forces regiment armed with the nuclear-capable Avangard hypersonic glide vehicle had entered combat duty.

Although the US remains the country with the most comprehensive air defence system in the world, even this missile shield is unable to intercept Russia's Avangard hypersonic glide vehicle, the Chinese news outlet Sina reports. The vehicle's characteristics, especially its strike speed and resistance to interception, "make the Avangard missile a more deterrent weapon than a nuclear bomb", Sina claimed.

The news outlet added that by showcasing the Avangard, Russia is sending a message to the US that "the existing American air defences are useless when it comes to intercepting Russian missiles". The remarks came a few days after The Washington Post (WaPo) published excerpts of veteran American journalist Bob Woodward's soon-to-be-released book on the Trump presidency, in which the reporter specifically cited POTUS as mentioning what he described as an "incredible" US nuclear weapons system.

"I have built a nuclear - a weapons system that nobody's ever had in this country before [...]", Trump told Woodward, adding that the US has "stuff" Russian President Vladimir Putin and his Chinese counterpart Xi Jinping "have never heard about before". Even though Trump did not elaborate, some quickly suggested that POTUS was probably referring to the W76-2, a new low-yield nuclear warhead designed to fit on the US Navy's Trident D-5 submarine-launched ballistic missiles.

The WaPo report followed Russian Ambassador to the US Anatoly Antonov noting last week that it was Washington's move to modernise low-yield nukes, not Russia's actions, that is destabilising the global nuclear deterrent. Antonov was responding to US Deputy Assistant Secretary of Defence Robert Soofer, who earlier declared that Russia was initiating an arms race in the sphere of non-strategic weapons.

Earlier in September, Soofer said that bipartisan support for the creation of the W76-2 remains "divided", as he outlined the US' Nuclear Deterrence Strategy, which "places a premium on ensuring the survivability of nuclear forces that can threaten the adversary".

Avangard Missile Enters Service

In late 2019, Russian Strategic Missile Forces commander Col-Gen Sergei Karakaev confirmed that the first Avangard-armed missile regiment had been stationed at the Yasnensky missile compound in the Orenburg region, about 1,200 km southeast of Moscow.

Russian Defence Ministry: Russia's Avangard Hypersonic Glide Vehicle Not Violating New START Deal - General Staff The statement was preceded by Russian President Vladimir Putin telling the country's Federation Assembly in February 2019 that the significance of creating the Avangard hypersonic glide vehicle can be likened to the creation of the Earth's first artificial satellite. Presenting the Avangard missile during his Federation Assembly address the year before, Putin said that the missile is capable of changing course mid-flight, thereby avoiding being tracked and intercepted. He noted that the speed of the missile, which "flies like a meteorite or a fire ball", was in excess of Mach 20 and that it is capable of penetrating any existing missile defence system.

Putin Says Russia Producing Unique Weapons With No Analogues in the World

© Sputnik / Aleksey Nikolskyi

[Military & Intelligence](#)

Russian defence enterprises showcased their wares at the Army 2020 Expo outside Moscow last month, including new drone designs, tanks, missile systems, small-arms, helicopters and other equipment.

The people working in the Russian military industry today have worthily built on the work of those who came before them, and produced new weapons some of which remain unmatched anywhere in the world, Russian President Vladimir Putin has said.

"The current generation of Russian defence industry workers continue the work of their predecessors with dignity, and produce truly unique weapons which today are ahead of foreign counterparts," Putin said, speaking at a meeting Russia's Military-Industrial Commission on Friday, on the eve of Defence Industry Workers Day professional holiday.

"In some cases, our weapons have no analogues in the world in a number of characteristics. This has become quite obvious," the president added. Putin emphasized that today, more than anything, Russia's defence industries need young engineers and competent managers, so that military factories can produce not just quality weapons, but civilian products enjoying global demand.

The share of civilian products by Russia's defence enterprises grew from 21 percent in 2018 to about 24 percent in 2020. The state has tasked the military-industrial complex with a target of 30 percent high-tech civilian market goods by 2025, and 50 percent by 2030.

Putin also commented on the need to maintain fair competition in the field of military procurement, emphasizing that foreign producers should not be given with any special treatment when it comes to the state defence order.

"Of course, it's clear that competition must be respected. But it must be observed between both our producers, and foreign ones. Foreign producers should not be given any advantageous conditions, as unfortunately still happens in our markets," the president said.

Meeting of the Military-Industrial Commission

On the eve of Gunsmith Day, Vladimir Putin held a meeting, via videoconference, of the Military-Industrial Commission of the Russian Federation. September 18, 2020

14:50

Novo-Ogaryovo, Moscow Region

President of Russia Vladimir Putin: Good afternoon, colleagues,

Today, we are holding a regular meeting of the Military-Industrial Commission but, importantly, we are doing this on the eve of Gunsmith Day. Therefore, I would like to begin by congratulating everyone who work in the military-industrial complex on this forthcoming holiday and convey the warmest words of gratitude to the veterans, who consolidated and continued the legendary traditions of the world-famous gun-making schools and developed weapons and equipment. Without any exaggeration they have come to embody the power and might of our army and navy, and ensured the military-technological parity with the leading states for decades ahead.

The current generation of gunsmiths befittingly continues the cause of their predecessors. They produce unique arms that are better than their foreign counterparts. In some cases they do not have any counterparts, which their characteristics make perfectly obvious.

I would like to wish all workers of the industry new successes for the benefit of the Motherland because the work, competencies and the talent of employees, engineers and other specialists is the foundation for the development of Russia's defence industry.

We will continue strengthening the personnel potential of the defence industry, creating conditions that will allow our talented managers, scientists and designers – those who are 30–40 years today – to fully reveal their abilities, use the accumulated experience, implement their bold ideas and eventually occupy key positions in the companies of the industry and assume responsibility for their future, and, hence, for the reliable supply of Russia's army and navy with modern equipment in the decades to come.

In this connection, we will discuss the federal personnel reserve in the defence industry under the first item on the agenda of the Commission's meeting.

Notably, such formats – the presidential and the federal management personnel reserve, the Leaders of Russia open competition and a number of others – are doing well and have an excellent track record. The experts who have passed this rigorous selection are already working at different levels of government.

Since May, such work began at the defence industry enterprises. I am aware that work is underway in four areas, and 55 promising professionals have already been selected. They are genuine leaders who are studying strategic planning for defence industry enterprises, organisation of the work of major labour and research teams, and management of order portfolios and finances.

It is important to train new-generation leaders, who will tackle major unconventional tasks facing the industry, such as the effective and timely implementation of the state defence order, the accelerated introduction of scientific and technical achievements into serial production, and, of course, the development of promising weapons and equipment. We need hundreds of such specialists, without any exaggeration. We are talking about many hundreds of top-level specialists.

I would like Deputy Prime Minister Yury Borisov to report in detail on the results of creating a federal personnel reserve in the defence industry complex and plans in this field.

The next item on our agenda is to stimulate the diversification processes in the defence industry. We outlined specific tasks and guidelines for this sphere several years ago.

Colleagues, you are aware that this matter is critical for the sustainable and balanced operation of the defence industry in the long run when we are past the peak of the army and navy rearmament programmes.

Notably, the share of civilian products in the total defence industry output is growing from year to year. In 2018, it was 20.9 percent, and in 2019 it was already 24.1 percent. These numbers are even higher in several defence industry segments. I believe it is already over 31 percent in the aircraft-building industry. Even in the field of ammunition 26 percent of the output is civilian goods. Positive numbers, but there is still much to be done. A boost in production of quality high-tech civilian items will bring defence organisations an additional income in the future, help create modern jobs, introduce important dual-use technologies and acquire new competencies.

That is why I spoke about this before, as you know, and I am saying this again today: we must follow through on all our plans made. Let me remind you that by 2025, high-tech civilian products should account for 30 percent of the total defence industry output, and by 2030, their share should reach 50 percent.

We have repeatedly said that defence industry enterprises should make broader use of the opportunities offered by national projects and federal programmes. Joining them will enable such companies to increase the output of civilian products and introduce advanced technologies, expand to new markets, and launch investment cycles focused on medium and long-term planning periods thereby strengthening Russia's technological sovereignty and making a significant contribution to its economic development.

The domestic industry – both civilian and defence segments – already supplies more than half of the machinery and equipment required for national projects. This is clearly seen on our monitoring of the procurement of products for national projects and the comprehensive plan for the modernisation and expansion of backbone infrastructure. As of September 1, total procurement of goods, works and services amounted to 2.1 trillion rubles, where Russian-made products accounted for 1.1 trillion, or 51 percent. However, I have to note that Russian high-tech equipment so far accounts for just 29 percent, if I remember correctly.

As you know, on July 31, several laws were adopted at my initiative to support domestic producers. In fact, the law changing the contract system was your proposal, a draft law submitted by the Government. Now the Government is authorised to establish the minimum share of domestic goods and services in state procurement and procurement by companies co-owned by the state. In simpler terms, of the total volume of purchases, a certain percentage should be supplied by domestic products. And this requirement cannot be violated or circumvented.

We have talked about this many times. I perfectly understand what is happening here. All the pros and cons, the upside and downside are well known. But I still think it is the right step towards supporting Russian industrialists and high-tech companies.

It is necessary to continue making system-wide decisions that will increase the demand for civilian products of the country's defence industry and ensure the priority of domestic producers on the Russian market, which is extremely important.

Of course, there clearly must be competition. But it must be observed both between Russian producers and between Russian and foreign producers. But foreign producers should not have special advantages, and unfortunately, this still happens on our market.

Improving the law on state defence procurement remains topical. This work has been actively carried out in recent years, and the main emphasis was made on developing a single mechanism of state price regulation in this sphere as well as implementing an information and analysis system that would gather data on prices as part of the implementation of state defence procurement and compare them with prices in non-defence industries. Let me note that through introducing such amendments to legislation and other measures we have achieved positive results in placing the state defence procurement order.

I am aware of the ongoing discussion between the Defence Ministry as the customer and producers. I will not go into detail now but only note that, as of early September, there already were contracts for 95 percent of tasks against 91.5 percent last year.

At the same time, the law enforcement practice in the state regulation of prices on products supplied as part of the state defence procurement has shown that a number of issues undoubtedly still require revision and adjustment.

For example, we have to address the question whether defence industry enterprises can leave profits, at least a part, a significant part of the profits they make from executing the state defence procurement order. We have discussed this with my colleagues. I believe this would be right: they would acquire some reserve at least. I would like to hear what proposals you have on this.

This is what I wanted to say at the beginning. Let's get down to work.
<http://en.kremlin.ru/events/president/news/64049>



CHINA:

Chinese military calls U.S. biggest threat to world peace

Associated Press, 13 Sep 20

BEIJING -- China's Defense Ministry on Sunday blasted a critical U.S. report on the country's military ambitions, saying it is the U.S. instead that poses the biggest threat to the international order and world peace.

The statement follows the Sept. 2 release of the annual Defense Department report to Congress on Chinese military developments and goals that it said would have "serious implications for U.S. national interests and the security of the international rules-based order."

Defense Ministry spokesman Col. Wu Qian called the report a “wanton distortion” of China’s aims and the relationship between the People’s Liberation Army and China’s 1.4 billion people.

“Many years of evidence shows that it is the U.S. that is the fomentor of regional unrest, the violator of the international order and the destroyer of world peace,” he said.

U.S. actions in Iraq, Syria, Libya and other countries over the past two decades have resulted in the deaths of more than 800,000 people and displacement of millions, Qian said.

“Rather than reflecting on itself, the U.S. issued a so-called report that made false comments about China’s normal defense and military construction,” he said in the statement. “We call on the U.S. to view China’s national defense and military construction objectively and rationally, cease making false statements and related reports, and take concrete actions to safeguard the healthy development of bilateral military relations.”

Running to more than 150 pages, the Defense Department report examined the PLA's technical capabilities, doctrines and the ultimate aims of China's military buildup. It said it includes becoming a “practical instrument” of China's statecraft with an active role in advancing Beijing's foreign policy and “aims to revise aspects of the international order.”

“Certainly, many factors will determine how this course unfolds,” the report said. “What is certain is that (the ruling Communist Party) has a strategic end state that it is working towards, which, if achieved and its accompanying military modernization left unaddressed, will have serious implications for U.S. national interests and the security of the international rules-based order.”

Much of the report was devoted to analyzing China's strategy toward Taiwan, a U.S. ally which China considers a part of its territory to be annexed by force if necessary. China's military capabilities dwarf those of the island of 23 million in numerical terms, although any invasion of Taiwan would be complex and would carry major political risks, the report said.

It also looked at areas where the 2 million-member PLA, the world's largest standing military, has overtaken the U.S., including in the size of its navy, now the world's largest with approximately 350 ships and submarines compared to around 293 for the U.S.

China has also built a considerable arsenal of land-based ballistic and cruise missiles and has one of the world’s largest forces of advanced long-range surface-to-air systems, the report said.

This year's report comes as relations between Beijing and Washington have hit their lowest ebb in decades amid simmering disputes over trade, technology, Taiwan, human rights and the South China Sea.

China coronavirus vaccine may be ready for public in November – official

Reuters, 14 Sep 20

Roxanne Liu and Tony Munroe

BEIJING -- Coronavirus vaccines being developed in China may be ready for use by the general public as early as November, an official with the Chinese Center for Disease Control and Prevention (CDC) said.

China has four COVID-19 vaccines in the final stage of clinical trials. At least three of those have already been offered to essential workers under an emergency use programme launched in July.

Phase 3 clinical trials were proceeding smoothly and the vaccines could be ready for the general public in November or December, CDC chief biosafety expert Guizhen Wu said in an interview with state TV late on Monday.

Wu, who said she has experienced no abnormal symptoms in recent months after taking an experimental vaccine herself in April, did not specify which vaccines she was referring to.

A unit of state pharmaceutical giant China National Pharmaceutical Group (Sinopharm) and U.S.-listed Sinovac Biotech are developing the three vaccines under the state's emergency use programme. A fourth COVID-19 vaccine being developed by CanSino Biologics was approved for use by the Chinese military in June.

Sinopharm said in July that its vaccine could be ready for public use by the end of this year after the conclusion of Phase 3 trials.

Global vaccine makers are racing to develop an effective vaccine against the virus which has killed more than 925,000 people. Leading Western vaccine makers pledged earlier this month to uphold scientific study standards and reject any political pressure to rush the process.

Beijing fumes at high-level U.S.-Taiwanese meetings

https://washingtontimes-dc.newsmemory.com/?token=5269bf5a18c119fb330e7a8c9122e70d_5f64b035_d3019ac&selDate=20200918

BY HUIZONG WU for the ASSOCIATED PRESS // 18 Sept 2020

TAIPEI, TAIWAN -- Undersecretary of State Keith Krach arrived in Taiwan on Thursday for the second visit by a high-level American official in two months, prompting a stern warning and threat of retaliation from China.

Beijing considers Taiwan its own and opposes all official contacts between other countries and the self-governing island, but the Trump administration has been stepping up formal and informal contacts with the government of pro-independence Taiwanese President Tsai Ing-wen. Mr. Krach arrived at an air force base in Taipei, the capital, for a three-day visit. Wearing a face mask, he bumped elbows in greetings with Taiwanese Deputy Foreign Minister Harry Ho-Jen Tseng. The trip of the U.S. delegation was confirmed earlier this week.

Mr. Krach, the highest-level State Department official to visit the island in decades, is to meet Ms. Tsai and other senior officials, the island's foreign ministry said. The visit by Mr. Krach, who is undersecretary for economic growth, energy and the environment, follows a highprofile trip in August

by Health and Human Services Secretary Alex Azar, the highest-level U.S. Cabinet official to visit since the U.S. switched formal relations from Taiwan to China in 1979.

Successive administrations have maintained unofficial ties with Taiwan since the official diplomatic break, and the U.S. remains the island's most important ally and provider of defense equipment. The U.S. ambassador to the United Nations, Kelly Craft, had lunch Wednesday with Taiwan's top official in New York. She called the meeting historic and a further step in the Trump administration's campaign to strengthen relations with Taiwan.

Ms. Craft said her lunch with James K.J. Lee, director of the Taipei Economic and Cultural Office in New York, was the first meeting between a top Taiwanese official and a U.S. ambassador to the United Nations since 1971, when the China seat at the United Nations was passed from Taipei to Beijing. "I'm looking to do the right thing by my president, and I feel that he has sought to strengthen and deepen this bilateral relationship with Taiwan, and I want to continue that on behalf of the administration," she said in an interview.

In Taiwan, Mr. Krach is to attend a banquet hosted by Ms. Tsai on Friday and hold discussions on the creation of an economic and commercial dialogue, according to Taiwan's de facto ambassador in the U.S., Hsiao Bi-khim. He will also attend a memorial service for former President Lee Teng-hui, who led the island's transition to democracy and died in July at age 97. Mr. Krach's visit and Ms. Craft's lunch with Mr. Lee are certain to exacerbate mounting tensions between Washington and Beijing on issues including the COVID-19 pandemic, trade and technology to Hong Kong and the South China Sea.

Taiwanese officials were quick to point up the significance of the U.S. gestures, particularly in the face of anger from Beijing. Tsai Shih-ying, a legislator from the governing Democratic Progressive Party of Taiwan who is on the foreign affairs and national defense committee, told The New York Times that the U.S.-Taiwanese contacts "let China know that not only will Taiwan not bow, [that] it has many powerful allies that will not let China just act blindly without thinking."

China condemned the visit Thursday and warned that it could retaliate. President Xi Jinping has made the eventual absorption of the island into China a centerpiece of his long-term foreign policy. At a daily briefing Thursday, Chinese Foreign Ministry spokesperson Wang Wenbin said Mr. Krach's visit violates U.S. commitments to China and "bolsters the separatist forces of Taiwan independence and undermines Chinese-U.S. relations and peace and stability across the Taiwan Strait."

He added that Beijing had "lodged solemn complaints" with Washington over the matter. "We urge the U.S. to fully recognize the high sensitivity of the Taiwan issue ... immediately stop official exchanges and actions of improving substantive relations with Taiwan, and handle Taiwan-related issues cautiously," Mr. Wang said. "China will make necessary responses in accordance with the development of the situation." China's state-controlled media also suggested that U.S. officials were uneasy with the prominence Taiwan's leaders were giving to the visit and downgraded Mr. Krach's agenda to mostly private events

Chinese Media on U.S.-Taiwan Visit: 'Stones May Become Torpedoes'

https://freebeacon.com/national-security/chinese-media-on-u-s-taiwan-visit-stones-may-become-torpedoes/?utm_source=actengage&utm_campaign=FreedomMail&utm_medium=email

By: [Jack Beyrer](#) for the WFB // SEPTEMBER 17, 2020 5:30 PM

Chinese media issued threats to the United States after a top U.S. official visited Taiwan this week, U.S. News & World Report [reported](#) Thursday.

"Once the People's Liberation Army dispatches troops to reunify the island of Taiwan, the military equipment from the U.S. will be nothing but decorations," an article in China's Global Times reads. "Once they go too far, the stones may become torpedoes, increasing the uncertainties in the entire region, as well as the risks of drastic changes in the Taiwan Straits." Global Times, a state-backed media outlet, has historically served as a mouthpiece for China's security apparatus.

"[PLA and CCP officials] can't speak willfully, but I can," Hu Xijin, the Times's editor, [told](#) American reporters in 2016. The threats follow Undersecretary of State Keith Krach's visit to Taiwan this week to pay respects to Taiwan's recently deceased and first democratically elected president, Lee Teng-hui, and to increase strategic dialogue with Taiwan around security and trade agreements.

Taiwan's representative to the United States reaffirmed [support](#) for a bilateral trade agreement this week, and the Trump administration also [agreed](#) Wednesday to sell roughly \$7 billion dollars' worth of arms to the island nation, including defensive equipment to be used against a potential Chinese amphibious assault. The move places greater pressure on China, which has kept an even closer eye on Taiwan after its hostile takeover of Hong Kong earlier this summer.

China reportedly views Washington's recent overtures to Taipei, including a visit from Health and Human Services secretary Alex Azar last month, as a threat to its claimed sovereignty over Taiwan through the "One China Principle." China's increasingly sharp rhetoric and corresponding military displays are meant to warn against rapprochement with the island country, [said](#) American Enterprise Institute scholar Michael Mazza.

"China is signaling that 'We're not going to let up when it comes to our goal of eventual unification,'" Mazza said. "They're saying, 'We're here, we're not going anywhere, and we're not going to change the way we behave toward Taiwan.'"



[NORTH KOREA:](#)

Missile launch or storm repairs? Flurry of activity fuels speculation of North Korea test

<https://www.msn.com/en-us/news/world/missile-launch-or-storm-repairs-flurry-of-activity-fuels-speculation-of-north-korea-test/ar-BB199LSp?ocid=msedgdp>

By Josh Smith for Reuters News Wire // 6 hrs ago

SEOUL (Reuters) - Analysts and security officials say they are watching for signs that North Korea may use an upcoming holiday to unveil new weapons or test fire a submarine-launched ballistic missile (SLBM), after a flurry of activity was detected at a key base.

Formations of troops have been seen practicing for what is expected to be a major military parade on Oct. 10, the 75th anniversary of the ruling Workers' Party of Korea. Some observers say North Korea may showcase its largest missiles for the first time since 2018. Imagery analysts and security officials caution that so far there is no conclusive evidence of an impending launch. But after several typhoons lashed North Korea in early September, satellite photos have shown a flurry of activity at the Sinpo South Shipyard, including in a secure basin where a barge used in previous underwater missile launches is docked.

"We're monitoring developments, as there is a possibility that a submarine-launched ballistic missile test will be conducted there using ejection equipment shortly after the repair is done," Won In-choul, the nominee for chairman of South Korea's Joint Chiefs of Staff, told lawmakers this week. Other South Korean officials have sounded more cautious notes, including incoming South Korean defence minister Gen. Suh Wook, who said on Monday that he considered an SLBM test unlikely because there is too little time to prepare ahead of the anniversary.

On Thursday, Daily NK, a Seoul-based website that reports on North Korea, cited a single unnamed source near the shipyard as saying the site "is bustling with activity to prepare for the ballistic missile launch," with officials and researchers arriving since late August. 38 North, a U.S.-based think tank, said in a report on Wednesday that imagery showed "heavy activity" at the shipyard, but that "no other indicators of launch preparations were observed."

Although the activity does suggest some kind of work is being done on the missile barge, which has either been moved from the basin or repositioned under a protective awning, it would also be consistent with basic repair work after the storm, said Dave Schmerler, a senior researcher at the James Martin Center for Nonproliferation Studies. On Sept. 4, the U.S.-based Center for Strategic and International Studies said satellite imagery showed activity at Sinpo that was "suggestive, but not conclusive, of preparations for an upcoming test of a Pukguksong-3 submarine launched ballistic missile from the submersible test stand barge."

Last October, North Korea said it had successfully test-fired a Pukguksong-3, which elicited no major reaction from U.S. President Donald Trump, who has held up the absence of intercontinental ballistic missile and nuclear tests by that country since 2017 as a diplomatic success and played down shorter-range launches. Although North Korea could roll out a new weapons system, there are no indications that the country is looking at "lashing out" ahead of the expected military parade, the commander of U.S. military forces in South Korea said last week.

(Reporting by Josh Smith. Additional reporting by Hyonhee Shin. Editing by Gerry Doyle)



SOUTH KOREA:

NSTR



IRAN:

Iranian Submarine-Launched Missile Range Extended

<https://www.tasnimnews.com/en/news/2020/09/13/2347906/range-of-iranian-submarine-launched-missile-extended>

From the Tasnim News Bureau // September, 13, 2020 - 14:23

TEHRAN (Tasnim) – Iran has increased the range of a homegrown submarine-launched missile, a top commander said. Speaking at a televised interview, Commander of the Iranian Navy Rear Admiral Hossein Khanzadi highlighted the advances in defense industries, pointing to the development of Jask-II submarine-launched missile. The commander noted that Jask-II has a longer range than its previous models.

Missiles fired from the surface could be diverted by the enemy, but Jask-II is launched by a submarine that travels where the enemy does not expect at all, he added. Rear Admiral Khanzadi also noted that the naval missile can be fired from Fateh submarine, a homegrown watercraft with advanced sonar system. The Iranian Navy on Friday fired a submarine-launched cruise missile during a massive military exercise in the Sea of Oman and parts of the Indian Ocean. The drill zone covered an area of 2 million square kilometers in eastern parts of the Strait of Hormuz, Makran Coast, Sea of Oman, and northern parts of the Indian Ocean, down to the 10-degrees latitude.

Iran says 1,044 centrifuges now active at underground plant

<https://www.timesofisrael.com/iran-says-1044-centrifuges-now-active-at-underground-plant/#gs.fm2412>

Tehran announced resumption of enrichment at Fordo site last November in a further step away from 2015 nuclear accord abandoned by Washington in May 2018

By [AFP](#) for the Times of Israel // 13 September 2020, 11:35 pm

TEHRAN, Iran — The head of Iran’s atomic agency said Sunday that 1,044 centrifuges were active at the Fordo uranium enrichment plant, in line with steps to reduce its commitments to the nuclear deal.

The suspension of all enrichment at the underground facility near the Shiite holy city of Qom was one of the restrictions on Iran’s nuclear activities that it accepted in return for the lifting of international sanctions in the 2015 accord. Tehran first announced the resumption of enrichment at Fordo last November, the fourth phase of its push since May 2019 to progressively suspend commitments to the deal.

It was in retaliation for Washington’s abandonment of the accord in May 2018, followed by its unilateral reimposition of sanctions on Iran. “Currently 1,044 centrifuges are enriching at Fordo,” Ali Akbar Salehi, the head of Iran’s atomic agency, told the Iranian parliament’s news agency ICANA. “We were committed in the JCPOA that these 1,044 machines do not carry out enrichment, but it is being done per dropped commitments as much as needed and we will stockpile the enriched material, too,” he added, referring to the accord’s official name, the Joint Comprehensive Plan of Action.

Iran's other walk-back steps included exceeding the accord's restrictions on enriched uranium reserves and enrichment level, development of advanced centrifuges, and foregoing a limit on its number of centrifuges. In a joint statement in November, Britain, France, Germany and the European Union said Iran's decision to restart activities at Fordo was "inconsistent" with the 2015 deal. The parties to the accord have called on Iran to return to its commitments, but Tehran insists the steps can be reversed once its economic benefits from the deal are realized.

The United Nations' nuclear watchdog said on September 4 that Iran's stockpile of enriched uranium now stands at more than 10 times the limit set down in the deal. Tensions between Tehran and Washington have escalated since the US pulled out of the deal.



INDIA:

India asks China to pull back troops, arms in Ladakh region

<https://www.msn.com/en-us/news/world/india-asks-china-to-pull-back-troops-arms-in-ladakh-region/ar-BB197Yig?ocid=msedgdhp>

By ASHOK SHARMA, Associated Press // 1 hr ago

NEW DELHI (AP) — India's defense minister said Thursday the country faces challenges in its border dispute with China and urged Beijing to sincerely implement an understanding they reached previously to completely disengage forces from the Ladakh region.

Rajnath Singh told the upper house of Parliament that China has amassed troops and weapons in Ladakh in violation of agreements reached in the 1990s and is trying to alter the status quo in the region through aggressive actions. He said that was not acceptable and that India is seeking a peaceful resolution through talks. The two countries' foreign ministers met in Moscow a week ago and agreed to deescalate tensions in Ladakh, but Singh's words to Parliament suggested they have not significantly declined and that settling the impasse will be a long process.

He also said India has counter-deployed troops that have foiled "transgression attempts by China." "We should be confident that our armed forces will handle the situation successfully," Singh said. He said it was "apparent from Chinese activities that their words don't match their actions." In Beijing, Chinese foreign ministry spokesperson Wang Wenbin again laid the onus on India to relieve the tensions and said Chinese border troops have "always strictly abided by the (agreements) between the two countries and are committed to safeguarding China's territorial sovereignty and maintaining peace and tranquility in the border areas."

"What is pressing now is that the Indian side should immediately correct its mistake, disengage on the ground as soon as possible and take concrete actions to ease the tension and lower the temperature along the border," Wang said at a daily briefing. Relations between the two countries have often been strained, partly due to their undemarcated border. They fought a border war in 1962 that spilled into Ladakh and ended in an uneasy truce. Since then, troops have guarded the undefined border area, occasionally brawling.

The standoff escalated to a deadly clash on a high ridge on June 15 that left 20 Indian soldiers dead. Singh said India inflicted “heavy” casualties on Chinese forces, but did not provide any numbers. China has not given any details on its casualties. After that clash, the two countries partially disengaged from the site in the Galwan Valley and at least two other places, but the crisis has continued in at least three other areas, including glacial Pangong Lake.

He said the impasse was due to differing perceptions of the fiercely contested Line of Actual Control that separates Chinese and Indian-held territories from Ladakh in the west to India’s eastern state of Arunachal Pradesh. Singh said India has doubled its budget on building roads, bridges and other infrastructure along the border to match the Chinese infrastructure to accelerate mobility of forces.

“We are fully prepared to protect the sovereignty and territorial integrity of our country,” he said, adding that China continued to occupy nearly 38,000 square kilometers (14,670 square miles) of Indian land in Ladakh.



PAKISTAN:

Pakistan’s Nuclear Diplomacy

A Commitment Towards Non-Proliferation

<https://modern diplomacy.eu/2020/09/14/pakistans-nuclear-diplomacy-commitment-towards-non-proliferation/>

By: [Sher Bano](#) for Modern Diplomacy // Published 2 days ago on September 14, 2020

Ever since Pakistan became a nuclear weapon state, Pakistan’s nuclear diplomacy has been in practice on the principles of restraint and responsibility.

Pakistan was even reluctant to enter the club of nuclear weapon states but soon after India had conducted its first nuclear test in the year 1974, going nuclear became Pakistan’s strategic compulsion. India’s series of nuclear tests in 1998 had compelled Pakistan to demonstrate its nuclear weapon capability accordingly to restore the strategic balance in South Asia. The development of Pakistan’s nuclear weapon capability primarily serves the purpose of a credible and reliable defence against the existential threat from India and to maintain peace and stability in the region.

After the inevitable nuclearization of South Asia, Pakistan has never been a part of any arms race in South Asia. Pakistan can neither afford and nor have an intent to indulge in an arms race in the region This is evident from the very fact that Pakistan has always been open for dialogues and arms control initiatives at the regional and international levels. In this regard, Pakistan’s [recent proposal](#) at the Conference on Disarmament (CD) in Geneva is also part of its responsible nuclear diplomacy to urge the international community to take steps and develop consensus on arms control and disarmament.

These factors show Pakistan's commitment and adherence to achieve the goal of nuclear non-proliferation. As part of its non-proliferation efforts, in the past, Pakistan had also proposed various Confidence Building Measures (CBMs) at the regional level. For instance, in [1974](#) Pakistan had proposed to make South Asia a nuclear-weapon-free zone (NWFZ), in [1978](#) proposal for the joint Indo-Pak declaration renouncing the manufacture and acquisition of nuclear weapons was presented.

Similarly, in [1979](#) Pakistan had proposed the mutual inspection of each other's nuclear facilities to build confidence and promote transparency. Moreover, being a responsible international player, in 1979 Pakistan had proposed to simultaneously sign the Non-Proliferation Treaty (NPT) along with India as non-nuclear-weapon states. In [1988](#) Pakistan had proposed a bilateral treaty to ban the nuclear tests to elude overt nuclearization and reduce the nuclear risk.

With the high risk attached to the emerging technologies and delivery systems, in [1994](#) Pakistan had proposed the South Asia zero-missile zone. Hence over the period, Pakistan has continued its efforts towards nuclear CBMs by proposing various regional and bilateral non-proliferation initiatives. These were aimed at strengthening strategic stability and to reduce the risk of any nuclear conflict in the region.

Unfortunately, India has always shown a negative attitude to all such proposals and disrupted various technical, political, and strategic level talks on nuclear CBMs. This historical evidence further validates Pakistan's appropriate nuclear diplomacy and enhances its credibility as a responsible nuclear-weapon state. In continuation of its responsible nuclear diplomacy, most recently at the plenary meeting of CD, being held in [June 2020](#), Pakistan has put forth its concerns regarding the nuclear disarmament.

While speaking at the conference, Pakistan's permanent representative to CD Ambassador Khalil Hashmi deliberated upon that with the emerging global conflicts, the consensus on non-proliferation and disarmament has also abraded. The likelihood of a resumption of nuclear testing by countries like the USA, Russia, and India and increased prospects of nuclear use has made the global arms control regime dormant. The increasing trend of double standards and discrimination of the western countries was also highlighted.

It was pointed out that the politics of granting waivers to certain states particularly India serves as one of the reasons that the confidence in the nuclear non-proliferation regime has eroded. India's aspiration of regional hegemony and aggressive military posture against Pakistan are the main contributing factors towards instability and turbulence in South Asia. Moreover, India's non-compliance with international law has emboldened it to intimidate its neighboring countries and to continue its brutalities in the Kashmir region.

India's irresponsible and incendiary rhetoric combined with its enhanced and aggressive nuclear capabilities is a huge threat to regional peace and security. To address the above concerns, Pakistan has outlined eleven points roadmap to build the global consensus on non-proliferation. Some of the important steps include; the 'right of equal security for all states' in both conventional and non-conventional domains at the national and international levels. The [SSOD-I](#) (Special Session on disarmament) has unanimously agreed to this principle of equal security.

This shows that Pakistan's nuclear diplomacy and its non-proliferation efforts have been acknowledged at such an international forum. Another pragmatic step would be that through a non-discriminatory Fissile Material Treaty, all the states must eliminate the current fissile material stock and

abandon future production. Likewise, all non-nuclear-weapon states must be provided with security assurances until nuclear disarmament is achieved.

A non-discriminatory and universal agreement must be developed to address the concerns regarding the proliferation and development of ABM (Anti-Ballistic Missile) systems. Furthermore, there is a need to strengthen laws to prevent the militarization of outer space and development of LAWS (Lethal Autonomous Weapons System) to be brought under international regulation. Hence to deal with the existing and future challenges to nuclear non-proliferation, international efforts are needed to rethink and re-evaluate the foundations of the non-proliferation regime.

Hence, in this nuclear age, global strategic stability cannot be achieved through discriminatory non-proliferation measures. There is a need for an enabling environment at both the global and regional levels for successful nuclear non-proliferation engagements. In South Asia, India's offensive doctrines of a limited war under a nuclear overhang, nuclear brinkmanship, and notions of a splendid first strike have posed a serious threat to regional security.

In this regard, CBMs and crisis control along with nuclear risk reduction are direly needed to help reinstate a stable regional nuclear order. This would likely serve the key to enduring peace and stability. Despite India's perilous and pessimist role in the non-proliferation realm, Pakistan should continue to act responsibly and maintain a constructive and responsible nuclear diplomacy.



UNITED KINGDOM:

NSTR



FRANCE:

NSTR



ISRAEL:

Historic Peace Deal Normalizes Israel's Relations With Bahrain

WASHINGTON/JERUSALEM/DUBAI (Reuters) – Bahrain joined the United Arab Emirates in striking an agreement to normalize relations with Israel on Friday, a dramatic move aimed at easing tensions in the Middle East.

U.S. President Donald Trump tweeted the news after he spoke by phone to both Bahrain's King Hamad bin Isa Al Khalifa and Israeli Prime Minister Benjamin Netanyahu, the White House said. "This is a historic breakthrough to further peace in the Middle East," the United States, Bahrain and Israel said in a joint statement. "Opening direct dialogue and ties between these two dynamic societies and advanced economies will continue the positive transformation of the Middle East and increase stability, security, and prosperity in the region," it said.

The United Arab Emirates last month agreed to normalize ties with Israel under a U.S.-brokered deal. That deal is scheduled to be signed on Sept. 15 at a White House ceremony hosted by Trump and attended by Israeli Prime Minister Benjamin Netanyahu and UAE Foreign Minister Sheikh Abdullah bin Zayed al-Nahyan. The easing of relations with Israel comes amid a backdrop of shared fears about the threat of Iran to the region.

The Trump administration has tried to coax other Sunni Arab countries to engage with Israel. The most powerful of those, Saudi Arabia, has signaled it is not ready. Bahrain, a small island state, is a close ally of Saudi Arabia and the site of the U.S. Navy's regional headquarters. Riyadh in 2011 sent troops to Bahrain to help quell an uprising and, alongside Kuwait and the UAE, in 2018 offered Bahrain a \$10 billion economic bailout.

Friday's deal makes Bahrain the fourth Arab country to reach such an agreement with Israel since exchanging embassies with Egypt and Jordan decades ago. Last week, Bahrain said it would allow flights between Israel and the UAE to use its airspace. This followed a Saudi decision to allow an Israeli commercial airliner to fly over it on the way to the UAE.

Saudi Arabia Could Be Next to Make Peace with Israel

White House senior adviser Jared Kushner hinted on Friday that Saudi Arabia could be the next Arab nation to reach a historic peace agreement with Israel. Speaking to reporters following the administration's surprise announcement that Bahrain would follow in the United Arab Emirates' footsteps and normalize relations with the Jewish state, Kushner expressed optimism that other Arab nations will also move to make peace.

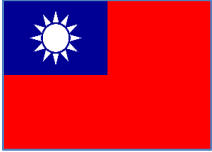
Bahrain became the second country in recent days to announce a historic peace deal with Israel that will see it normalize diplomatic relations after decades of hostility. Kushner and other senior White House officials participated last week in the first flight from Israel to the UAE, which was permitted to fly over Saudi air space. Asked if Saudi Arabia, one of the most influential Gulf Arab nations, could be next to make peace, Kushner expressed hope.

"I do believe it's an inevitability that all countries in the Middle East" will eventually make peace with Israel, Kushner said during a phone call with reporters. "I think [the agreement] was noticed by everyone in the region, how well the deal with Israel and UAE was received." Arab leaders now "recognize the approach taken in the past hasn't worked and they realize their people want to see a more vibrant future," Kushner said. A signing ceremony between the UAE, Bahrain, and Israel will be held at the White House on Tuesday.



JAPAN:

NSTR



TAWIAN:

NSTR



SAUDI ARABIA:

NSTR



TURKEY:

NSTR