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24 May 2020

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## ADMINISTRATION/PROGRAM SPECIFICS

## Trump touts new 'super-duper' missile that can allegedly travel 17 times faster than current missiles

See article on: thehill.com // By: Marty Johnson

President Trump on Friday touted a mysterious new military asset: a missile that could travel significantly faster than any warhead the U.S. currently has in its arsenal.

"We are building, right now, incredible military equipment at a level that nobody has ever seen before. We have no choice. We have to do it with the adversaries we have out there. We have, I call it the super-duper missile, and I heard the other night - 17 times faster than what they have right now," Trump said in the Oval Office. Trump's comments came during a White House event where he signed the 2020 Armed Forces Day Proclamation.

During the ceremony, the administration also unveiled the flag of the country's newest military wing, the Space Force. It's the first new military flag to be unveiled in 72 years. "Space is going to be the future, both in terms of defense and offense and so many other things," Trump said. "And already, from what I'm hearing and based on reports, we're now the leader in space." A Pentagon spokesman was asked about the "super-duper missile" during a subsequent press call and referred reporters back to the White House.

Friday evening, Pentagon spokesman Jonathan Hoffman tweeted, "The Department of Defense is working on developing a range of hypersonic missiles to counter our adversaries."

## Trump Tips Brand-New 'Super-Duper Missile' That Puts China's Best Missiles to Shame

Trump Drops Game-Changing Military Announcement
By C. Douglas Golden for the Western Journal // Published May 16, 2020 at 8:15am

If you're developing something that'll put China's best missiles to shame, what do you dub it? The "super-duper missile," of course.

The media's going to seize upon that moniker bestowed upon a new missile tipped by President Donald Trump at the White House on Friday. It's made it into pretty much every headline I've seen (including ours, to be fair). And, if the missile turns out to live up to the specs laid out at the event, it's going to be very much worthy of the branding. The occasion was the unveiling of the official <u>Space Force</u> flag at the White House, but Trump had one more thing to talk about: a new hypersonic missile which would match and beat similar efforts from China and Russia.

"We're building right now incredible military equipment at a level that nobody's ever seen before," Trump said at the news conference. "We have no choice. We have to do it with the adversaries we have out there. We have, I call it the super-duper missile," he continued. "I heard the other night, 17 times faster than what they have right now." "You've heard Russia has five times, and China is working on five or six times, we have one 17 times, and it's just gotten the go-ahead."

It's the "fastest in the world by a factor of almost three," Trump added. The media had its usual field day over this one — particularly after the Pentagon refused comment and deferred to the White House, only for White House press secretary <u>Kayleigh McEnany</u> to defer back to the Pentagon. In response, Pentagon official Jonathan Rath Hoffman tweeted back that they were working on "a range of <u>hypersonic missiles</u>."

So, what is a hypersonic missile? It's defined as any missile which goes past Mach 5, or five times the speed of sound. The United States conducted a test of a newly developed hypersonic missile glide body in March, Reuters reported. The missile follows an unpredictable path, which makes it difficult to neutralize. It's fired on a rocket up to 25 miles in the atmosphere, at which point the hypersonic glide body detaches and flies toward the target.

This unpredictability is actually why they're considered so lethal; regular ballistic missiles have a predictable arc, whereas hypersonic glide vehicles can do extraordinary things to evade a country's missile defenses. A senior NATO official told <u>Agence France-Presse</u> that in a hypersonic missile strike, the target country wouldn't know what happened "until there's a boom on the ground."

It's unclear whether this was the missile Trump was referring to in his comments on Friday, but given the context, one would assume it was something else. Both China and Russia have tested hypersonic missiles, and Russia says it has an operable version. It's always a good day at the White House when both China and Russia can be put on notice like this. It's even better when you consider that Russia has used the threat of aiming their putative hypersonic missile arsenal at the United States if we were to deploy <u>intermediate-range ballistic missiles in Europe</u>.

Russia, however, clearly isn't the main target for the "super-duper missile," when it arrives. China has been fairly aggressive about pushing its hypersonic missile, the DF-17. When 16 of them appeared at last year's National Day parade, the Beijing-friendly South China Morning Post said the "boost-glide missile may be powerful enough to penetrate US missile shields in the region, transforming Beijing's previously defensive strategy of containing independence-leaning forces in the Taiwan Strait."

That's a dangerous statement to begin with, particularly when it comes from a paper that — if certainly not under the heel of the <u>Chinese Communist Party</u> the same way Xinhua news agency or similar propaganda mills are — clearly amplifies pro-Beijing voices. If Beijing is going to saber-rattle over the issue of Taiwan with its hypersonic missiles, well, the best medicine is to saber-rattle right back. Mutually assured destruction worked during the Cold War.

Even in the 21st century, that paradigm still works. Every headline seemed to trumpet what the president called the missile. Few seemed to grasp the import of those words. If this missile can deliver on something even remotely like what the president said it would, the big news from Friday's news conference won't be that Space Force flag.

## Air Force Splits ICBM Directorate in Two as GBSD Development Continues

Air Force Magazine Online, 19 May 20 Brian W. Everstine

The Air Force Nuclear Weapons Center is splitting its management of intercontinental ballistic missiles in two as the next-generation Ground-Based Strategic Deterrent progresses.

AFNWC's former Intercontinental Ballistic Missile Systems Directorate at Hill Air Force Base, Utah, will now be the Minuteman III Systems Directorate and the Ground-Based Strategic Deterrent Systems Directorate.

"This restructuring is a natural progression of the Air Force's increasing focus on the modernization of the ICBM, the third leg of our strategic nuclear triad," said Maj. Gen. Shaun Morris, AFNWC commander and Air Force program executive officer for strategic systems, in an Air Force Materiel Command release. "It also allows us to centralize some functional requirements, such as manpower and security, at a central operating location at Hill AFB, thus freeing up our subject matter experts to better focus on both sustaining the Minuteman III and acquiring the new GBSD weapon system."

The Minuteman III directorate will focus on maintaining the operational readiness of the aging ICBM system, while the new GBSD directorate will focus on bringing the new system online. The \$22 billion GBSD program will include more than 600 missiles. Northrop Grumman is now the sole contractor, after Boeing pulled its bid, and the company expects to deliver the new missiles in 2029.

"GBSD will ensure uninterrupted deterrence against current and future adversaries through 2075," said Col. Jason Bartolomei, who will lead the new directorate and continue serving as the system program manager for GBSD. "At the same time, it will provide more efficient operations, maintenance, and security by modernizing a critically aged infrastructure and lowering lifecycle costs," Bartolomei said.

Separate from these two, the AFNWC also has directorates overseeing Air Delivered Capabilities; Nuclear Command, Control, and Communications Integration; and Nuclear Technology and Integration Directorate. The move comes after the Air Force Life Cycle Management Center realigned its oversight of fighters, bombers, and mobility aircraft. The Fighters and Bombers Directorate has been split into a Fighters and Advanced Aircraft Directorate and a Bombers Directorate. The Tanker Directorate also moved to the Mobility and Training Aircraft

## <u>Directorate.Pentagon to Spend Billions Mass-Producing Hypersonic Weapons</u>

By Jon Harper for National Defense Magazine // 18 May 2020

The Defense Department plans to spend billions of dollars in the coming years on large-scale production of hypersonic weapons, a senior official said March 4.

The systems are designed to fly faster than Mach 5 and challenge enemy defensive systems with their high speed and maneuverability. They have been a top priority of Undersecretary of Defense for Research and Engineering Mike Griffin. "We're actually to the point where we're beginning to believe that, at least for rocket-boosted hypersonic glide vehicles, we really think we have the technology close to being in hand," he said at the McAleese & Associates annual conference in Washington, D.C.

To compete with great power competitors China and Russia, the U.S. military will need to field large numbers of them, he said. "The adversaries are not going to be scared by production levels where we produce one a week," Griffin said. "I mean that's 500 by the end of the decade. That doesn't scare anybody. Our adversaries are accumulating them by ... hundreds of thousands. So we are making a major investment in production of

hypersonic weaponry at scale. I'm not going to quote a number, but I'll just say we're going to be making a major investment of many billions of dollars."

Aero shells that provide thermal protection for the high-speed platforms will be a key component of the systems, he noted, but the nation is lagging in this area. "The United States has not been in the business of designing and producing entry vehicle aero shells ... in decades," he said. "We need to get back in that business — and we are — and you will find as budgets roll on over the next year that this is a major investment for us."

Griffin told members of industry that his remarks should be seen as a strong demand signal from the Pentagon for large quantities of the technology. Undersecretary of Defense for Acquisition and Sustainment Ellen Lord has set up a "hypersonics war room" to examine the state of the industrial base and its capability and capacity for mass production of the new weapons, officials noted during a Pentagon press briefing earlier this week.

In addition to rocket-boosted glide vehicles, the Defense Department wants to field air-breathing hypersonics, which could function as high-speed cruise missiles. "Especially for airborne-launch platforms, that really increases the load-out of the weaponry," Griffin said. "It's been a long time since we've invested in high-speed, air-breathing technology, so we're renewing that." The Defense Advanced Research Projects Agency has an experimental program underway that will include near-term testing, he noted.

"I believe we're going to have a good result there," Griffin said. The Pentagon aims to move the systems into production in the later part of this decade, he added. "I think as we get past 2025, you're going to see a serious demand signal from the DoD for high-speed, air-breathing weaponry," he predicted.

## U.S. discussed holding first nuclear test since 1992

From: The Straits Times // Published // 8 hours ago

WASHINGTON (AFP) - President Donald Trump's administration has discussed holding the first US nuclear test since 1992 as a potential warning to Russia and China, the Washington Post reported on Friday (May 22).

Such a test would be a significant departure from US defence policy and dramatically up the ante for other nuclear-armed nations. One analyst told the newspaper that if it were to go ahead it would be seen as the "starting gun to an unprecedented nuclear arms race". The report, citing one senior administration official and two former officials, all who spoke anonymously, said the discussion had taken place at a meeting on May 15.

It came after some US officials reportedly claimed that Russia and China were conducting their own low-yield tests. Moscow and Beijing have denied the claims, and the US has not offered evidence for them. The senior administration official said that demonstrating Washington's ability to "rapid test" would be a useful negotiating tactic as the US seeks a trilateral agreement with Russia and China over nuclear weapons.

The meeting did not conclude with any agreement, and the sources were divided over whether discussions were still ongoing. Nuclear non-proliferation activists were quick to condemn the idea. "It would be the starting gun to an unprecedented nuclear arms race," Mr Daryl Kimball,

executive director of the Arms Control Association, told the Post. He added that it would also likely "disrupt" negotiations with North Korean leader Kim Jong Un, "who may no longer feel compelled to honour his moratorium on nuclear testing".

The Trump administration has repeatedly shaken up US defence policy. The Washington Post report came one day after Mr Trump announced that he <u>plans to withdraw from the Open Skies treaty with Russia</u>, which was designed to improve military transparency and confidence between the superpowers. It is the third arms control pact Mr Trump has abrogated since coming to office.

Russia has insisted it will abide by the 18-year-old agreement, which seeks to lower the risk of war by permitting each signatory country's military to conduct a certain number of surveillance flights over another member country each year on short notice. European nations have also urged Mr Trump to reconsider. Facing re-election in November, Mr Trump has also significantly hardened his rhetoric against China in recent weeks, repeatedly criticising Beijing's handling of <a href="telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagnetic-telectromagneti

He has made repeated but vague threats of retaliation against the chief US economic rival, which has denied all his accusations. Earlier this month Mr Trump called for involving China in new arms control talks with Russia, telling his Russian counterpart, Mr Vladimir Putin, they need to avoid a "costly arms race". It is not the first time Mr Trump's defence policy has raised concerns the administration is elevating the risk of nuclear war.

**Related Story**; In February the Pentagon announced it had deployed a submarine carrying a new long-range missile with a relatively small nuclear warhead, saying it was in response to Russian tests of similar weapons. Critics worry that small nukes would be more likely to be used because they cause less damage, thereby lowering the threshold for nuclear conflict. But the Pentagon says it is crucial to deterring rivals like Moscow who might assume that, with only large, massively destructive nuclear weapons in its arsenal, the US would not respond to another country's first use of a small, "tactical" nuclear bomb.

## United States Strategic Approach to The People's Republic of China

https://www.whitehouse.gov/wp-content/uploads/2020/05/U.S.-Strategic-Approach-to-The-Peoples-Republic-of-China-Report-5.20.20.pdf Report to Congress PDF Above, 16 pgs..

**Introduction:** Since the United States and the People's Republic of China (PRC) established diplomatic relations in 1979, United States policy toward the PRC was largely premised on a hope that deepening engagement would spur fundamental economic and political opening in the PRC and lead to its emergence as a constructive and responsible global stakeholder, with a more open society. More than 40 years later, it has become evident that this approach underestimated the will of the Chinese Communist Party (CCP) to constrain the scope of economic and political reform in China.

Over the past two decades, reforms have slowed, stalled, or reversed. The PRC's rapid economic development and increased engagement with the world did not lead to convergence with the citizen-centric, free and open order as the United States had hoped. The CCP has chosen instead to exploit the free and open rules based order and attempt to reshape the international system in its favor. Beijing openly acknowledges that it seeks to transform the international order to align with CCP interests and ideology. The CCP's expanding use of economic, political, and military.

Conclusion The Administration's approach to the PRC reflects a fundamental reevaluation of how the United States understands and responds to the leaders of the world's most populous country and second largest national economy. The United States recognizes the long-term strategic competition between our two systems. Through a whole-of-government approach and guided by a return to principled realism, as articulated by the NSS, the United States Government will continue to protect American interests and advance American influence. At the same time, we remain open to constructive, results-oriented engagement.

## **US Strategic Approach to the PRC at:**

 $\underline{https://www.defense.gov/Newsroom/Releases/Release/Article/2193725/united-states-strategic-approach-to-the-peoples-republic-of-china/source/GovDelivery/$ 

## **Report to Congress:**

https://www.whitehouse.gov/wp-content/uploads/2020/05/U.S.-Strategic-Approach-to-The-Peoples-Republic-of-China-Report-5.20.20.pdf

## Trump administration to withdraw from Open Skies treaty

A further erosion of arms-control pacts with Russia By John Hudson and Paul Sonne The Washington Post // May 21, 2020 -- 1 hr ago

**WASHINGTON** -- The Trump administration began privately informing allied nations this week that the United States will withdraw from a nearly 30-year-old treaty designed to reduce the chances of an accidental war between Russia and the United States by allowing reconnaissance flights over the two countries, according to diplomats familiar with the discussion.

A withdrawal from the Treaty on Open Skies risks driving another wedge between the United States and its European allies, some of which urged the United States to remain in the pact in recent weeks, despite U.S. concern about Russian compliance. The treaty emerged out of a proposal that President Dwight Eisenhower initially suggested to the Soviets to promote transparency about military surveillance overflights.

The Soviet Union rejected his offer, but President George H.W. Bush revived the idea and the multicountry pact was signed after the fall of the Soviet Union in 1992. It came into force in 2002, after the 20th nation ratified the agreement. Today, the treaty includes 34 countries and allows each to carry out reconnaissance flights over one another's territory on short notice to gather information about military activities.

The Trump administration has argued that Russia is violating the agreement. In March, Defense Secretary Mark Esper said Russia had blocked the United States from flying reconnaissance missions over the exclave of Kaliningrad, on the Baltic Sea, and the southern border with Georgia. "They have been cheating for many years," Esper told the Senate Armed Services Committee. Advocates of the treaty said a U.S. withdrawal would be counterproductive.

"The problems we were having with Open Skies did not defeat the object and the purpose of the treaty," said Alex Bell, a senior director at the Center for Arms Control and Non-Proliferation. "It never appeared like the Trump administration was really trying to fix these compliance problems. It

seems like they only know how to break things." The U.S. intention to withdrawal was expected to come up at a lunch in Washington on Thursday between Russian Ambassador Anatoly Antonov and Christopher Ford, a senior State Department official in charge of arms control.

European allies have been briefed during meetings with U.S. officials at the Pentagon and the State Department. Some diplomats were told that the United States might still salvage the treaty, if Russian behavior changes, but they said the U.S. intention to withdraw seems clear. The State Department and the Pentagon did not respond to requests for comment. A withdrawal from the Open Skies treaty would mark another example of the erosion of an arms-control framework that Washington and Moscow hashed out painstakingly over the course of the Cold War and after the Soviet collapse.

In 2002, the George W. Bush administration abrogated the Anti-Ballistic Missile Treaty with Russia, paving the way for a U.S. missile defense buildup in Europe. Last year, the Trump administration pulled out of the Intermediate-Range Nuclear Forces Treaty, or the INF Treaty, with Russia, citing Russian violations. Beyond those pacts, Sen. Tom Cotton, R-Ark., has pushed for the Trump administration to withdraw from the Comprehensive Nuclear Test Ban Treaty, which has yet to enter into force, as well as the Treaty on Open Skies.

He has argued that the pact is giving Russia spying capability that Moscow wouldn't otherwise possess, and that it doesn't give the United States any intelligence that isn't available elsewhere. "Like so many treaties with Russia, the Open Skies agreement was negotiated and signed with good intentions, then abused by Moscow for maximum advantage," Cotton wrote late last year in an op-ed piece in The Washington Post.

Cotton praised the Trump administration's decision Thursday, but some Republican elder statesmen criticized the move, including **Gen. Michael Hayden**, a senior intelligence official in the George W. Bush administration. "This is insane," he tweeted, adding that he previously served as CIA director. Russia has denied violating the treaty. Russian Foreign Minister Sergey Lavrov said in April that the Trump administration is averse to any limits on its military, particularly over U.S. territory.

"The Americans, the current administration, conceptually, fundamentally have an aversion to any kind of control over American military activity, especially when that control is exercised on or over U.S. territory," Lavrov said. He said he doesn't believe other countries will withdraw. "Will other countries follow the Americans? I doubt it," he said. "Europeans seem to me to understand that the agreement has added value as an instrument of trust, an instrument of predictability, transparency, and that is how we see it."

The last remaining main pillar of the arms-control framework between the United States and Russia is the New START pact, signed by Presidents Barack Obama and Dmitry Medvedev in 2010. The agreement, which places limits on strategic nuclear platforms, such as bombers, submarines and intercontinental ballistic missiles, will expire in February. It can be extended for five years without any ratification if the United States and Russian presidents both agree.

Russian President Vladimir Putin has said he wants to extend the pact, but the Trump administration has balked, describing it as outdated and lacking in proper oversight. The administration has been pushing to negotiate a follow-on agreement that includes China, in addition to Russia, but China has rejected its calls for talks. If the pact is not renewed, the world would return to an era without any legally binding or verifiable limits on its two biggest nuclear powers for the first time since 1972.

The impending U.S. withdrawal from the Open Skies treaty is part of a broader debate about how Washington should approach legacy arms-control agreements with Russia that have eroded in recent years because of violations or outdated mechanisms in the treaties themselves. Led by former White House national security adviser John Bolton, the Trump administration has moved quickly to rip them up, arguing that there's no sense in remaining in treaties if Russia isn't going to comply and that only by withdrawing can the United States lay the groundwork for new deals calibrated to the modern era.

Members of the arms-control community, however, have argued that these pacts took a long time to negotiate and Washington might not be able to agree on any substantive follow-on pacts with Moscow. They say the administration should exhibit more caution, act in concert with allies and hold on to agreements, even if they are flawed, while trying to improve them. Ripping them up, they argue, serves only to make the world more dangerous.

"Trashing the legacy of respected Republican presidents like Eisenhower and G.H.W. Bush will put President Trump in the rarefied territory of being the only U.S. leader to have abandoned three arms-control treaties and created none," Bell said.

## U.S. Strategic Command reveals plan to launch Minuteman 3 ICBM

The Dong-A Ilbo, 19 May 20 Sang-Ho Yun

Intercontinental ballistic missile (ICBM) Minuteman 3 will be test-launched in August this year despite the COVID-19 crisis, said the U.S. Strategic Command in charge of strategic weapons, such as nuclear weapons and ICBMs. The Minuteman 3 is one of the three major nuclear capabilities of the U.S. along with strategic bombers and strategic nuclear submarines. It is deemed as a strategic measure to keep North Korea, China, and Russia in check, following the recent use of B-1B bombers forward deployed to Guam across the Korean Peninsula and the nearby region.

ICBMs are one of the key tools of nuclear deterrence power exercised by the U.S. Air Force Global Strike Command, and constant readiness and reliability should be ensured for the mission of maintaining such nuclear deterrence power despite the massive outbreak of COVID-19, the U.S. Strategic Command said. It added that the test launches of the Minuteman 3 without a warhead will be conducted as planned in August. Similar to the test launched conducted at the beginning of February, the Minuteman 3 will be launched from Vandenberg Air Force Base in California to Kwajalein Atoll in the Republic of the Marshall Islands covering 6,750 kilometers between the two locations.

The U.S. Strategic Command emphasized that such test launches will verify the reliability of the Minuteman 3 and maintain fatal and definite nuclear deterrence while confirming the U.S.' commitment to extended deterrence for its allies. The U.S. has been test-launching the Minuteman 3 two to three times a year. "The test launches have to be understood as a way for the U.S. to show off its strategic dominance in the region against the nuclear and conventional military threats of North Korea, China, and Russia," said a military official.

In addition, the U.S. Strategic Command announced that training involving four B-52 strategic bombers and two stealth bombers, which took off simultaneously from three bases in the U.S. mainland, took place in the areas of responsibility of the U.S. European Command and Indo-Pacific Command. Specific flight routes were not revealed. Such a dynamic employment training with long-distance bombers is to ensure firm responses to

potential risks in any region in the world, the U.S. Strategic Command said.

## Some Air Force Missions Could Grow Under Bigger Budget

Air Force Magazine, 20 May 20 John A. Tirpak

The Air Force wants to add more Airmen for space, sensing, command and control, and logistics, if upcoming military budgets let the service grow, Vice Chief of Staff Gen. Stephen "Seve" Wilson said May 20.

Wilson also said plans for a larger bomber force will firm up within a year, that the other services will have to justify their long-range strike spending, and that he is cautiously optimistic that mission-capable rates or similar readiness measures will continue to improve.

Speaking during an online Mitchell Institute for Aerospace Studies event, Wilson said the service plans to focus on staffing the most urgent areas first as it builds toward 386 operational squadrons—the so-called "Force We Need."

"We're certainly going to have to prioritize any growth that we have, and as we do that, we'll follow this framework," Wilson said.

He did not say how many people might be part of that first tranche of growth, but that the number will depend on "getting the mission areas right" first.

"The structure ... determines the number of people," he said, "instead of saying, 'Here's 1,000 people,' and then figure out what you can do with them."

He named the ability to "dominate in space" as the top priority, followed by building "a global sensing network" with resilient communications and more flexible data-sharing. After that, the service will emphasize fusing that information to come up with new plans of attack, using both stand-in and standoff forces. It also wants to beef up its logistics enterprise so that a flaw in the supply chain would not derail troops.

Trillions of dollars in federal spending to address the coronavirus pandemic could well halt the recent uptick in annual defense spending. That, in turn, will prompt the military to look at ways to do more with the people they already have, a trend already underway that is spurred by the promise of helpful artificial intelligence and machine learning algorithms.

Wilson joined the growing chorus of Air Force leaders who argue other services are needlessly duplicating USAF capabilities, which could land redundant capabilities like long-range strike on the chopping block in future budgets.

"We are going to have to ... reduce redundancies and overlap, and we're going to have to show the strengths of the different services and what they can contribute," Wilson said.

Pacific Air Forces boss Gen. C.Q. Brown Jr., the service's presumptive next chief of staff, recently suggested the time is ripe for a "roles and 10

missions" review that could cut down on overlap within the Pentagon and save money.

The service eventually wants to get down to two types of bombers after peaking at four separate fleets: the B-1, B-2, B-21, and B-52. Even so, while the service's goal is to own 220 bombers, B-52s and B-21s may not be the only ones in the mix.

"How do we get there?" he asked. "Is it more B-21s? Is it something else? Another airplane?"

Air Force Global Strike Command boss Gen. Timothy Ray is talking to industry about potential options while also seeing what additional capacity the forthcoming B-21 could offer. Wilson predicted the Air Force will have a good idea of what the future bomber force could look like "in the next year or so."

## Griffin 'worried' federal pandemic spending spree could blow back on new weapon plans

InsideDefense.com, 20 May 20 Jason Sherman

Mike Griffin, the Pentagon's chief technology officer, said he is concerned that weapon system research and development spending will soon be squeezed as the federal deficit mounts in the wake of the novel coronavirus outbreak and pressure grows to rein in federal spending -- a view he said should come as no surprise to anyone.

"Of course I'm worried," Griffin said today during an online briefing hosted by the Washington Space Business Roundtable. "This is a little like the famous line in the movie Casablanca, 'I'm shocked to discover gambling in this establishment."

"We're on a multitrillion-dollar spending binge to deal with coronavirus," Griffin said. "And when the urgent problems of this pandemic are behind us, we're going to have to take stock and figure out how we're going to pay for it all."

COVID-19 stimulus spending is estimated to push the U.S. federal deficit from an estimated \$1 trillion in fiscal year 2020 to more than \$4 trillion.

Todd Harrison, a defense budget expert at the Center for Strategic and International Studies, said a downturn in U.S. defense spending could be in the offing as a result.

"We could be looking at a deficit-driven defense drawdown in the next two or three years," Harrison said during an online event April 27.

"I would be very surprised if other budgets across government, not just DOD, not even just the entire national security industry -- I would be very surprised if every government budget was not under siege as we try to grope our way forward in a post-pandemic world," Griffin said today. "If you're asking me what I think the details of that are going to be, I'm going to punt that question because I have no idea at this point. I, and my colleagues on the E-Ring of the Pentagon . . . we're all struggling to figure out what the details are going to be. I just don't know."

In the 1942 classic Casablanca, starring Humphry Bogart and Ingrid Bergman, Rick's café is closed by Captain Renaut, who has been ordered to shut

the business down but has no legal basis for the action. Renaut uses gambling as a pretense, even though he is a regular at the casino. "I am shocked, shocked to find that gambling is going on in here," he says, as he is handed and accepts winnings from a recent visit.
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# **News & Opinion**

## Trump's 'super duper missile' is super duper necessary

By Ryan P. Burke, opinion contributor for THE HILL // 05/19/20 12:00 PM EDT

Last week, <u>President Trump</u> hyped the Pentagon's new "<u>super duper missile</u>" in his comments to reporters following the unveiling of the U.S. Space Force flag at the White House.

This prompted thousands to take to Twitter <u>mocking</u> the president's vocabulary. Media outlets, meanwhile, turned to the Pentagon for comment on the missile, seeking clarification on the details of what sounded like a significant defense project in development. Between the Twitter jokes and the media's fixation on missile development speculation and soundbites, the public narrative is missing the point: The super duper missile is a super duper necessity to deal with the super duper Russian threat in the Arctic.

Albert Einstein said that complex theories and mathematical expressions should be simply distilled such "that even a child could understand them." Per Einstein, describing the complexities of a <u>supposed hypersonic weapon system</u> as a "super duper missile" is probably sufficient for most. The fact is, Trump <u>doesn't use big words</u> to appeal to American elitists. Despite the pretentious heckling — from many who don't know the first thing about hypersonic weapons — this is part of his appeal to millions of American voters.

So while the media continue to seek clarity from the Pentagon on its hypersonic weapons development programs, and while Twitter jocks pursue the cleverest Wile E. Coyote comparisons, the reality is that Trump's reference to <u>assumed</u> hypersonic weapons development is super duper important for a country in third place in the hypersonic weapons race.

## But what are hypersonic weapons anyway?

To do as Einstein suggests and attempt to distill the complexities of hypersonic weapons to a child's comprehension — excluding the part about how missiles destroy things — we generally might describe them as super fast rockets that can fly super far. In a slightly more technical description, hypersonic missiles present a dual threat, in that they combine the flightpath maneuverability of a guided <u>cruise missile</u> with the speed of a <u>ballistic</u> <u>missile</u> capable of suborbital (into outer space) trajectory.

Hypersonic weapons are used in two ways: as a hypersonic cruise missile propelled by a hydrogen propulsion air-breathing engine, or as a hypersonic glide vehicle launched via a rocket before detaching to glide to its target. Regardless of delivery method, hypersonic weapons can accelerate several times faster than the speed of sound. Hypersonic missiles can maneuver for thousands of miles in mere minutes, enabling them to defeat modern missile defense systems.

Moreover, hypersonic missiles can be launched from land-based mobile rocket launchers or fighter aircraft, can carry conventional or nuclear warheads, and maintain precision strike accuracy of 10 to 20 meters (though <u>Russia claims</u> within one meter). So why are hypersonics all the rage in the era of renewed great power competition with Russia and China? Put simply, because the United States cannot defend against them.

Russia knows this U.S. vulnerability and continues to strengthen its military position by deploying hypersonic weapons in the Arctic, a northern avenue of approach to the U.S. homeland. In December 2019, Russia confirmed the deployment of the hypersonic Kinzhal (Russian for "dagger") air-launched ballistic missile. The aptly-named Kinzhal can be launched from Russian fighter aircraft with a nuclear warhead traveling over 7,600 mph and strike targets 1,200 miles away with precision accuracy.

Another <u>recently deployed</u> Russian hypersonic weapon, the Avangard hypersonic glide vehicle, reportedly travels <u>20</u> to <u>27</u> times the speed of sound, or 15,000 to 20,000 mph, and can strike targets up to <u>3,700 miles</u> away. But Russia hardly needs this range to reach the U.S. Russia has an air and naval base on Wrangel Island, about <u>300 miles</u> from the Alaskan coastline on the western edge of the Chukchi Sea.

However, such close proximity is almost irrelevant with maneuverable land- or air-launched hypersonic missiles capable of traversing the Arctic Ocean to strike their target with nuclear warheads from over 3,000 miles away in less than 10 minutes. At these standoff ranges, all of Alaska is within range of the Russian Avangard if it were to be launched from any of the dozens of Russian military bases north of the Arctic Circle.

These are <u>unstoppable</u> missiles that both Russia and China possess while the U.S. has neither a close analog nor the technology to sufficiently defend against them. According to U.S. Northern Command's Gen. Terrance O'Shaughnessy, Russian hypersonic missiles can "<u>strike Alaska with little indication or warning</u>." The <u>North Warning System</u> — a dated radar array used to track incoming missiles — is over 30 years old and incapable of effectively tracking and warning against modern hypersonic missiles.

**Gen. O'Shaughnessy** put it more bluntly in his <u>March testimony</u>: "We cannot defend the nation against 21st century threats with 20th century technology." As the saying goes, the best offense is a good defense. The U.S. is pursuing answers to this tangible threat in the Arctic via its efforts to develop the Strategic Homeland Integrated Ecosystem Layered Defense (SHIELD), a system designed to <u>detect and defeat threats</u> to the United States.

The problem is that as a fanciful-sounding good defense, SHIELD is a long way from operational reality. In the absence of a good defense against "advancing adversaries" in the Arctic, the United States needs a good offense. The hypersonic weapons game calls for a tit-for-tat offensive approach, or the development of "super duper missiles" to match existing adversarial capabilities. Weapons parity — if you have one, I have one — continues to drive defense acquisition programs.

In the longstanding era of conventional deterrence, parity evens the playing field. Though conventional deterrence is questionably relevant with modern nuclear weapons, given mutually assured destruction, it remains the guidepost of the <u>National Defense Strategy</u>. So, for a U.S. intent on keeping up with Moscow in modern military muscle flexing, developing **super duper missiles** is indeed necessary to answer the threat posed by great power competitors. And maybe now, thanks to Trump's comment, <u>Vladimir Putin</u> and Moscow are super duper concerned about losing their competitive advantage in the hypersonic weapons game.

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## Quest for 'super-duper' missiles pits US against key rivals

By: Robert Burns, for the The Associated Press to the Air Force Times // 3 hours ago

**WASHINGTON** — They fly at speeds of a mile a second or faster and maneuver in ways that make them extra difficult to detect and destroy in flight.

President Donald Trump calls them "super-duper" missiles, though they're better known as hypersonic weapons. And they are at the heart of Trump administration worries about China and Russia. For decades the United States has searched for ways to get ultra-fast flight right. But it has done so in fits and starts. Now, with China and Russia arguably ahead in this chase, the Trump administration is pouring billions of dollars a year into hypersonic offense and defense.

The Pentagon makes no bones about their purpose. "Our ultimate goal is, simply, we want to dominate future battlefields," Mark Lewis, the Pentagon's director of defense research and engineering for modernization, told reporters in March. The centerpiece of the \$130 million facility will be a kilometer-long tube for hypersonic testing. Critics argue that hypersonic weapons would add little to the United States' ability to deter war. Some think they could ignite a new, destabilizing arms race.

A look at hypersonic weapons:

#### WHAT'S SPECIAL ABOUT HYPERSONIC?

Two things make these weapons special: speed and maneuverability. Speed brings surprise, and maneuverability creates elusiveness. Together, those qualities could mean trouble for missile defenses. By generally agreed definition, a hypersonic weapon is one that flies at speeds in excess of Mach 5, or five times the speed of sound. Most American missiles, such as those launched from aircraft to hit other aircraft or ground targets, travel between Mach 1 and Mach 5.

Trump occasionally mentions his interest in hypersonic weapons, sometimes without using the term. In February he told governors visiting the White House: "We have the super-fast missiles — tremendous number of the super-fast. We call them 'super-fast,' where they're four, five, six and even seven times faster than an ordinary missile. We need that because, again, Russia has some." And last Friday, Trump told reporters, "We have no choice, we have to do it, with the adversaries we have out there," mentioning China and Russia. He added, "I call it the super-duper missile." He said he "heard" it travels 17 times faster than any other U.S. missile. "It just got the go-ahead," he added, although the Pentagon would not comment on that.

#### **HOW THEY WORK**

The Pentagon is pursuing two main types of hypersonic weapons. One, called a hypersonic glide vehicle, is launched from a rocket. It then glides to a target, maneuvering at high speed to evade interception. The other is sometimes referred to as a hypersonic cruise missile. Capable of being launched from a fighter jet or bomber, it would be powered by a supersonic combustion ramjet, or scramjet, enabling the missile to fly and maneuver at lower altitudes.

On March 19, the Pentagon flight-tested a hypersonic glide vehicle at its Pacific Missile Range Facility in Kauai, Hawaii. It deemed the test a success and "a major milestone towards the department's goal of fielding hypersonic warfighting capabilities in the early- to mid-2020s." Unlike Russia, the 15

United States says it is not developing hypersonic weapons for use with a nuclear warhead. As a result, a U.S. hypersonic weapon will need to be more accurate, posing additional technical challenges.

As recently as 2017, the Pentagon was spending about \$800 million on hypersonic weapon programs. That nearly doubled the following year, then rose to \$2.4 billion a year later and hit \$3.4 billion this year. The administration's 2021 budget request, which has yet to be approved by Congress, requests \$3.6 billion. Although this is a priority for Pentagon spending, it could become limited by the budgetary pressures that are expected as a result of multitrillion-dollar federal spending to counter the coronavirus pandemic.

The government's \$3 trillion effort to rescue the economy from the coronavirus crisis is stirring worry at the Pentagon. Bulging federal deficits may force a reversal of years of big defense spending gains and threaten prized projects like the rebuilding of the nation's arsenal of nuclear weapons.

#### WHY THEY MATTER

Top Pentagon officials say it's about Russia and, even more so, China. "By almost any metric that I can construct, China is certainly moving out ahead of us," Lewis, the Pentagon research and engineering official, said Tuesday. "In large measure, that's because we did their homework for them." Basic research in this field was published by the U.S. years ago, "and then we kind of took our foot off the gas," although the Pentagon is now on a path to catch up and surpass China, he added.

China is pushing for hypersonic weapon breakthroughs. It has conducted a number of successful tests of the DF-17, a medium-range ballistic missile designed to launch hypersonic glide vehicles. According to a Congressional Research Service report in March, U.S. intelligence analysts assess that the DF-17 missile has a range of approximately 1,000 to 1,500 miles (1,600 to 2,400 kilometers) and could be deployed this year.

Moscow describes the Avangard hypersonic glide vehicle as a technological breakthrough comparable to the 1957 Soviet launch of the first satellite. Russia last December said its first hypersonic missile unit had become operational. It is the Avangard hypersonic glide vehicle, which Moscow says can fly at Mach 27, or 27 times faster than the speed of sound, and could make sharp maneuvers to bypass missile defenses. It has been fitted to existing Soviet-built intercontinental ballistic missiles and in the future could be fitted to the more powerful Sarmat ICBM, which is still in development.

#### **BUT ARE THEY NECESSARY?**

As with other strategic arms, like nuclear weapons and naval fleets, for example, hypersonic weapons are seen by the Trump administration as a must-have if peer competitors have them. But critics see hypersonic weapons as overkill and potentially an extension of the arms race that led to an excessive nuclear buildup by the U.S. and the Soviet Union during the Cold War. The Air Force will not proceed with the Hypersonic Conventional Strike Weapon. But what's the state of its other hypersonic efforts?

There also is worry about these technologies spreading beyond the U.S., Russia and China. "Their proliferation beyond these three nations could result in lesser powers setting their strategic forces on hair-trigger states of readiness and more credibly being able to threaten attacks on major powers," the RAND Corp., a federally funded research organization, said in a 2017 report.

### **POLAND** would gladly host American nukes if Germany refuses

US envoy claims, fanning 'Cuban missile crisis 2.0' 16 May, 2020 01:08 / Updated 1 day ago

As the US ambassador to Germany – and acting spy chief – tried persuading Berlin to keep hosting US nuclear weapons, his colleague in Warsaw suggested Poland would be willing to take them instead, an act sure to provoke Moscow.

"If Germany wants to diminish nuclear capability and weaken NATO, perhaps Poland – which pays its fair share, understands the risks, and is on NATO's eastern flank – could house the capabilities here," Ambassador Georgette Mosbacher tweeted on Friday. She was commenting on the statement by Rick Grenell, the US ambassador to Germany who is also the acting director of National Intelligence, issued on Thursday, urging the authorities in Berlin not to weaken NATO by seeking the removal of US nuclear weapons from their soil.

"The purpose of NATO's nuclear share is to keep non-nuclear member states involved in the planning of NATO's deterrence policy. Germany's participation in nuclear share ensures that its voice matters," Grenell wrote. "Will Germany bear this responsibility, or will it sit back and simply enjoy the economic benefits of security provided by its other allies?" While Mosbacher's quip may have been nothing more than an attempt to bolster Grenell's argument, her replies were flooded by Poles eager for the nuclear redeployment to happen – albeit none of them representing official Warsaw, just yet.

Only a few voices cautioned against the idea, such as former US Marine and weapons inspector Scott Ritter telling Mosbacher she had "no sense of history" and calling her idea "one of the dumbest" in the world. Mosbacher also made headlines in Moscow, where it was noted that moving the bombs to Poland would destroy the final vestiges of the Russia-NATO Founding Act, the 1997 treaty which declares that "NATO and Russia do not consider each other as adversaries."

Admittedly, this sentiment has been repeatedly rejected by NATO itself, from the 1999 war against Yugoslavia intended to send Russia a message, to this week's editorial by the alliance's Secretary-General Jens Stoltenberg, citing "Russian aggression" to urge Berlin to keep US nukes. This is not the first time that Mosbacher – a former cosmetics executive who entered diplomacy during the Obama administration and was sent to Warsaw by President Donald Trump in 2018 – has made headlines in Moscow.

Back in January, she <u>endorsed the Polish revision</u> of WWII history that claimed Nazi Germany and the Soviet Union "colluded" to start the war by invading Poland. While it is unclear whether her tweet is an official State Department position, it would not be entirely out of line with the Trump administration's aspirations to station US troops in Poland permanently, while dismantling nuclear treaties with Russia.

Last year, the US shredded the 1987 INF arms control treaty in Europe, and seems to be on track not to renew the last remaining nuclear pact with Moscow, the 2011 New Start, scheduled to expire next February. If the US moves nuclear warheads to Poland, this could result in a rerun of the 1962 Cuban Missile Crisis, when the Soviet Union reacted to US nuclear deployments in Turkey by sending its own missiles to Cuba. After a standoff that almost escalated into nuclear war, both Washington and Moscow stood down and pledged to withdraw their missiles.

## Russia Had a Terrifying Cold War Plan to Destroy NATO in a Week

Seven days to victory?

by Peter Suciu for the National Interest // May 16, 2020

There have been numerous discussions regarding how NATO could have defeated the Soviet Union and its Warsaw Pact allies in a World War III that fortunately never occurred.

As the National Interest has previously noted, crucial to NATO's strategic mission was to prevent the destruction of the alliance by military force. That required four wartime goals of:

- 1. Gaining and maintaining air superiority,
- 2. Keeping sea lines of communication open to North America,
- 3. Maintaining the territorial integrity of West Germany and
- 4. Avoiding the use of nuclear weapons.

The failure of any of those four goals meant the war likely couldn't be won.

According to a secret plan, the use of nuclear weapons was apparently a key consideration to crush NATO in seven days and ensure a Soviet/Warsaw Pact victory. The possible scenario was part of a top-secret military simulation exercise that was developed in 1979 to determine how much from NATO could be gained in a short space of time. Nuclear bombing along with a rapid invasion were determined to be crucial to any such attack.

While never put into actual practice, the files were only released by the Polish government following the former Soviet bloc country's national election in 2005. The Daily Express <u>newspaper reported</u> this was done in order to "draw a line under the country's Communist past" and to "educate the Polish public about the old regime." The plan was known as the "Seven Days to the River Rhine," and was formulated even as U.S. President Jimmy Carter and Soviet Premier Leonid Brezhnev were discussing détente.

The <u>plan's map</u> highlighted how much of Europe could have been laid to waste, as the then German capital of Bonn, as well as Frankfurt, Cologne, Stuttgart, Munich, and Hamburg would have also been targeted. In addition, Brussels, the political headquarters of NATO, as well as cities in Denmark, the Netherlands, and northern Italy would have also been in the Soviet's crosshairs; while it was expected that NATO might have responded by destroying Prague and Warsaw.

Notable in the plan is that France would have been spared such an attack as it was not a member of NATO's integrated structure. The UK too wouldn't have faced nuclear annihilation. With Austria and Yugoslavia remaining neutral, it would have created what the plan describes as an "invasion funnel" where the bulk of any frontline ground combat would have been in Germany. The goal of the plan was always to reach the Rhine in the shortest amount of time possible—making a NATO victory almost impossible.

To ensure that France wouldn't respond, a second wave called for a push to the Spanish border in another seven days—a truly ambitious plan if there ever was one. Not all of the Warsaw Pact nations were on board with the <u>seemingly-overreaching attack plan</u> however. Czechoslovakia's military suggested it was far too optimistic. While the goal of the simulation was to avoid total nuclear annihilation and to be in the stronger position when

peace was agreed upon, it failed to take into account a tactical nuclear response from France or other factors that could have slowed down even a determined Soviet juggernaut.

Such an ambitious plan to strike into Germany and rush to the Rhine was part of the plot of the James Bond film Octopussy, but in the film even other leaders in the Kremlin described it as "madness." Fortunately for the world as a whole no one ever had the chance to give this plan an actual go.

Peter Suciu is a Michigan-based writer who has contributed to more than four dozen magazines, newspapers and websites. He is the author of several books on military headgear including A Gallery of Military Headdress, which is available on Amazon.com.

## Russia reincarnated the USSR's most powerful artillery system

By: Igor Rozin for Global Look Press - Science & Tech // May 16 2020

These metal monsters were created to hit targets up to 50 kilometres beyond the frontline and rain "hell on earth" with their **atomic charged** shells.

In late April, Russia <u>received</u> its first batch of the 2S7 'Pion' artillery system using 203 mm shells that can be charged with **nuclear warheads**. This weapon system was created in particular to rain "hell on Earth" with these tactical nuclear warheads. And back in the late Soviet era, they were based on the country's Western borders as another tool of nuclear deterrence. The Pion artillery system uses the biggest artillery projectiles in the world and sends them up to 50 kilometres beyond the frontline. Its ammunition includes shells with various charges.

The main ones are considered to be the high-explosive and active-rocket ones. The first ones weigh as much as 110 kg with 17,8 kg of explosive materials. The resulting explosion can leave a five-meter crater in the ground. The latter ones weigh a little bit less - 103 kg with 13,8 kg of explosives. And yet, they hit targets further away and much more precisely, compared to standard shells.

This active-rocket ammunition received a laser navigation system in late 1980s and, as mentioned by former 'Izvestia' newspaper military analyst, Dmitry Safonov, passed a number of modifications to match the 21st century's precise weapon standards. "These are expensive charges used only for precise shots, when armies need to eliminate enemies' command centres, arsenals or any other military structure of high importance. In cases when your military command knows that there are high-security targets or any other underground facilities, the Pion may use concrete-breaking or even nuclear ammo," according to Safonov.

## When and Why Russia created the 'Pion' (By: Vadim Savickiy/Sputnik)

According to editor-in-chief of 'Homeland Arsenal' magazine Viktor Murahovsky, Russia decided to "reincarnate" these metal monsters in the wake of the worst economic crisis, due to the recent changes in U.S. military doctrine, thus allowing Washington to use "low power" nuclear charges in battle conflicts around the globe. "These 'low powered' charges are a part of tactical nuclear arsenals.

These weapon technologies were used in the middle of the 20th century, yet were abandoned after military tests, as they posed threats not only to enemy targets, but were also devastating to the army using them. Nowadays, Washington has decided to allow its militaries to use such systems in

conflicts abroad and Russia's military command has had to react to these changes and has 'reincarnated' some of the 'tactical nuclear deterrence' projects," Murahovsky says.

According to him, the U.S. has an analogue to the 'Pion'. The system is dubbed 'Atomic Annie' and the Russian system was created to match the American monster's capacities on the field. "What's interesting is that neither of these two systems were ever used on the battlefield. Ten years after its creation, the 'Pion' was then stored in arsenals for nearly 20 years, until it was decided to upgrade the system and put it back into business to match possible threats," Murahovsky notes.

By the end of the Soviet era, engineers created as many as 500 'Pion' artillery systems for the military. It's possible that all of them will be modernized in coming years and be reintroduced into the military ranks. "Engineers had to replace all the rusty gears, install new navigation mechanisms, as well as install new power supply units. Modern 'Pions' will also get new optic and radio communication systems," Murahovsky says. If using any of Russia Beyond's content, partly or in full, always provide an active hyperlink to the original material.

# Kim Jong Un Disappeared From View, But North Korea's Problems Never Left Leader signals focus on the home front as Pyongyang faces economic strains, coronavirus threat

By: Timothy W. Martin for the WSJ //17 May 2020

SEOUL—When Kim Jong Un emerged after weeks of questions over his health and whereabouts, the North Korean leader picked a visit to a fertilizer factory as the stage for his public return.

The setting was no accident, South Korean officials and Pyongyang experts said. It was an indication that Mr. Kim is far less focused on the outside world now than the world is on him. He has significant challenges piling up at home. The regime's economy appears to be under pressure after closing the border with China, its main benefactor and trading partner, according to Seoul estimates using Beijing's customs data. Panic buying has strained the food supply.

Coronavirus threats continue to persist, leaving the country isolated and alone, even more than normal. And nuclear talks with the U.S. remain tabled, minimizing a shot at sanctions relief. The North has reshuffled senior political and military leadership in recent months, with Pyongyang's state media reporting that Mr. Kim dismissed officials over abuse of power, bureaucratic indulgence and corruption. Seoul's unification ministry said Wednesday it believed Mr. Kim's personal bodyguard, as well as the head of the country's spy agency, had been replaced.

Kim Jong Un Re-Emerges, Strolling and Smoking. State-media footage shows North Korean leader Kim Jong Un cutting the ribbon at a fertilizer factory, ending a nearly three-week absence from public view that fueled rumors of his death. "Kim seems laser-focused on internal politics rather than external," said Duyeon Kim, a senior adviser at the International Crisis Group, a think tank. "He's a dictator, but he still needs to satisfy his key constituents, the North Korean elites, and continue to show his strength and ability to govern effectively."

Mr. Kim has, in recent years, spent much of his time on the global stage, meeting with President Trump three times, hosting Chinese President Xi Jinping in Pyongyang and traveling by train to see Russian leader Vladimir Putin. He participated in three inter-Korean summits. He also outlined a grandiose vision to revitalize the country's cash-strapped economy. But leaving last year's nuclear summit in Hanoi without a deal may have forced Mr. Kim to reconsider the timeline for that plan.

He began this year by broadcasting a policy speech that implored the nation to acclimate to a life under sanctions. The Covid-19 pandemic added new pressures. Pyongyang, to much skepticism, has yet to report a single coronavirus case. But the Kim regime has shut itself from the outside world, suspending foreign tourism that has helped prop up the cash-strapped country's economy. It canceled public events, closed schools and required citizens to wear masks outdoors.

Unlike the famine of the 1990s, the coronavirus can just as easily strike Pyongyang's elites as the rural poor, leaving Mr. Kim susceptible to internal criticisms if the situation becomes derailed, said Jessica Lee, a Korea expert at the Quincy Institute for Responsible Statecraft, a Washington think tank. "Kim has only himself to blame if there are mass casualties from Covid-19," Ms. Lee said.

Pyongyang, so far, has accepted some basic supplies from international relief agencies. But on Thursday, Seoul's unification ministry said North Korea had accepted more than \$80,000 in hand sanitizer sent from a South Korean nonprofit organization. It was the first time the Seoul government had allowed a civilian group to deliver aid to the North, the unification ministry said. The challenged situation inside the North is one explanation for its five <a href="mailto:short-range missile launches">short-range missile launches</a> this year, given that such provocations are unlikely to jostle the U.S. off its negotiating stance, close Pyongyang watchers say.

But the weapons tests are an important tool to show strength and boost morale for the domestic audience, said Kevin Shepard, a former deputy director for the U.S. Forces Korea, which oversees American military personnel stationed in South Korea. Mr. Kim's appearance at the fertilizer factory was an attempt to instill confidence in citizens and show that he is trying to address the livelihood struggles, South Korea's spy agency told lawmakers earlier this month.

That assessment matches the tone of late from North Korean state media, which has been emphasizing self-reliance in recent weeks and saying hostile forces were trying to "economically suffocate" the country. "I am sure those living on the margins already—and this is much of the country—are facing additional scarcity in terms of food, medicine, and income to meet daily needs," said Courtland Robinson, who has studied North Korean health and is a professor at Johns Hopkins University.

Pyongyang store shelves recently emptied out because of panic buying, not only of fruits and vegetables but also other staples, according to several news outlets that talk with people inside the Kim regime, including NK News and Radio Free Asia. To show progress domestically this year, Mr. Kim has ordered speedy construction of the Pyongyang General Hospital ahead of an October holiday marking the 75th anniversary of the country's Workers' Party founding.

A new facility near its international airport is nearing completion, likely related to North Korea's expanding ballistic missile program, according to a recent report from the Center for Strategic and International Studies, a Washington-based think tank. The support facility, analyzed by satellite imagery, is large enough to accommodate the entirety of North Korea's known ballistic missile variants, according to the CSIS report.

History has shown that many dictators have been overthrown when domestic challenges surfaced, rather than outside forces pushing them out, said Ramon Pacheco Pardo, the KF-VUB Korea chair at the Institute for European Studies in Brussels. "Even if Kim doesn't care about his own population, he has to care about the millions of elites in Pyongyang," Mr. Pacheco Pardo said. "He has to provide for them economically."

## **Ground-Based Strategic Deterrent Passes Preliminary Design Review**

Air Force Magazine, 15 May 20 John A. Tirpak

Northrop Grumman's Ground-Based Strategic Deterrent system passed a two-day preliminary design review in late April, the Air Force said May 15.

The evaluation clears the way for a final review by Ellen Lord, undersecretary of defense for acquisition and sustainment. If she approves, the Air Force expects to award Northrop the GBSD development contract by the end of September.

The review showed that the GBSD—the replacement for the Minuteman III ICBM force—is "sufficiently mature and ready to proceed into detailed design with acceptable risk, and will meet performance requirements within budget and on schedule," program manager Col. Jason Bartolomei said in a press release from the Air Force Nuclear Weapons Center.

The review took place between April 28-30, and involved 25 government organizations discussing the evaluation from 19 locations in a "secure virtual environment," according to the Air Force. Bartolomei called the event "a huge success" for the program, "especially during the COVID-19 pandemic." The classified network and AFNWC's digital engineering capabilities were "key to this milestone."

Bartolomei presided over the PDR, but Thomas Lockhart, NWS director of engineering, "served as an independent advisor" for the event, a Nuclear Weapons Center spokeswoman said. Some 20 organizations participated to provide "independent, objective feedback," she added.

The PDR was the capstone on a long process. "Since January 9, the Air Force has participated in 22 of 23 subsystem and segment reviews prior to Northrop Grumman's formal delivery of PDR artifacts in mid-March," the spokeswoman told Air Force Magazine. Since then, the program office supervised a six-week review involving 22 organizations in 18 locations. The April event "was the culmination of several months of collaboration" between the Air Force and the company, she said.

A Preliminary Design Review assesses a program for design maturity, blesses requirements trades, and reviews prototypes and sub-systems. At the conclusion of the formal PDR, there were seven outstanding issues—the NWC declined to say what they were—and since then, six of the seven have been closed. The remaining open issue "has a mutually-agreed schedule" for resolution.

Assuming Lord passes the program on at its "Milestone B" review, the next phase will be engineering and manufacturing development, which will refine the design, conduct testing, and prepare for production. The EMD contract is expected to be let by the end of the fiscal year. Deployment of the GBSD missiles will begin "in the late 2020s and span about nine years," the Nuclear Weapons Center said.

Northrop has been refining its GBSD design under a Technology Maturation and Risk Reduction contract, under which it provided numerous trade 22

studies that Air Force acquisition chief Will Roper has said has made the program one of the Air Force's strongest. Boeing was also performing TMRR studies ahead of proposals for the GBSD contract, but declined to bid because it said it could not offer a competitive price against Northrop, which acquired the country's sole maker of large solid rocket motors, Orbital ATK, in 2018.

The NWC said the TMRR program officially ends August 20.

The GBSD program office operates out of Hill Air Force Base, Utah. The program entails missiles, structural changes to existing missile silos, and a replacement of the command and control system for operating them.

## Boeing to finish delivering Grey Wolf test helicopters in coming months

InsideDefense.com, 15 May 20 Sara Sirota

The Boeing-Leonardo team that's building MH-139A Grey Wolf helicopters to patrol the military's intercontinental ballistic missile silos will deliver three remaining test aircraft to the Air Force in the coming months.

The service received the first helicopter at Duke Field, FL, in December to begin developmental testing and expected three more to arrive in January and February, Lt. Col. Mary Clark, commander of Air Force Global Strike Command's Detachment 7 that's supporting the Grey Wolf test program, previously told Inside Defense.

But the MH-139A team decided instead to leave the aircraft at Boeing's facility to focus on Federal Aviation Administration certification activities, Air Force spokesman Capt. Jacob Bailey told Inside Defense in an email Thursday.

"Boeing is preparing to make an additional aircraft available to enable more combined testing as civil certification completes this summer," he said.

Boeing confirmed in a statement to Inside Defense this week that the company is moving to finish certification testing and anticipates "incremental delivery" of the remaining MH-139A helicopters in the coming months.

In the meantime, Bailey said the aircraft that arrived in December "is proving sufficient" for testing activities, noting the program remains on schedule to meet upcoming milestones, including a milestone C decision to start production.

The Grey Wolf program is pursuing a streamlined testing schedule featuring an integrated developmental and operational testing team as well as a mixed crew of Air Force and Boeing personnel. AFGSC activated Detachment 7 in December specifically to support the 413th Flight Test Squadron, the program's DT lead, and the Air Force Operational Test and Evaluation Center, which is overseeing OT.

Thus far, the "focus has been on ground test, and it has been progressing well for this stage in the test efforts," AFGSC spokeswoman Linda Frost told Inside Defense in a May 1 email. "There have been some flights as well, which have started exercising some of the avionics components."

The Air Force signed a \$376 million contract with Boeing-Leonardo in September 2018 for the four MH-139A test helicopters. Clark said the quantity will enable a fast schedule since testers "can do a couple formations at a time. We can have parallel test efforts going on. If we have a bird down, we still have a couple more to fly."

The Air Force plans to buy up to 84 helicopters and valued the deal for acquisition and sustainment at \$2.4 billion.

Of the 84 Grey Wolf aircraft, 41 will support the ICBM mission at the 20th Air Force and Air Education and Training Command, while the rest are intended for Air Force Materiel Command, Air Force District of Washington, Pacific Air Forces and other AETC programs.

Maj. Gen. Fred Stoss, commander of the 20th Air Force, previously told Inside Defense that low quantity is one of several reasons the aging UH-1N Hueys, which the MH-139As will replace, are insufficient.

The ICBM mission requires more Grey Wolf aircraft than Hueys "to maximize the helicopters part of a multilayered ICBM defense system," Frost said.

## Japan could carry the day in a US-China conflict

Japan's military rise has been stealthy but strong and is increasingly concentrated on China's perceived threat By BERTIL LINTNER for Asia Times // MAY 13, 2020

When Japanese Prime Minister Shinzo Abe said last month that the Covid-19 pandemic was the biggest national crisis since World War II, it was widely overlooked that just weeks earlier his government passed by far the nation's biggest defense budget since the end of that conflict.

The Japanese Diet, or parliament, approved a whopping US\$46.3 billion defense budget on March 27, replete with earmarks for new hypersonic antiship missiles and helicopter carrier upgrades that will allow for the carrying of Lockheed Martin F-35B stealth fighters. Defense-related spending in Japan has traditionally aimed chiefly to shield against neighboring North Korea's nuclear threat. But the new ramped up spending is more clearly pointed towards an expansionist and increasingly assertive China, according to Japanese military insiders.

"It is China, not North Korea, that is the main concern," said a Japanese official who requested anonymity. As the US ramps up Covid-19 inspired threats against China and fears of a possible armed conflict mount, many strategic analysts have speculated that the Asia-Pacific's strategic balance may have shifted in favor of China in sight of its fast rising military might and capabilities. But that calculus often overlooks Japan's stealthier military progress and the support it could provide the US in any potential conflict scenario, including through new weapons' systems designed specifically to counter China's new-age military assets including aircraft carriers.

Exhibit A is Japan's new hypersonic anti-ship missile, which is specifically designed to pose a threat to Chinese aircraft carriers in the East and South China Seas. The missile, qualified as a "game changer" by the Japanese defense establishment, can glide at high speed and follow complex patterns, making it difficult to intercept with existing anti-missile shields. Japan's hypersonic missile is a direct response to China's years-long campaign of

maritime land-grabs and fortress-construction in the South and East China Seas. When finally put into service, Japan will be the fourth country in the world after the United States, Russia and China to be armed with hypersonic gliding technology.

New spending will also go towards deploying Japan's first real aircraft carriers since World War II as well as enhancing its space security, including through research into using electronic waves to disrupt what the budget terms "enemy communication systems", likely meaning China's. Japan's bolstered naval capacities will allow it to monitor or, from its main and outlying islands, even interdict Chinese naval forces from breaking out of the Yellow Sea into the Pacific in a potential conflict scenario.

In April 2018, moreover, Japan inaugurated its first marine unit since World War II. Serving under the military's Amphibious Rapid Deployment Brigade, it is ready for action anywhere in the immediate maritime region. Some observers believe that the Japanese Navy is now as capable, and possibly superior, to any force in the Pacific including China. Meanwhile, more China-oriented defense spending is on the way. Ministry of Defense forecasts show that the defense budget will increase to \$48.4 billion in fiscal 2021 and rise to \$56.7 billion by 2024.

That would appear to be conflict with Japan's pacifist 1947 constitution, imposed on it by the US after its defeat in World War II to prevent a repeat of its invasions across the region. A Japanese naval vessel at sea. Photo: FacebookJapan's defense budget is still maintained at 1% of gross domestic product (GDP), a rule imposed in the late 1950s to prevent Japan from becoming a military superpower, an era when memories of the country's wartime atrocities were still fresh.

But with China's recent strong emergence as a military power, that budgetary limit looks increasingly anachronistic and could soon be lifted if defense hawks in Tokyo have their way. By law, the former expansionist power's Self-Defense Forces (SDF) are still not permitted to maintain armed forces with war potential. But since its formation in 1954, SDF has quietly grown into one of the world's most powerful, if not understated, militaries.

Indeed, Japan now has the world's eighth-largest military budget, trailing only the US, China, India, Russia, Saudi-Arabia, France, Germany and the United Kingdom, according to the Stockholm International Peace Research Institute, a think tank. The SDF now has nearly 250,000 active personnel and is equipped with the latest weaponry and technology procured mainly from the US. That includes a wide range of missiles, fighter planes and helicopters, as well as some of the world's most technologically advanced diesel-electric submarines and indigenously built battle tanks.

Japan also maintains a permanent naval base in Djibouti on the Horn of Africa, where the US and China also maintain military bases. Tokyo has come under pressure from US President Donald Trump to boost its budget and shoulder more financial responsibility for US-provided defense protection at Japan-situated bases, a rising point of contention between the allies. In April last year, then defense minister Takeshi Iwaya declared that Japan is already spending 1.3% of GDP on defense when peacekeeping operations, coastguards and other security costs are tallied.

Japanese Prime Minister Shinzo Abe delivers a campaign speech in Fukushima on July 4, 2019. Photo: AFP / Yomiuri ShimbunTokyo has increased defense spending every year under Abe. Moreover, the constitution's Article 9, which outlaws war as a means to settle international disputes, was reinterpreted in 2014 to allow the SDF to defend its allies, including the US, if war is declared upon them.

That provision has enabled Japan to participate in future more actively in military operations outside its own boundaries, a trend that actually began in the early 1990s through the SDF's participation in a UN intervention to establish peace in war-torn Cambodia. Although the SDF's mission was termed "non-combatant", it was the first time since World War II that Japanese troops were seen outside the country. That deployment was followed by participation in a range of other UN peace-keeping operations in Africa and East Timor. In 2004, Japan sent troops to Iraq to assist the US-led reconstruction of that country.

That deployment was controversial even at home in Japan as it was the first time since World War II that Japan sent troops abroad except for participation in UN peace-keeping missions. But Tokyo has since increasingly coordinated its defense policies with the US as well as India, two countries which are equally worried about China's growing clout in the Indo-Pacific region. Japan's participation in Exercise Malabar, an annual tripartite naval exercise that involves partnership with the US and India since 2015, has demonstrated its naval prowess far from home and sent a muscular message to China, significantly at a time when Beijing extends its naval reach deeper into the Indian Ocean.

It is unclear whether Exercise Malabar will be conducted this year due to the Covid-19 crisis, but Japan's defense relations with India have grown apace since Narendra Modi became prime minister in 2014. Japanese, US and Indian vessels in the 2015 Exercise Malabar. Japanese ambassador to India Kenji Hiramatsu, speaking to media after a visit to Japan by Indian Defense Minister Rajnath Singh in September last year, was clearly upbeat about the partnership, stating that the visit "is very significant to compare notes on various aspects of Japan-India defense cooperation, including some joint exercises [and] defense equipment cooperation...we are very excited to have a good discussion on opening the Pacific also. We are on the same page on various aspects of international affairs."

That cooperation involves not only Exercise Malabar but also land-based maneuevers. In October and November last year, a joint exercise called "Dharma Guardian-2019" between India and Japan was conducted at the military's Insurgency and Jungle Warfare School at Vairangte in the northeastern Indian state of Mizoram. According to an official Indian statement at the time, the aim of the exercise was to carry out "joint training of troops in counter-insurgency and counter-terrorism operations in mountainous terrains."

Why Japan would be interested in counterinsurgency operations in India was not made clear, but "the statement also said that, "Exercise Dharma Guardian-2019 will further cement the long-standing strategic ties between India and Japan." Northeastern India is a volatile region where the border with China is still in dispute. China has been quick to respond to what it perceives as an emerging US-led, Japan-supported anti-China axis in the region.

China has two combat-ready aircraft carriers, the Liaoning and the Shandong, and a third is under construction. According to the US-based International Institute for Strategic Studies, China plans to have five or six aircraft carriers by 2030. Hu Xijin, editor-in-chief of the Global Times, an English language newspaper under the communist party organ People's Daily, wrote in an editorial on May 8 that China needs to expand its stockpile of nuclear warheads from 260 currently to 1,000. "

Some people may call me a war monger", Hu wrote, but "they should instead give this label to US politicians who are openly hostile to China...this is particularly true as we are facing an increasingly irrational US." A Japanese Special Defense Force soldier in a drill. Photo: FlickrIrrational or not, the US has stepped up its verbal attacks in China during the Covid-19 crisis with Trump even saying that the virus, which originated in China and as

of May 10 had claimed 279,345 lives globally and 78,794 in the United States, is the "worst attack" ever on his country, more severe than the Japanese bombing of Pearl Harbor during World War II and the 9/11 terrorist attacks of 2001.

Abe, on the other hand, has refrained from openly blaming China for the virus crisis. The Japanese government even donated medical supplies to China when it ran short of masks, gloves and other protective gear, and when the cruise ship Diamond Princess was quarantined in Yokohama, China sent testing kits to Japan while Chinese billionaire Jack Ma donated a million masks. But such gestures of goodwill cannot hide the fact that new battle-lines are fast being drawn in the Indo-Pacific and that Japan will play an increasingly important role in the region's post Covid-19 geo-strategic contests, regardless if the US becomes more or less committed to the region's security.

### **Renewing US Extended Deterrence Commitments Against North Korea**

By: Shane Smith for .38 North // May 13, 2020

As COVID-19 upends millions of lives as well as traditional notions of security and the global economy, North Korea offers a stark reminder that the United States and its allies must still tend to military threats.[1] Pyongyang set a single-month record of nine missile launches this spring and declared it is now "more zealous for our important planned projects aimed to repay the U.S. with actual horror and unrest for the sufferings it has inflicted upon our people." This was undoubtedly a reminder of Kim Jong Un's New Year's promise to soon unveil a "new strategic weapon" and his willingness to use it.

Does this portend a return to provocations and hostility reminiscent of 2017? There are good reasons to be concerned. Kim has called for "shocking" and "offensive" measures in charting a "new path" with the United States and South Korea. The return to missile tests, exercises and vitriol could be just the beginning. Similarly concerning are reports of political, economic and COVID-related uncertainty inside North Korea, given its purported history of lashing out in tough times to bolster domestic support for the Kim regime.

Understandably, extended deterrence issues have not received priority attention since denuclearization talks began in 2018. As prospects for those talks now appear grim, US and allied leaders may soon face decisions about how to revitalize a deterrence posture that has been largely dormant for two years. If and when they do, they will confront new challenges and old ones that have arguably worsened over time. Below, I take stock of those challenges and explore options for strengthening deterrence for a new era.

#### **The Threat Grows On**

Kim was cryptic about what the "new strategic weapon" might be in his New Year's address. But it is widely believed North Korea is working on a solid-fueled, mobile intercontinental ballistic missile (ICBM) that can deliver thermonuclear warheads anywhere on the globe. The Commander of US Northern Command hinted at such concerns when he recently testified before Congress. North Korea, he said, "may be prepared to flight test an even more capable ICBM design that could enhance Kim's ability to threaten our homeland during a crisis or conflict."

Indeed, a newly published United Nations report finds North Korea has not halted its nuclear or ballistic missile programs. Some estimates suggest it could now have enough fissile material to build over 50 weapons. And, while North Korea watchers look for signs of an upgraded ICBM, it has tested new types of regional missiles that can strike targets in South Korea and Japan with increasing accuracy and reliability as well as a new submarine-launched ballistic missile (SLBM).

Previous threats and exercises involving preemptive nuclear strikes on ports and airfields in neighboring countries suggest these new capabilities may be for purposes beyond retaliation. All signs point to an emerging strategy to enable limited nuclear first strikes against regional targets, while using a "new strategic weapon" to prevent full US retaliation by holding US cities at risk. Such a strategy aligns with many statements from North Korea's leaders suggesting they may believe nuclear weapons can be used to compel adversaries, not just deter them, and even help unify the peninsula one day, by force, if necessary.[2] It is difficult to imagine the Kim regime ever concluding that it could actually launch a nuclear attack and survive, but the types of weapons Pyongyang is building, the way it exercises and its public pronouncements about using them make it hard to dismiss that possibility out of hand.

**Extended Deterrence: Four Questions of Credibility --** These developments put into sharp relief several questions about US extended deterrence. **First,** does North Korea believe the United States is willing to run nuclear risks to protect an ally (e.g., trade Seattle to save Seoul)? Signaling political resolve to take on such risk is no easy task, and presumably is becoming more difficult and costly for the United States. Perceptions of US resolve may have been damaged in recent years due in part to US President Donald Trump's treatment of alliances as transactional arrangements rather than manifestations of core US national interests worth fighting to defend. This is especially poignant in South Korea's case, given multiple reports that President Trump has questioned the value of the alliance and US forces stationed there.

Second, how does North Korea's growing threat to Japan impact perceptions of US commitments to South Korea? More than once, North Korea has made clear that Japan is first on its nuclear target list. Leaders in North Korea might believe the United States would waver if confronted with the prospect of trading one ally in Tokyo to save another ally in Seoul. Or they might conclude that threats to Japan would lead Tokyo to deny US access to bases located on its territory for the defense of South Korea. Any daylight between the three countries surely emboldens North Korea, which is likely encouraged by the current state of trilateral relations and the open antagonism between Japan and South Korea.

**Third,** does North Korea believe the US-ROK alliance is credibly postured to fight and win a limited war under the nuclear shadow? North Korea may believe that holding hostage US and allied cities buys it an opportunity to wage conflict at lower levels. Its effort to deploy increasingly accurate and operationally flexible regional missiles, and the way it exercises them, suggest its leaders might even believe they can launch limited nuclear strikes without triggering an overwhelming allied response. Convincing North Korea that the alliance is willing and able to defeat aggression at any level of conflict must be a priority.

A fourth question stems primarily from developments off the peninsula: How does US-China competition shape North Korean perceptions of US commitments to South Korea? China remains North Korea's most important patron and ally, whose military modernization and buildup is widely recognized. The 2018 US National Defense Strategy Commission concluded that the regional military balance has shifted to a point that the United States could suffer "unacceptably high" costs in a war with China that it "might struggle to win, or perhaps lose." North Korean leaders might believe the United States would be unwilling or unable to defend South Korea if there is a credible threat of Chinese intervention. To date, there is little evidence the US-ROK alliance is developing combined measures to preclude such thinking.

**Renewing US Commitments: Options and Opportunity** 

Should tensions with North Korea grow, US and allied leaders will face difficult tasks. Tending to the requirements of extended deterrence will be among the top priorities. The preceding section presented four areas where deficits may exist: perceptions of US resolve; trilateral cohesion; ability to fight a limited war under the nuclear shadow; and deterring/countering Chinese intervention.

Below is an exploration of options to fill potential gaps. It is important to keep in mind, however, there will likely be very different views in South Korea of what should be done and much will depend on which political party is in charge.

The Moon administration has tended toward a softer deterrence posture to advance diplomatic relations with North Korea and China. Historically, liberal governments like the current one have been more wary of the alliance and invested in options that preserve freedom of action. The opposition party has pledged a harder line on North Korea and China. In the past, conservative governments have emphasized efforts to highlight the alliance's combined deterrence posture and sought robust and tangible US commitments. While only one of many tools, US nuclear weapons have long been a powerful instrument for signaling vital national interests and the resolve to defend them. Nuclear signals can provide high-profile expressions of political commitment to both accept and inflict terrible costs on behalf of an ally. There are three broad approaches for how leaders in Washington, as well as Seoul, might think about leveraging US nuclear forces in the future.

**Status Quo Plus:** The most modest approach would not involve major changes to existing arrangements. The United States would continue to rely on contiguous US (CONUS)-based capabilities, including the strategic deployment of bombers, to signal US commitment. The 2017 bomber overflight missions in which ROK and Japanese fighters provided tactical escort was a particularly strong show of unity. Building on, even routinizing, combined exercises of this kind could demonstrate both US resolve and alliance cohesion.

Other recent developments also provide new signaling opportunities. Earlier this year, the United States deployed a low-yield warhead option for its SLBMs. While characterized as a response to Russian doctrine and forces, this new capability could play a deterrence role against North Korea. It adds flexibility to US deterrence forces and offers potentially more credible response options in a narrow but critical set of scenarios. For instance, the 2018 Nuclear Posture Review calls for holding at risk North Korea's leadership and missile force. Having a prompt, accurate and penetrating low-yield option against those types of targets in limited attack scenarios likely conveys more credibility than relying on much higher-yield weapons or much slower delivery systems. A visit to Guam by a US ballistic missile submarine (SSBN) carrying the new warhead would signal its presence and potential utility in the region. Inviting ROK and/or Japanese delegations to tour the boat could highlight common purpose among allies.

US leaders might also consider opportunities afforded by the recent change in regional strategic bomber operations. No longer will bombers be based in Guam. Rather, CONUS-based bomber groups will now utilize a broader array of locations to increase resiliency and operational flexibility. Conducting an early demonstration of the ability to deploy and operate from multiple locations would signal sustained US commitment and ability to fight more effectively in a limited nuclear conflict. There also are opportunities to demonstrate alliance cohesion. An official statement about the change said, "We will maximize all opportunities to train alongside our allies and partners, to build interoperability, and bolster our collective ability to be operationally unpredictable." Perhaps that could involve joint exercises and investments in airfields, including on allied territory.

Lastly, the United States maintains mature high-level dialogues with South Korea and Japan that advance a common understanding of deterrence requirements, the role of US nuclear weapons and the value of policy coordination. Establishing a formal bilateral or trilateral operational-level nuclear crisis planning mechanism to support policy decisions could be an important next step to strengthen these relationships. The basic idea is to

sustain attention on the operational implications of a North Korean nuclear attack as well as alliance mitigation and response options under a range of scenarios. The specific goal is to strengthen combined and coordinated conventional military planning under the nuclear shadow. If established, such an enhanced consultative process should reflect the reality that an effective response to a North Korean attack at any level will require a coordinated US-ROK-Japan approach. A trilateral nuclear crisis planning mechanism would strengthen planning and serve as a powerful deterrence signal.

Forward Deploy: A second, more controversial approach would involve deploying US nuclear weapons to South Korea. This is an option long favored by a majority of South Koreans—about 55-65 percent—in public opinion polls for over a decade as well as prominent politicians, although not by South Korean President Moon Jae-in. There is scant support for this course of action in the United States for many good reasons. The main reason is that it is militarily unnecessary because the current suite of US capabilities can destroy any target in North Korea. In addition, US nuclear weapons based in South Korea would be vulnerable to attack and, thus, unreliable as a response option. Finally, their presence would provide first strike incentives that contribute to crisis instability.[3]

Arguments against the deployment option are valid in their own right but do not necessarily vitiate the underlying deterrence logic. Namely, it is difficult to imagine—in a world of garbled messages—a clearer signal of US willingness to run nuclear risks to defend a vital interest than placing nuclear weapons in harm's way. While this may not significantly enhance US military options, it certainly complicates North Korean targeting decisions for any attack in which it might hope to keep conflict limited. By increasing the perceived risk that any conflict would become a nuclear one, partly due to first strike incentives, North Korea may be persuaded that, in fact, it cannot wage a limited conflict and manage the risks of escalation.

It's possible the financial costs and escalatory risks inherent in this option would outweigh the deterrence benefits. China would be sure to make such costs as high as possible, if its reaction to the deployment of THAAD in South Korea is any indication. At the same time, it is precisely such high-cost and high-stake measures that can send powerful strategic signals. Cheap and easy actions do not carry much weight. To be sure, the debate over the deployment option is not going away. It is likely to grow in intensity in the coming years. Pressure is mounting in South Korea to develop an independent nuclear capability, if the United States does not take seriously perceived credibility gaps in the US nuclear "umbrella." Few US strategists believe this would be a good outcome.

Phased and Adaptive: With that in mind, a third approach could adopt a phased, adaptive model. The United States could commit to deploying nuclear weapons to South Korea at some indeterminate time in response to a heightened North Korean threat, implementing a series of phased steps to create the necessary conditions and reduce the deployment timeline. For instance, a preparatory phase might include conducting a survey of potential storage locations and an environmental impact study. A subsequent phase could involve training combined US-ROK units to conduct perimeter security, incident response and recovery operations. A later phase could involve certifying Korea-based US F-16 units (or F-35 replacements) for nuclear missions and conducting combined exercises. A final phase would be the construction of storage facilities. Each step could be adapted to a changing security environment prior to putting actual US nuclear weapons in South Korea.

There are inevitable tradeoffs associated with this approach. Concretely conveying resolve but conditioning deployment on North Korea's behavior could strengthen deterrence and incentivize restraint. Each phase offers an opportunity to signal and apply incremental pressure on the North while preserving flexibility to manage associated costs and risks. However, perceived half measures would belie resolve. A convincing commitment toward

deployment would be necessary but has the potential to create unhelpful "tit-for-tat" expectations in which every North Korean provocation requires taking the next step. Drawing out the timeline also would invite pressure from China, Russia and domestic audiences to abandon the option. Pushing forward in the face of associated costs could reaffirm the perception of resolve but ultimately may come at a higher price than a "deploy now" option. Optimistically, if China and Russia see that deploying US nuclear weapons to South Korea is a serious option, they might apply more pressure to restrain North Korea.

The US-ROK alliance could also take conventional measures to strengthen extended deterrence. For one, it could resume large-scale military exercises after a long pause to signal strategic and operational readiness. Sustained investments toward an integrated missile defeat capability—both left- and right- of launch—can deny North Korea the benefits it seeks from its missile force. Establishing a combined element to advance and align growing strike and missile defense capabilities would signal commitment to that mission. Integrating new nonkinetic capabilities, such as cyber and electromagnetic warfare, can expand the range of alliance options and reinforce deterrence objectives. Moreover, the alliance could take measures to demonstrate operational flexibility and resiliency necessary for fighting a limited nuclear war, including the ability to disperse and operate using a diverse range of ports and air bases. Should exercises involve locations in Japan, it would be a stronger message of trilateral unity.

Lastly, the US-ROK alliance could address Chinese pressure on extended deterrence by establishing a bilateral China policy coordination mechanism. This could be a valuable first step to signal Beijing and begin to strengthen response options against any effort to split the alliance. The United States is already investing heavily to maintain access to allies in the face of China's growing regional power. But Washington has made clear those allies must contribute in meaningful ways in a new era of global competition. South Korea, a formidable high-tech ally, has much to offer in this regard. However, the alliance and ROK military investments have largely neglected China. Strengthening combined policies and military planning for third-party intervention could disabuse China and North Korea from concluding the United States might be unwilling or unable to defend South Korea. A turn of this kind toward Beijing would likely be extremely difficult for leaders in Seoul, but a failure to do so risks weakening deterrence on the peninsula.

#### **Conclusion**

As US and allied leaders consider how to respond to potential tensions with North Korea, they arguably face more challenging circumstances than two years ago. Demonstrating resolve may be a heavier lift largely due to North Korea's and China's growing capabilities. Fortunately, the allies have many tools and options for renewing US commitments. Each has costs and risks that must be weighed against expected deterrence benefits. None offers a silver bullet. The challenges discussed in this paper cannot be solved, only managed; they will require sustained attention and collective determination for the foreseeable future.

## The US accounted for nearly half of the \$72.9 billion spent on nuclear weapons last year

By Allen Kim, CNN // Updated 2:16 PM ET, Thu May 14, 2020

The US spent \$35.4 billion on its nuclear weapons last year, according to a new report. (CNN)

A collective \$72.9 billion was spent on nuclear weapons by the world's nuclear-armed nations in 2019, with the US spending nearly as much as all eight other countries combined, according to a report from a global coalition. The report by the International Campaign to Abolish Nuclear Weapons 31

(ICAN) notes that the \$35.4 billion spent by the US in 2019 on its approximate 5,800 nuclear weapons was an increase of \$5.8 billion spent in 2018. ICAN estimates the US spent \$67,352 per minute on nuclear weapons in 2019.

#### Nuclear Power/IAEA Fast Facts

The <u>Congressional Budget Office has projected</u> the US nuclear forces budget will cost \$494 billion from 2019 to 2028 -- a 23 percent increase of its previous estimate from 2017. The \$94 billion increase would put annual US spending on nuclear forces for an average of just under \$50 billion a year. The increased budget is a <u>part of the Pentagon's efforts to bolster the country's nuclear arsenal to counter Russia</u>.

There is widespread concern in the Pentagon that Russia could use a low-yield nuclear weapon on NATO's eastern flank, a senior Department of Defense official told reporters in February. The <u>US deployed a new submarine-launched low-yield nuclear weapon</u> in February, which the Pentagon views as being crucial to counter Russia's arsenal of tactical nuclear weapons. These are the first new nuclear weapons that the US has produced in decades, and the weapons were first called for in Trump's 2018 Nuclear Posture Review.

#### The Coming Nuclear Menace: Hypersonic Missiles

by Karl Grossman for Counter Punch Tabloid // May 18, 2020

The United States is seeking to acquire "volumes of hundreds or even thousands" of nuclear-capable hypersonic missiles that are "stealthy" and can fly undetected at 3,600 miles per hour, five times faster than the speed of sound.

Why so many? A Pentagon official is quoted in the current issue of <u>Aviation Week & Space Technology</u> as saying "we have to be careful we're not building boutique weapons. If we build boutique weapons, we won't—we'll be very reluctant to—use them." The article in the aerospace industry trade journal is headlined: "Hypersonic Mass Production." A subhead reads: "Pentagon Forms Hypersonic Industry 'War Room."

On March 19, 2020, the U.S. conducted its first hypersonic missile test from its Pacific Missile Range Facility on Kauai, Hawaii. "Fast and Furiously Accurate" is the title of an article about hypersonic missiles written by a U.S. Navy officer which appeared last year on a U.S. Naval Institute website. The piece declares that by "specifically integrating hypersonic weapons with U.S. Navy submarines, the United States may gain an edge in developing the fastest, most precise weapons the world has ever seen."

"Hypersonic weapons," explains the article by U.S. Navy Lieutenant Andrea Howard, "travel faster than Mach 5—at least five times the speed of sound, around 3,600 mph, or one mile per second....They are similar to but faster than existing missiles, such as the subsonic U.S. Tomahawk missile, which maxes out around 550 mph." "While hypersonic weapons can carry conventional or nuclear warheads, they differ from existing technologies in three critical ways," writes Howard.

**First...**a one-kilogram object delivered precisely and traveling multiples of the speed of sound can be more destructive than one kilogram of TNT. **Second,** the low-altitude path helps mask HCMs [Hypersonic Cruise Missiles] when coupled with the curvature of the Earth" and so "they are mostly invisible to early warning radars.

**Third...**they can maneuver during flight; in contrast with the predictable ballistic-missile descend, they are more difficult to intercept, if even detected."

"By offering the precision of near-zero-miss weapons, the speed of ballistic missiles, and the maneuverability of cruise missiles, hypersonic weapons are a disruptive technology capable of striking anywhere on the globe in less than an hour," declares the Navy officer. The article also notes that Russian "President Vladimir Putin unveiled six new" what he called "invincible" hypersonic missiles as part of a March 2018 "state of the nation" speech.

"Russia has successfully tested the air-to-ground hypersonic missile" named Kinzhal for dagger, "multiple times using the MIG-31 fighter." It's "mounting the Kinzhal on its Tu-22M3 strategic bomber." The article also says "China, too, is working on hypersonic technologies." The piece concludes: "As the tradition of arms control weakens with the breakdown of the Intermediate-Range Nuclear Forces (INF) agreement, it would be naïve to anticipate anything other than full-fledged weapon development by Russia and China in the coming decades....

The bottom line is that hypersonic weapons will determine who precisely is 'prompt' enough in 21st century conflict." The U.S. under President Trump withdrew last year from the <u>INF treaty</u>, a landmark agreement which had banned all land-based ballistic and cruise missiles with ranges of from 310 to 3,420 miles. It had been signed in 1987 by President Reagan and Soviet General Secretary Mikhail Gorbachev.

The treaty "marked the first time the superpowers had agreed to reduce their nuclear arsenals, eliminate an entire category of nuclear weapons, and employ extensive on-site inspections for verification," notes the Arms Control Association. "Hypersonic missiles may be unstoppable. Is society ready?" was the headline of an article in March in The Christian Science Monitor. This piece notes:

"Hypersonic missiles are not just very fast, they are maneuverable and stealthy. This combination of speed and furtiveness means they can surprise an adversary in ways that conventional missiles cannot, while also evading radar detection. And they have injected an additional level of risk and ambiguity into what was already an accelerating arms race between nuclear-armed rivals." The article raises the issue of the speed of hypersonic missiles miring military decisions.

"For an incoming conventional missile, military commanders may have 30 minutes to detect and respond; a hypersonic missile could arrive at that same destination in 10 minutes." Thus "artificial intelligence" or "AI" would be utilized. The Christian Science Monitor article quotes Patrick Lin, a professor of philosophy at California Polytechnic State University in San Luis Obispo, as noting: "Technology will always fail. That is the nature of technology."

And, says the article: "Dr. Lin argues that the benefits of hypersonic weapons compared to the risk they create are 'widely unclear,' as well as the benefits of the AI systems that inform them." It quotes Dr. Lin as saying, wisely: "I think it's important to remember that diplomacy works and policy solutions work...I think another tool in our toolbox isn't just to invest in more weapons, but it's also to invest in diplomacy to develop community."

The Aviation Week & Space Technology article begins: "As the U.S. hypersonic weapons strategy tilts toward valuing a quantity approach, the new focus for top defense planners—even as a four-year battery of flight testing begins—is to create an industrial base that can produce missiles affordably enough that the high-speed weapons can be purchased in volumes of hundreds or even thousands."

It continues: "To pave the way for an affordable production strategy, the Pentagon's Research and Engineering division has teamed up with the Acquisition and Sustainment branch to create a 'war room' for the hypersonic industrial base, says Mark Lewis, director of research and engineering the modernization." The piece then quotes Lewis as saying: "At the end of the day, we have to be careful we're not building boutique weapons. If we build boutique weapons, we won't—we'll be very reluctant to—use them.

And that again factors into our plans for delivering hypersonics at scale." The article says that "Air Force and defense officials have been promoting concepts for operating air-launched hypersonic missiles in swarm attacks. The B-1B [bomber], for example, will be modified to carry" six hypersonic missiles. "I think it's a poorly posed question to ask about affordability per unit," the piece quoted Lewis as saying. "We have to think of it in terms of the affordability of the capability that we're providing.

By that I mean: If I've got a hypersonic system that costs twice as much as its subsonic counterpart but is five times more effective, well, clearly, that's an advantageous cost scenario." The hypersonic missiles will indeed likely be "invincible." And they would be at the ready because of the withdrawal by the Trump administration of the INF treaty and other international arms control agreements, one after another.

With the vast numbers of hypersonic nuclear-capable missiles being sought, the world will have fully returned to the madness in the depths the Cold War—as presented in the 1964 film Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb. Apocalypse will be highly likely. Artificial intelligence is not going to save us. These weapons need to be outlawed, not produced and purchased en masse. And we must, indeed, "invest in diplomacy to develop community"—a global community at peace, not a world of horrific and unstoppable war.

## Nato warns of Russian threat if nuclear weapons are removed from Germany

NATO secretary-general Jens Stoltenberg warns US nuclear warheads should not be removed from Germany because of threat from Russia. By Brian McGleenon for the UK Express // PUBLISHED: 17:23, Tue, May 12, 2020 | UPDATED: 18:00, Tue, May 12, 2020

At present, an estimated 20 US B61 nuclear bombs are stored at the Buchel Airbase in western Germany.

Mr Stoltenberg in a piece published by Frankfurter Allgemeine Zeitung wrote: "Around the world, terrorism continues, authoritarian regimes challenge liberal democracies, and we see the proliferation of nuclear weapons to countries like North Korea, as well as the continuing aggressive actions by <u>Russia</u>." The NATO chief warned Moscow was making developments "significantly in its military capabilities, and especially in its nuclear arsenal"

He added that this is occurring "while NATO views its own nuclear deterrent as a political tool, Russia has firmly integrated its nuclear arsenal into its military strategy." He then pointed out that Moscow "has placed nuclear-capable missiles in Kaliningrad, just 500km from Berlin". The General added: "Russia has threatened Allies such as Denmark, Poland, and Romania with nuclear strikes."

He explained that NATO's nuclear sharing amongst member countries "is a multilateral arrangement that ensures the benefits, responsibilities, and risks of nuclear deterrence are shared among allies." He wrote in his op-ed: "Politically, this is significant. It means that participating allies, like Germany, make joint decisions on nuclear policy and planning, and maintain appropriate equipment."

The threat from Moscow was elevated after Vladimir Putin tested a new Russian hypersonic missile on a new type of strategic bomber. The Russian air force recently tested the new hypersonic aircraft missile that is being modified for a version of the Tu-22M3M bomber aircraft. A source told TASS news: "Recently, a new hypersonic missile was tested on the Tu-22M3. "The missile will be part of the armament range of the upgraded Tu-22M3M along with a number of other latest aviation weapons."

The Russian defense industry has recently developed two types of aircraft hypersonic missiles. The Kinzhal is the latest Russian airborne system that consists of a MiG-31K aircraft as a delivery vehicle and a hypersonic missile. The Kinzhal missile is the airborne version of the Iskander tactical missile system. Another hypersonic missile was created for the Su-57 fifth-generation fighter. But, amid the perceived threats from Moscow, a member of Chancellor Merkel's governing coalition has argued for the withdrawal of US nuclear weapons from the country's airbases. German opposition party the SPD has also demanded that US nuclear weapons should be removed from Germany.

## On Arms Control, Little Reason for Optimism

By Steven Pifer Fellow, Stanford University for Defense One // May 17, 2020

Officials in Moscow and Beijing will read Mr. Billingslea's interview and see nothing to give them reason to negotiate.

President Trump's newly named envoy for arms control, Marshall Billingslea, gave a lengthy <u>interview</u> last week on the administration's approach to nuclear arms negotiations. He stressed bringing in China, struck a pessimistic note about the sole treaty constraining Russian and U.S. nuclear forces, and offered no ideas for getting Moscow to discuss non-strategic nuclear arms. Unfortunately, the interview reinforces the view that the Trump administration is unlikely to achieve a nuclear deal...or even develop a serious proposal.

Since late 2018, Mr. Trump has called for a trilateral nuclear negotiation involving Russia, China and the United States. Mr. Billingslea emphasized the need to get China in the game, terming the failure to include it a main flaw of the 2010 U.S.-Russia New Strategic Arms Reduction Treaty, or New START. Involving China in nuclear arms talks is a laudable ambition. The problem: Beijing has <u>repeatedly stated</u> that it will not take part. Chinese officials point out the large <u>disparity</u> in numbers compared to the nuclear superpowers.

The United States maintains about 3800 nuclear warheads in its active stockpile, while Russia has some 4300; China has just over 300. Despite that yawning gap, Mr. Billingslea seems to expect Beijing to negotiate because it "wants to be a great power." He offered nothing that might entice the Chinese to reconsider their refusal (Chinese officials have long expressed concern about U.S. missile defense capabilities, but constraints on missile defense are off limits for the Trump administration).

The administration to date has offered no idea of what a trilateral agreement might look like. Are Washington and Moscow prepared to reduce their nuclear weapons to a total of 300? No. Are they prepared to accept an agreement that would legitimize a Chinese buildup to their levels? Again, no. Does anyone expect China to accept an agreement with unequal limits? In Mr. Billingslea's view, if Beijing will not play ball, Washington likely will not agree to extend New START, which expires in February 2021.

He did not explain how New START's end, which would leave Russian strategic nuclear forces unconstrained, would improve America's position vis-à-vis China. In general, he did not sound like a fan of the treaty. For example, he criticized its verification measures for unspecified loopholes that Russia allegedly exploits. (For the record, the U.S. government has certified that Russia is in <u>compliance</u> with New START.)

Mr. Billingslea expressed concern about Russia's large number of non-strategic nuclear arms. Getting to a negotiation that would cover all Russian nuclear weapons, strategic and non-strategic, is a desirable goal. However, Russian officials have said many times over the past decade that they would negotiate <u>non-strategic weapons</u> only when Washington addressed certain Russian concerns, such as missile defense and long-range conventional strike weapons. Mr. Billingslea offered nothing on either point.

He did, however, raise the <u>five new nuclear systems</u> that Russian President Putin announced in March 2018, calling on Moscow to simply "discard them." Again, no suggestion of what the United States would be prepared to give in response. Actually, Russian officials stated last year stated that two of the weapons systems—the Sarmat intercontinental ballistic missile and Avangaard hypersonic glide vehicle—are limited by New START.

The other three systems are new kinds not constrained by the treaty, but it offers a mechanism for discussing them. That mechanism goes away if New START lapses. Mr. Billingslea appears to believe the impact of COVID19 will give him a strong hand with his Russian counterparts. Perhaps; the effects of COVID19, including the fall in the price of oil, are painting a grim economic picture for Moscow.

The virus, however, affects America as well: a multi-trillion-dollar deficit, nearly 15 percent unemployment and a deepening recession do not exactly put the U.S. budget in prime shape for an arms race. Moreover, the Russian military has completed about 70 percent of its strategic nuclear modernization program; the U.S. military has just begun its modernization cycle.

Dealing with these complex arms control questions will take time, but Mr. Billingslea's appointment comes late in the game—well into the fourth year of Mr. Trump's presidency.

Given the White House's inept response to COVID19, a U.S. economy in crisis and polls showing Mr. Trump trailing former Vice President Biden, how much incentive will the other side's negotiators have to deal with an administration that could be out the door come January? So, any arms talks will be hard. Mr. Billingslea's interview brings to mind one wag's depiction of the ideal arms control treaty:

# Article I. The United States can do whatever it wants, whenever it wants, without restriction of any kind. Article II. The Russians can't.

A nice agreement, but hardly negotiable. Officials in Moscow and Beijing will read Mr. Billingslea's interview and see nothing to give them reason to negotiate

#### China's Cold War games

<u>The United States must restore its independence regarding medicine, rare earth minerals and more</u> By Jed Babbin for the Washington Times // 18 may 2020

Though no one in our government speaks in these terms, we are decades into a Second Cold War, this time with China. Unlike the Soviet Union, China is so deeply involved in our economy and brazen in its aggression that our ability to deal with the threats it poses is uncertain.

There are a dozen reasons for the U.S.-China rivalry — all of which are based on the ideological difference between America, a free nation, and Communist China, a totalitarian state. It was inevitable that, as China rose and the Soviet Union fell, the imbalance in global power would result in a second cold war between the United States and China. The natural evolution of the new Cold War has produced an adversarial relationship from China's pursuit of domination over U.S. allies such as Japan, its persistently aggressive cyberwar against us and its aggression in the South China Sea.

In 1990, Chinese leader Deng Xiaoping issued his "24-character strategy," which centered around concepts such as "secure our positions," "hide our capacities and bide our time" and "never claim leadership." China's current leader, Xi Jinping, hasn't descended into the shrillness of Nikita Khrushchev's "we will bury you," but has given up the pretense of restraint in claiming China's position as a global power.

One of the hallmarks of the first Cold War was the ideological struggle against Soviet communism. Another was the ever-present fear of nuclear war. Both of those factors are central to the new Cold War but seem to be ignored by American leaders. Since January, U.S. scientists have been racing to develop a vaccine and treatments for the COVID-19 virus. Chinese cyber thieves have been working just as hard trying to steal every bit of information our scientists possess and every finding they make.

China's cyberattacks are reportedly also seeking to interfere in and sabotage our scientists' work. At the same time, China has stepped up its disinformation campaign to spread the false messages that the virus didn't originate in the Chinese city of Wuhan and that China is leading the global effort to fight the pandemic. The facts of its disinformation campaign and that China sent thousands of COVID-19 test kits to other nations, most of which were defective, established China's record.

If China claims to have won the race to develop an anti-COVID-19 vaccine, no nation could rationally trust the vaccine's effectiveness or safety. While we are fighting the pandemic, China's aggressive operations in the South China Sea continue. Its ships and aircraft monitor our "freedom of the seas" operations there. By its military machine and growing presence in the South China Sea, China means to block our access there and threaten Japan and South Korea.

China's ubiquitous involvement in our economy poses its own significant threats, including its domination of the U.S. antibiotics market. Beyond threat, China is finding ways to have Americans help create tools of war it could use against us. For example, DJI is a Chinese manufacturer of unmanned ground and aerial vehicles which we commonly refer to as "drones." DJI reportedly makes 76 percent of the UGVs and UAVs sold in the U.S.

DJI's website invites people everywhere to help program their drones to improve their performance. One of my closest friends often flies a DJI drone with his son. The drone's equipment records every flight automatically and funnels data back to DJI. (My friend has seen some of his drone flights on the DJI website.) What's most innovative is DJI's offer to its "members" to help program the drones.

For \$549, you can buy a DJI "Robo-Master S1," a wheeled drone that can "fight" with a mounted "gun." If you're a computer programmer, you can sign up to help reprogram the S1. Every programming idea, no matter how small, is funneled into DJI's system. Instead of 20 people employed by DJI to improve the RoboMaster's performance, they potentially have thousands working for free in many nations to improve the drone's aggressive capabilities.

The DJI program is in the "python" computer language, the current language of artificial intelligence development. Outsourcing AI development through DJI is an asymmetric win for China. What DJI is doing on a small scale, China's Confucius Institute is doing far more broadly. Dozens of American universities accept the Institute's funds in exchange for access to research and Chinese control over how the subject of China is taught.

To counter China, we need to combine military deterrence, economic pressure and strong leadership from the president to heighten Americans' awareness of the seriousness of China's threats. Strong presidential leadership is the sine qua non of countering China. On the economic side, we need to do whatever it takes to restore our independence regarding medicine, rare earth metals and other critical items. We need to legally block U.S. companies from sharing technology with China.

To even begin to counter China militarily will require new long-range naval aircraft and missiles as well as new electronic countermeasure systems, and improved defenses against both long-range and shortrange missiles. We don't want a war with China. Perhaps the Chinese need a war with us to prove their claim to regional dominance. Deterrence worked with the Soviets. It can work with China as well. The ancient Latin phrase, si vis pacem, para bellum — if you desire peace, prepare for war — still holds true.

Jed Babbin, a deputy undersecretary of Defense in the George H.W. Bush admin-istration, is the author of "In the Words of Our Enemies."

# China has no intention of engaging in arms control talks — Foreign Ministry

According to the Chinese diplomat, Russia and the United States as possessors of the largest nuclear arsenals are to create conditions for other countries to join multilateral arms control deals

From the Russian News Service – TASS // 15 May, 06:44

BEIJING, May 15. /TASS/. Beijing has no intention of engaging in multilateral arms control talks, Chinese Foreign Ministry Spokesman Zhao Lijian said on Friday, commenting on a statement by Russian Foreign Ministry Spokeswoman Maria Zakharova, who had said that the issue of China's accession to the Strategic Arms Reduction Treaty (New START) was contrived.

"New START remains an important nuclear treaty between Russia and the US and requires great attention. It is the foundation of strategic stability for the two countries, as well as the basis of global strategic stability. China has no intention of engaging in any trilateral talks on strategic arms 38

control," the Chinese diplomat pointed out. Zhao Lijian added that Russia and the United States "possess the largest nuclear arsenals" and should have a special responsibility for reducing them and creating conditions for other countries to join multilateral arms control deals.

Zakharova said on Thursday that Moscow considered the issue of China's accession to New START to be completely contrived. She emphasized that Russia was ready to support any multilateral schemes that would contribute to ensuring global security and stability, provided they were implemented on a voluntary basis and the interests and concerns of all potential participants were taken into account.

#### **New START issue**

New START, which came into force in 2011, limits Russia and the US to no more than 700 deployed intercontinental ballistic missiles (ICBM), submarine-launched ballistic missiles (SLBM) and strategic bombers, no more than 1,550 deployed warheads and 800 deployed and non-deployed launchers. The Treaty is set to remain in effect for ten years (until 2021) unless a new document is signed to replace it. The document can also be extended for no more than five years (that is, until 2026) by mutual agreement of the parties.

US President Donald Trump said in response to a TASS question on November 4, 2019, that the United States would like to make a new arms control agreement with Russia and China, and maybe some other countries. A US Department of State official said later that despite Beijing's refusal to take part in arms control talks, Washington was interested in launching a strategic security dialogue with China that would be similar to its dialogue with Russia.

# The Doomed Treaty: Russia's Position on Prolonging New START

By Pavel Luzin for the Eurasia Daily Monitor // May 19, 2020

The Donald Trump administration has signaled that it is not interested in prolonging the New START strategic nuclear weapons limitation treaty after its expiration in February 2021, expressing the need to focus on the strategic threats emanating from China instead; this has seriously complicated the Kremlin's position on the ten-year-old arms-control regime.

Moscow's strategic nuclear arsenal has long been a pillar of its great power status. But the ongoing collapse of the arms control agenda allows Moscow to expand its opportunity for further bargaining with Washington. Russia's leadership certainly needs this enlargement and will follow several avenues to achieve it. Per the conditions of New START, the United States and Russia agreed that neither side may deploy more than 700 intercontinental ballistic missiles (ICBM), submarine-launched ballistic missiles (SLBM) and heavy bombers, and no more than 1,550 nuclear warheads.

Though Washington and Moscow maintain near parity of deployed warheads (1,372 and 1,326, respectively), the number of deployed missiles and heavy bombers is much more lopsided, at 655 for the US and 485 for Russia, as of March 2020 (State.gov, March 1). This disparity does not represent any real security threat for Russia, but it does create a political challenge for the Kremlin, since it undermines the appearance of an equal relationship with the United States.

In terms of nuclear forces, Russia must actively seek to achieve a new balance in the coming years. By the mid-2020s, Moscow will need to dismantle more nuclear missiles and submarines than it is able to replace. For instance, Russia has 91 old ICBMs: 46 R-36M2 (SS-18) and 45 Topol (SS-25) missiles (<u>Russianforces.org</u>, January 4). This is almost 30 percent of all deployed Russian ICBMs. Despite regular efforts to extend the missiles' lifetimes, they will have to be retired in large numbers over the coming years (<u>Krasnaya Zvezda</u>, December 16, 2019).

At the same time, current annual manufacturing capacity at the missile plant in Votkinsk is only estimated at approximately 12–16 Yars (RS-24) ICBMs. Moscow is additionally conducting research and development on the new heavy liquid fuel ICBM Sarmat (RS-28), an advanced version of the R-36M2. However, the missile plant in Krasnoyarsk will not begin producing Sarmat missiles until the mid-2020s, and it may have an industrial capacity of fewer than ten missiles per year.

A similar issue is inherent in the strategic naval forces: in the coming decade, Russia needs to dismantle seven Soviet-era nuclear-missile submarines. Russia plans to replace them with seven Borei-class submarines, including one that should be commissioned by this summer (TASS, May 13). Nevertheless, the manufacturing of Boreis faces numerous delays—originally, Moscow planned to complete construction on eight of these vessels by the end of 2020, but the number will in fact only reach four by this December.

Russia additionally plans on modernizing its 55 Tu-95MS heavy turboprop bombers and 11 Tu-160 heavy jet bombers (<u>RIA Novosti</u>, February 5). Moreover, Moscow has scheduled the manufacture of new Tu-160s within the next ten years. But as of May, it is unclear if Russia's defense industry will be able to realize these plans at a proper pace. Therefore, between the middle and end of this decade, the number of Russia's nuclear forces will likely stabilize somewhere below 500 deployed ICBMs, SLBMs and heavy bombers.

Since the lifetimes of new ICBMs, SLBMs, submarines and modernized strategic bombers are longer, any kind of return to a quantitative arms race with the US would only be possible for Russia at the end of the 2020s, at the earliest. Due to this context, Moscow may prefer to return to the negotiating table on strategic arms limits in the future, when it will have a stronger bargaining position and will be able to extend the diplomatic agenda to encompass missile defense, space and/or other global security issues.

The Kremlin leadership is, thus, likely to increase uncertainty in the domain of strategic arms for the long-term purpose of forcing the United States to take Russia as seriously as it now takes China. Russia has at least two options for increasing nuclear instability if New START collapses next year. The first such tool is continued development and deployment of the Avangard nuclear hypersonic glider. As of May 2020, only two gliders were confirmed to have been deployed—reportedly, on Soviet-era UR-100N UTTH (SS-19) ICBMs (Russianforces.org, December 27, 2019).

The authorities contend that the production of additional units is underway (<u>Russianforces.org</u>, December 27, 2019; <u>Mil.ru</u>, January 6, 2020). Nevertheless, the gliders face the significant problem of being too heavy for the modern Yars missile. Consequently, the Kremlin may have to continue to rely on Soviet-era liquid-fuel missiles with larger throw-weights (<u>TASS</u>, May 28, 2019). With the Avangard onboard, they may be able to partly fill the gap in ICBMs, but it will hamper the introduction of 28 newer missiles in their place.

Pointedly, the Avangard changes nothing in terms of nuclear deterrence, which implies that the hypersonic gliders could be easily traded away in future negotiations, if the Kremlin sees the chance for striking a separate bargain with the United States. The second option is a conversion of Tu-

22M3 jet bombers into nuclear-capable heavy (strategic) bombers. As of this spring, Russia has been modernizing 30 of these jets, and the first converted (Tu-22M3M) versions are now undergoing flight tests (<u>Lenta.ru</u>, March 20).

Their new engines and avionics were unified with the modernized Tu-160 heavy bombers, so when the Tu-22M3M is presumably introduced into service in 2021, it will be capable of filling the gap in Russia's deployed strategic arms. Again, however, the problem lies with the defense industry: the Kuznetsov engine plant produced only four engines in 2018; and since 2019, the plant has been contracted to build only 22 additional engines (Samregion.ru, October 16, 2018). Even the Russian military has complained about these low production rates (TASS, February 5, 2020).

Consequently, the probable expiration of the New START treaty will allow the Kremlin to cover up the actual number of its strategic arms as the problems related to their modernization and development begin decreasing Russia's arsenal. Over the coming years, Moscow will likely seek to launch a new Cold War–style arms race in order to pressure Washington to negotiate on strategic security and other political issues, even as Russia's nuclear forces dwindle. Prolonging the treaty may be an option, but likely only if the Kremlin can secure a bilateral presidential summit with the White House.

Dr. Pavel Luzin is a specialist in international relations and an expert on the Russian Armed Forces. He is a regular contributor to Riddle.

#### **Failed Economic Ideology on China**

"Warfare is the greatest affair of state, the basis of life and death, the way to survival or extinction. It must be thoroughly pondered and analyzed."—Sun Tzu, The Art of War

By Lamont Colucci for Newsmax // Tuesday, 19 May 2020 11:59 AM

If you say something often enough, you can either talk others or yourself into believing it.

We have been told repeatedly by pundits who lecture us on how vital pragmatism in politics is and how ideology is irrelevant and that the only thing that matters is the bottom line. Utilitarianism in politics and economics is equally attractive as it is useless. We call this column "From the Heartland," and so a saying from the heartland is appropriate. You can put lipstick on a pig, but it is still a pig. This is especially true when one analyzes the assumptions of the status quo regarding China.

The media devote much of the news to the "new Cold War" and "sudden tensions" between the United States and China. Those primarily on the Left will use this narrative, with help from some libertarians, to condemn the current administrations' more robust approach towards China, advocated by officials like Secretary of State Mike Pompeo. The problem is that the narrative is false.

In reality, America and the PRC have been on a collision course since 1949.

The Truman administration quickly realized that the creation of a left-wing totalitarian dictatorship would not only destabilize Asia, condemn the Chinese people to state terror but also create a permanent enemy to American values and strategic concerns. This situation literally blew up with Mao's engineering (with the support of Stalin) of the Korean War, which set the tone not only for our relationship with China but with the tragedy on the Korean peninsula.

Early on, there were advocates in the United States that sought accommodation and during the Nixon years, an attempt to use our enemy in Beijing with our stronger enemy in Moscow. When Deng Xiao Ping began opening China in 1978, there were early American promoters who wanted to take advantage of this situation. This resurrected the 19th century American merchant dream of the "China market."

The 1980s and 1990s saw this blossom into full-throated advocacy of entering China, no matter what the cost, in order to take advantage of a cowed workplace, low wages and a corrupt Communist Party willing to accept bribes and favors to streamline business ventures and foreign investment. China was lauded as the "workshop of the world," and billions of dollars of products ranging from heavy industry to electronics to medicines were moved to the communist dictatorship.

Many Democrats and libertarian inclined Republicans bought into the idea that globalization and a mutated free-market could change China's behavior and reap generous profits at the same time.

This became the status quo religion and anyone who opposed it was a heretic. These "panda huggers" took over the levers of the American foreign policy, academics and the corporate boardroom establishment. In more formal language, this camp referred to itself as advocates of "constructive engagement."

This group believed that the economic liberalization and greater opening to the West would lead to democratic liberalization. They saw China's military growth in the context of internal national security rather than expansion. They argued the necessity of keeping trade open as the only source of Western influence in the PRC. These establishment thinkers in the public, private and academic sectors were wrong on all counts.

It was, to use modern slang, an epic fail. These same experts were the ones who told us that the USSR would never collapse and that terrorism was only a mild irritant. This "practical" argument was as attractive as it was useless. When I was in the government, I took from a Fulbright report I authored earlier, where I wrote, "The Peoples Republic of China will be the next superpower in the 21st century. She will rise to prominence economically, politically and militarily over the next few decades.

The PRC will either rival American supremacy or work around it... these security issues that America faces will lead us and the PRC to conflict." Such ideas were heresy and had there been some firewood and stakes I might have ended up as a human bonfire. Later, at the beginning of the 21st century, I and other conservatives identified the flashpoints where conflict with China would occur: the South China Sea, a potential military or economic invasion of South Asia, an attempt to dominate the various maritime straits in Asia such as Malacca, Taiwan and Tsushima. China would use intimidation to coerce Taiwan and Japan, destroy freedom in Hong Kong, modernize its military to expand and use coercive economic diplomacy.

Unlike the constrictive engagers, those advocating containment were right on all counts. We can add to this the latest and boldest attempts by China regarding their insidious actions concerning the COVID virus, the economic imperialism of "One Belt-One Road," and the beginning attempts to dominate space. Those who opposed the status quo thinking of the late 20th Century, advocating containment, were castigated as right-wing warmongers.

The "panda huggers" excoriated them, insisting they did not understand the supremacy of the market and the inevitability of democratic thinking. Just as liberals and progressives have suddenly discovered the Russian threat, a threat they belittled for decades, they failed to see the threat from China and continue to misunderstand China's strategic objectives. Republicans, who had stars in their eyes about the China market, allowed themselves to rationalize PRC behavior and told conservatives to wait, that China was an adolescent that needed to mature.

Conservatives understood that there was never a utilitarian argument, just as there is no right moral utilitarian argument in philosophy, a curse from the nonsense of Jeremy Bentham and the Benthamites. Conservatives are believers in the free-market, but they do so because they believe the free-market enhances economic and political liberty. A conservative would never serve his nation on a platter to a foreign entity for business.

Conservatives made the case that there were national security imperatives that overcame economic utility and industries ranging from high tech to medicine to heavy steel were, by necessity, needed to be domestically maintained. They understood that the driving force behind the Chinese government is the twinning of a corrupt communist party and her grand strategy globally. The communist party will do anything to stay in power, exemplified by President Xi's lifetime presidency and a political crackdown on any dissent or freedom. Strategically, China desires to overcome U.S. power regionally first, globally second and finally to dominate the final frontier in space.

The "constructive engagers" were wrong in the '80s, the '90s and today. Their poor decision-making has cost America dearly, including the thousands dead of the COVID virus. Beware when someone advocates pragmatism, as it is rarely "what works," but it is almost always a ruse for a selfish narcissism whose goal is sinister and backward. Conservative principles are the only anchor for any policy regarding China now and in the future.

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# China builds a mega-fortress on the Horn of Africa

The highly defended fortress is strategically located and appears ready to receive large warships by Dave Makichuk for asiatimes.com · //· May 17, 2020

The Chinese Navy is busy building a string of overseas bases, and one of the largest is in Djibouti, on the Horn of Africa.

The question is, why? Exactly who are they defending against? And why is it a modern-day "Fort Apache" walled fortress, featuring battlements similar to medieval castles, shooting ports and corner towers. Think Gary Cooper and Beau Geste and you'll get the picture. According to a report in Forbes magazine, this strategically-located base appears ready to receive large warships, maybe even aircraft carriers.

One aspect of the base is particularly interesting: It is a modern-day "Great Wall of China" fortress built from scratch. And it is not just castle aesthetics, the base really is designed to be highly defendable on a scale rarely seen, even in war zones. Construction of the walls started in early 2016, and was substantially complete by spring 2017, Forbes reported. There appears to be many layers of defense, including; vehicle checkpoints, perimeter fencing with razor wire, last-ditch pop-up vehicle barriers and large concrete doors.

The "Hesco" style barrier features razor wire along the top. Hesco barriers are wire frames filled with giant sandbags. They are commonly used by Western forces in Afghanistan and Iraq as the main walls of fortified bases, Forbes reported. Inside the Hesco wall is the main wall built out of sturdy concrete. It also has crenelations, meaning the up-and-down style battlements familiar from medieval castles. There are also gun loops, which are holes to fire weapons through and tall towers on the corners.

#### **The Putin Regime Cracks**

Vladimir Putin has become increasingly disengaged from routine matters of governing and prefers to delegate most issues. By Tatyana Stanovaya for The Moscow Times // May 7, 2020

President Vladimir Putin's clever maneuver to dispense with the Russian constitution's provisions on presidential terms limits will, in theory, allow him to stay in office until 2036.

Yet by rewriting the constitution and reshuffling the government, Putin did far more than throw most of the Russian elite off-balance. Putin's efforts signal that he is building a new political regime that will be more conservative, more ideological, and more anti-Western in its outlook. Everything is not going to plan, however. The planned reconfiguration of Russia's political system has been complicated by the collapse of global oil prices and the unprecedented disruption caused by the coronavirus. The April 22 quasi-referendum to "approve" the constitutional amendments is now on hold while the Kremlin tries to deal with both the virus and a new economic crisis. These twin challenges represent the biggest shock the Putin regime has ever faced and are likely to feed popular dissatisfaction.

Tackling this crisis successfully requires a well-planned collective effort by the Russian leadership. Unfortunately, the pandemic is casting a harsh spotlight on a long-running reality: Putin has become increasingly disengaged from routine matters of government and prefers to delegate most issues to others. During the initial phase of the crisis Putin has repeatedly called on his new government and regional governors to bear even heavier responsibilities. But the president's team is far from unified. This article aims to explain how the Putin regime operates and its growing internal conflicts by classifying five different elite groups. For brevity's sake, it does not cover specific aspects of the Russia government's response to the pandemic (this will be the subject of future research). Nor does it examine the public dimensions of Russian politics (for example, parliamentary developments and media activity). The focus is on the inner workings of Russia's main decisionmakers.

# **Common Myths And Misconceptions About the Putin Elite**

Putin's twenty years in power have spawned many popular explanations of the way Russia is governed. The first phase of his tenure in the early 2000s was famously dominated by a power struggle between the remnants of Boris Yeltsin's close circle, the Family, and Putin's St. Petersburg clan. That struggle exposed increasingly obvious rifts inside the new president's team. The first split was between groups of ex-KGB officials and more

liberal figures who all hailed from Putin's hometown of St. Petersburg but moved quickly up the ranks in Moscow. Very soon the powerful figures who run Russia's security agencies and their most senior subordinates, the siloviki, began fighting turf wars, then repeated conflicts between Putin's friends and former colleagues in the security services (for example, the Rosneft vs. Transneft battle, the Rosneft vs. Gazprom battle, etc.)

More recently, there has been much speculation about tensions in the highest reaches of Putin's so-called vertical of power. Overused and imprecise labels are often applied to describe ongoing battles between so-called liberals within the system and technocrats, the siloviki, and Putin's longtime personal friends and associates. It is especially common to see the hand of the siloviki in almost all developments. The reality is more complex. The ranks of the siloviki, including the FSB itself, are themselves divided. Moreover, some key security officials have learned the hard way that they are vulnerable and have ended up being prosecuted or embroiled as defendants in high-profile criminal cases. Putin is not averse to occasionally criticizing of the security services' draconian actions and the backlash that results from prosecuting prominent figures such as famed theater director Kirill Serebrennikov and Baring Vostok CEO Michael Calvey.

A new kind of elite has formed in recent years that is set to become broader and even more important than the siloviki—the protectors. They comprise an informal alliance between many of the regime's leading agents of repression and its conservative ideologists. They share the belief that tackling Russia's challenges requires a harsher and more conservative approach. Two further common misconceptions refuse to die. One is that Putin makes all high-profile decisions by himself and that nothing important gets resolved without him. Another is that Putin's omnipotent friends routinely put pressure on him and orchestrate many important decisions. Neither of these is close to the truth—but, given how opaque and unpredictable Russian elite politics is, it's easy to understand how these misconceptions take root. Informal power—for example, the influence that the head of a large state-owned corporation has over a government minister—plays a huge role in the system that is hard to quantify. This problem is especially acute in times of crisis, such as the present.

What follows is a description of the five most important kinds of elites surrounding Putin. They are classified in terms of their functions within the current political system. These relationships, clashes and power dynamics will shape Russia's trajectory over the next few years, until its next milestone, the end of Putin's fourth presidential term in 2024. Competition between the groups helps us to understand some decisions, which may initially look surprising. For example, Moscow Mayor Sergey Sobyanin is unexpectedly challenging Prime Minister Mikhail Mishustin over the government's response to the pandemic, while Putin is reluctant to vest the security services with the same level of responsibility for ensuring public compliance with self-isolation policies as his Chinese counterparts have done.

#### **Putin's Retinue**

The retinue is the nucleus of the team, which is in daily contact with the president himself. Longtime friends and associates who have served alongside Putin since the early 2000s have gradually been replaced by younger, more technocratic players. Many of them have spent their entire careers in the Kremlin, never having worked anywhere else. The functions of the president's retinue are fairly narrow. They set the president's schedule and handle protocol functions. They prepare and arrange his meetings. They provide security. Some important figures are Dmitri Kochnev, director of the Federal Protective Service; Alexey Rubezhnoy, director of the Presidential Security Service; Anton Vaino, head of the Presidential Administration; and Dmitry Peskov, the Kremlin press secretary, among others. This group seeks to satisfy the president's work-related needs and—just as importantly—his psychological comfort. This creates incentives to provide Putin with information that conforms to his existing worldview and outlook and will not spoil his mood.

For example, in June 2019, independent journalist Ivan Golunov was arrested on trumped-up drug charges. This triggered public protests that overshadowed the St. Petersburg International Economic Forum, one of Putin's favorite annual events. In the end, top officials from the Presidential Administration pressured the Ministry of Interior Affairs to release Golunov. They were not concerned with freedom of speech, only with a desire to protect Putin from an intrusive and bothersome issue. More recently, Putin's detached initial response to the spread of the coronavirus outbreak was at least partly a result of his staff's tendency to sanitize information and to portray events in the most optimistic light possible. Putin's staff reports about its achievements, not problems.

In recent years, Putin has grown more secretive and aloof from public politicians and drawn closer to his retinue. Few of its members are public figures, with the obvious exception of Peskov. Yet they are often better informed about impending political decisions than many of Putin's old friends. For example, Putin's chief speechwriter Dmitry Kalimulin was in the know about the rollout of the constitutional reform in mid-January while then prime minister Dmitry Medvedev was taken completely by surprise. Kalimulin, who is only forty-nine, has worked in the Kremlin apparatus since 1997, that is, nearly his entire professional career.

In another example, members of the retinue orchestrated a high-profile POW exchange with Ukraine in September 2019. Vaino oversaw the exchange in tandem with Deputy Prime Minister Dmitry Kozak. Both the Russian Foreign Affairs Ministry and longtime Ukraine special adviser Vladislav Surkov were sidelined. By playing the lead operational role, the retinue also took charge of the policy process. Most members of the president's retinue know their place and tend to be quiet, obedient, and self-sacrificing. For this they are often richly rewarded. Two former bodyguards, Alexei Dyumin and Dmitry Mironov, are now the governors of Tyumen and Yaroslavl, respectively. A third, Yevgeny Zinichev, is now the minister of emergency situations. Yet the shift from working behind the scenes to public politics does not come easily. Most members of the retinue find the transition hard, especially as the Russian public now has a stronger desire for more dynamic and responsive politicians.

#### **Putin's Friends and Associates**

Putin's longtime associates and personal friends from the years before his rise to power are often portrayed as the inner core of the regime. It is widely believed that these figures are actually running the country. That perception is misleading. Members of this group include Putin's former comrades in arms from his days in the KGB, his judo sparring partners, the business partners who helped establish the Ozero dacha cooperative, and the people he worked with in the St. Petersburg's mayor's office. Today these friends and associates can be subdivided into three very different categories: state oligarchs, state managers, and private business figures.

# **State Oligarchs**

These are individuals who assumed control over large state assets in the 2000s as Putin consolidated power. They helped him rebuild Russia's "power vertical" and fight Yeltsin-era oligarchs. In the end, they became oligarchs themselves, albeit ones operating in partnership with the Russian state. Their ranks include Igor Sechin (Rosneft), Sergey Chemezov (Rostec), Alexey Miller (Gazprom), German Gref (Sberbank), Nikolai Tokarev (Transneft), and Anatoly Chubais (Rusnano). Although these men rely heavily on the state, they are not necessarily conservatives. More often, because of their sizable business interests, they have an international outlook and would like easier relations with the West and relief from sanctions. Paradoxical as it may sound, Putin's designated oligarchs increasingly play the role of "liberals within the system" who do not want to see Russia lurch in a conservative or isolationist direction.

Each state oligarch has been assigned a specific national goal. Chemezov's mission was to restore the fallen military-industrial complex. Miller was entrusted with controlling and developing Russia's strategically important gas reserves. Gref's job was to revitalize the country's largest state-owned bank and make it an engine of economic growth. Chubais was supposed to help create innovative technology and develop it commercially. Many of Putin's old friends and associates now carry less political weight because the president finds it easier to work with "implementers" and factotums, who have fewer personal ambitions or corporate responsibilities. Generally, Putin prefers to see service and sacrifice, not hear requests for help. Moreover, he has come to believe that his historic and geopolitical mission takes precedence over personal relations.

Igor Sechin was always the most audacious member of this group. In the early 2000s he oversaw the destruction of what was then Russia's largest privately owned oil company, Mikhail Khodorkovsky's Yukos. Yet although Sechin has grown more ambitious, his star has gradually waned, and it appears that his relations with Putin have cooled. In early 2020, he reportedly irritated Putin for his disastrous advice to pull out of OPEC+, a deal that had seen Russia coordinate oil production with the Organization of Petroleum Exporting Countries. The political influence of Chemezov has also ebbed. A contemporary of Putin's, Chemezov served with him in the KGB's small outpost in Dresden in the mid-1980s. Being the head of a sprawling industrial conglomerate with a massive workforce has given him important levers of influence, and he has benefited from having many of his allies in government jobs. However, when Chemezov stuck his neck out and criticized the government's restrictions in last summer's Moscow municipal elections, he was ignored by the Kremlin.

The coronavirus crisis cuts two ways for the state oligarchs. On the one hand, the pandemic is a threat to their livelihoods. On the other, it is potentially very lucrative, especially for Chemezov. He recently called on regional leaders to procure Rostec-produced facial recognition surveillance systems. Other Rostec subsidiaries are producers of ventilators, which are in short supply; the government has already ordered 5,700 new machines. Another Rostec company, Roskhimzashchita, is the country's only provider of masks, gloves, and other medical equipment for healthcare facilities.

# **State Managers**

Another group of close friends of Putin have long served as senior officials, even if none of them remained in his cabinet following the reshuffle in January. Four old-timers, all of whom worked with Putin before he became president, merit special attention: Dmitry Medvedev, Dmitry Kozak, former defense minister and PA chief Sergey Ivanov, and longtime Putin confidante Alexey Kudrin. They have all rotated through various senior jobs which gave the close access to the president. Nearly all of the four have seen their relative influence decline in recent times, as Putin relies more heavily on younger, fresh faces for top jobs. Medvedev's demotion is a sign that his influence has waned. Kudrin is far too liberal to take on a senior government post in the current conservative atmosphere. Ivanov appears to have lost any interest in high-level government even though he retains his seat on the Security Council.

Only Kozak, who worked with Putin in the St Petersburg mayor's office in the 1990s, has held on to a meaningful portfolio, being now in charge of relations with Ukraine and Belarus. These four may be called on again, however. Above all else, Putin values loyalty and self-sacrifice. It mattered a great deal to him that Medvedev humbly endured personal humiliation when Putin chose to return to the presidency in 2012. With Putin potentially having an opportunity to stay in power for two more six-year terms, these steadfastly loyal figures could easily be summoned to serve another stint in senior positions. However, it becomes more and more difficult for Putin to promote them—having reached the ceiling, they become a burden to bear.

# **Private Business Figures**

This third subgroup of Putin's longtime friends and associates consists of people who have profited handsomely from their long-standing personal ties to the Russian leader. They mainly hail from St. Petersburg, some of them used to be Putin's judo sparring partners. This subgroup includes shareholders in the notorious Ozero dacha cooperative, founded in the mid-1990s, and the owners of Bank Rossiya, which the U.S Treasury described as the personal bank of Russia's senior leadership, including Putin himself. Some of these figures rose to prominence in the 2010s. Many of them hold strongly conservative views and are closely tied to Russia's security and law enforcement agencies. Even if their names figure prominently on U.S. sanctions lists, they have no interest in pushing for a thaw with the West, as some state oligarchs do. For this group the sanctions regime opens an opportunity to work more closely with the state and strengthen their ties with the Kremlin.

The Rotenberg brothers, the Kovalchuk brothers, Gennadiy Timchenko, the Shamalov family, and Yevgeny Prigozhin have all secured state contracts and other largesse from the Russian state in recent years. They have also learned the benefits of doing favors for Putin. For example, Arkady Rotenberg won favors from Putin for financing a multi-billion-dollar bridge to Crimea. Prigozhin's fingerprints can be found on the internet trolls who harass members of the political opposition, in cyber operations aimed at the United States and other Western adversaries, and the mercenary forces deployed by the Wagner Group in hot spots like Ukraine, Syria, Libya, and other parts of Africa. Yuri Kovalchuk, the main shareholder of Bank Rossiya, also controls Russia's largest media holding company, National Media Group. Kovalchuk's elder brother, Mikhail, is the director of the Kurchatov Institute and a close friend of Putin. He informally advises the president on issues that range from genetic engineering to biological weapons.

The secret of the Kovalchuk brothers' success lies partly in their readiness to offer solutions for difficult challenges like running elections or battling the nonparliamentary opposition. In contrast to the state oligarchs, they talk to Putin in a language he recognizes, which is heavy on patriotic, conservative, and anti-Western rhetoric. They do not ask for help, but provide services. The current crisis is reducing the amount of budget resources available for the commercial projects of Putin's friends. The distribution of rents and privileges may become more selective. The state oligarchs are likely to fight for more privileges, to seek to shore up their monopolies, and to attempt to oust their remaining competitors. These business figures may have an advantage, however. As the regime grows weaker, it is more likely to turn to Putin's coterie of businessmen for assistance. This is also a form of political outsourcing—important state functions are being informally delegated to politically loyal private agents.

#### **Political Technocrats**

Russia's elite can be divided into two rough categories: politicians and technocrats. Putin's longtime friends and associates, as well as the protectors, mostly fall in the political category. The technocrats—both Putin's Kremlin retinue and government bureaucrats—have a much more circumscribed role, but they very much form the bureaucratic core of the Putin regime, which gives them a different kind of power. It is to the technocrats' advantage that Putin is ever more impatient with figures who flaunt personal political ambitions. For example, Vyacheslav Volodin lost his role as Putin's chief domestic political adviser and banished to chair the State Duma when he became too creative in his political thinking. Volodin's replacement, Sergey Kiriyenko, the longtime head of Rosatom who served briefly as prime minister under Boris Yeltsin, has conspicuously shed personal ambitions and presents himself as a capable manager and administrator.

Kiriyenko is part of a special group of political technocrats who occupy senior positions and whose professional competence has earned them a certain degree of autonomy. Although not original members of Putin's original inner circle, they have won his personal trust. Senior political technocrats now make policy in several key areas. Kiriyenko oversees domestic and regional policy. Alexey Gromov is in charge of the traditional media. Deputy prime minister Andrey Belousov leads the economic policymaking process. Finance Minister Anton Siluanov is responsible for fiscal policy and the budget. Foreign Minister Sergey Lavrov—and Defense Minister Sergey Shoigu—implement decisions on foreign and military policy. Central Bank Governor Elvira Nabiullina and Moscow Mayor Sergey Sobyanin are also part of this group. All of these are prominent figures whom Putin would find it hard to replace.

Prime Minister Mikhail Mishustin was tapped to be a leading member of this group, entrusted with boosting Russia's economic growth. But his career has stuttered thanks to his uncertain handling of the coronavirus outbreak. During the crisis, Mishustin has been much less visible than Sobyanin, a technocrat with high-level political experience who served previously as the Kremlin chief of staff, to step in and play a leading role. This shows why Sobyanin, formally just a regional leader, beats Mishustin, the second person in the state's hierarchy: a political technocrat will always outplay a common technocrat, whatever status the latter has.

### **The Implementers**

The biggest part of the elite—the implementers—is also the most expendable and weak politically. Its members can also be described as "executors" or "doers." Most deputy prime ministers in the former government and all four of Mishustin's deputies fall into this category. The same is true for nearly all cabinet ministers. Interior Minister Vladimir Kolokoltsev is a quintessential implementer despite his silovik status, as is the new Prosecutor General Igor Krasnov. These ministers are generally subordinate to much more influential players, including figures outside government. Energy Minister Aleksandr Novak, for instance, is politically weaker than Rosneft CEO Sechin or Gazprom CEO Miller. The new minister of digital development, Maksut Shadayev, is weaker than any big player in the IT sphere, as well as the siloviki who remain influential in the communication sphere.

Nonetheless, many implementers have long careers ahead of them and can still evolve into political technocrats. But the trend is that they have been slowly pervading the official vertical while Putin's proxies have been escaping from political responsibility. Being the most technocratic and least ideological part of the elite, they are, for the most part, wary of the rise of a conservative ideology in Russia. As the system becomes more repressive, the rift between the technocratic bureaucracy and its more aggressive vanguard (described in the next section) will surely widen.

#### **The Protectors**

In recent years, as the Kremlin has become ever more conservative in its outlook, a key group in the elite, seeking to protect the system from both domestic and foreign foes, has grown stronger. These are the protectors. It's important to bear in mind that not all protectors are siloviki and not all siloviki are protectors. They share hardline ideological views and an instinct to use repression against the political opposition. The protectors' ideology, unashamedly drawing on conspiracy theories, seeks to mobilize society against foreign threats and advocates stricter control over Russians' private and political life.

Up until 2012, the Putin regime had little need for grandiose political ideology. Its main goal was for Russia to become as developed as the West, but in its own way. Those goals began changing in 2012, when Putin returned to the presidency. The rokirovka (as his role swap with Medvedev is

known) sparked a backlash from the elite and parts of the public. To consolidate power anew, Putin repositioned himself as a dyed-in-the-wool conservative stressing the importance of "spiritual bonds" and traditional values that were lacking in the decadent West. In 2014, as Russia's leaders contended with growing international isolation in the wake of the war in Ukraine, they began selling this new ideological model across the world. Since the beginning of Putin's fourth term in 2018, the concept of "Putinism" has emerged, which many observers regard as synonymous with this ideology.

The siloviki are the most prominent protectors: Alexander Bastrykin, the head of the Investigative Committee and a former Putin classmate; Sergey Naryshkin, the head of Foreign Intelligence Service; and Nikolay Patrushev, secretary of the Security Council, which has carved out an enhanced role for itself in formulating government strategy. In the summer of 2019, both Patrushev and FSB Director Alexander Bortnikov reportedly informed Putin that foreign actors had helped orchestrate the street protests in Moscow, persuading him to authorize a crackdown on the protesters. Viktor Zolotov, a former Putin bodyguard who now leads his praetorian guard, the National Guard (Rosgvardiya), looks much weaker by comparison. He was unable to expand the National Guard's prerogatives and angered the Kremlin with a clumsy campaign against anticorruption activist Alexey Navalny. Today, Rosgvardiya remains locked in near-permanent competition with the police, which irritates Putin and other leaders as they are both charged with ensuring the population's compliance with self-isolation guidelines—they should be doing their jobs, not get into squabbles.

The protectors enjoy close ties with Russian Orthodox conservatives and support from Duma speaker Volodin, who has pushed through a series of legislative restrictions on civil liberties. They command the personal respect of Putin for repeatedly demonstrating that they are the most loyal and self-sacrificing members of his team. Yet the protectors also have a tendency to get out in front of the president and embarrass him. A case in point is the arrest of top U.S. private equity investor Michael Calvey, whom the security services reportedly detained without first getting Putin's approval. The protectors have taken advantage of the coronavirus crisis with their initiative to prosecute people accused of spreading fake news about the pandemic—a move that is merely a new tool to limit freedom of speech. However, calls by the heads of the security services to Putin to declare a state of emergency to halt the spread of the virus have so far gone unheeded.

The Putin elite, which has always prided itself on pragmatism, is increasingly split between its professional technocrats and conservatives. The protectors are worried that Russia may seek one day to normalize relations with the West and presumably they are always on the lookout for ways to slow things down. They therefore propagate increasingly radical versions of "Putinism," which have begun to take on a life of their own and often bear little relation to what Putin himself actually wants. These cleavages may well produce more open conflict within the elite. An effort to shift to a more progressive policy or a looser stance toward the West could radically deepen divisions or even lead to an attempted putsch.

#### Conclusion

From a distance, Russia's elite may appear to be fully consolidated under President Vladimir Putin. His decision to reset the clock on his presidential term limits reinforces that first impression. The real picture is very different. Russia's elite is extremely fragmented and riven by conflict. Competing groups fight not just over influence and property but also over ideology. This poses an ever more serious problem for Putin, as the loudest and most active segment of the elite holds views that are far more radical than his own. Elite division is such that there is almost no consensus on major issues. Every player acts according to his own corporate or political agenda and, with Putin increasingly absent from everyday decisionmaking, enjoys greater room for maneuver.

This article has divided the Russian elite into five broad groups, but one group—the protectors—are very much a law unto themselves. They take heart from Putin's pronouncement that the liberal idea has "outlived its purpose." Their influence has grown as the ideology they espouse has become dominant. This hardline stance puts them into direct conflict with other figures in the elite as diverse as longtime Putin associate Sergei Chemezov, former prime minister Dmitry Medvedev, and Central Bank Governor Elvira Nabiullina. This is setting up a profound longer-term clash with technocrats, who are forced to stay politically neutral but have been put in charge of modernizing the state.

The coronavirus pandemic crisis has made this battle more visible. The technocrats, who are not used to taking the initiative in a crisis, have thus far failed to demonstrate that they can manage the situation. The protectors are making it clear that they would like to take more decisive action. In the longer term, global developments will partially determine if one group or another comes out on top. The more Russia clashes with the West, the more the protectors will claim a moral right to fight adversaries both at home and abroad. Russian society may also have its say, especially if the current crisis deepens. The public may protest against mistakes made by government leaders and their failure to understand the needs of society. In the long run, a lack of effective governance at a moment of national peril could hasten the gradual formation of an elite not beholden to Putin. The core of this alternative elite will ultimately be drawn from the class of technocrat-modernizers who are increasingly disillusioned with Putin's path.

The deep divisions within Putin's team are a feature, not a bug of the way Russia is ruled. For most of his presidency, Putin appeared to relish playing the role of arbiter among competing groups and asserting his centrality. That state of affairs conformed to centuries of Russian political culture dating back to the beginning of the Romanov dynasty, if not earlier. Now it has largely disappeared. Indeed, Putin has put significant distance between himself and his subordinates, a form of self-isolation that predates the coronavirus outbreak. As a result, he risks being more captive to their initiatives, their shortcomings, and their constant disputes and squabbles. In many respects, the Putin system's unity and cohesion have never been more important than now, when they are the least in evidence.

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#### New nuclear talks begin between US, Russia

By: Joe Gould for Defense News // 14 hours ago

WASHINGTON — Early U.S.-Russia talks on a new nuclear arms control agreement have begun, and the two sides have agreed to an in-person dialogue once the coronavirus pandemic subsides, according to a top U.S. State Department official.

Arms control envoy Marshall Billingslea announced Thursday he is in nascent talks with his Russian counterpart, Deputy Foreign Minister Sergei Ryabkov. The news comes a month after Moscow <u>signaled readiness</u> to include some of its latest nuclear weapons in the last remaining arms control pact between the two countries, if the U.S. agrees to extend the treaty. "We have concrete ideas for our next interaction, and we're finalizing the details as we speak," Billingslea said of himself and Ryabkov.

"We've settled on a venue. And we're working on an agenda based on the exchange of views that has taken place in our call." Arms control advocates and some lawmakers have worried that the Trump administration could let the 2010 New START arms control treaty between the U.S. and Russia expire in 2021, leaving no limits on the world's two largest nuclear arsenals. Speaking at a Hudson Institute event, Billingslea emphasized the

talks must be based on U.S. President Donald Trump's vision for a trilateral arms control agreement that includes China along with the U.S. and Russia.

Billingslea said that emphasized to Ryabkov "the crucial roles that verification and compliance play in making arms control effective. But above all, I made perfectly clear that it is our expectation that Russia help us to bring China to the negotiating table." While there have been no concrete signs China will take part in trilateral talks, Billingslea argued that Beijing has both an obligation to negotiate over its weapons under the Treaty on the Non-Proliferation of Nuclear Weapons and should view the talks as a venue to be seen as a great power.

But Moscow has a motive to avoid a three-way arms race, Billingslea said. China, he warned, is "in the midst of a sizable buildup," and, "like Moscow, is intent on building up its nuclear forces and using those forces to try to intimidate the United States and our friends and allies" — all while presenting a so-call Great Wall of Secrecy on its weapons programs. "Beijing has stubbornly refused to share any significant information about its plans, capabilities and intentions regarding its move to a triad of delivery vehicles, a launch-on-warning posture, and exploration of low-yield nuclear weapons," Billingslea said.

Trump appointed Billingslea as special presidential envoy for arms control on April 10. He previously led anti-money laundering and counterterrorist financing efforts at the U.S. Treasury Department. Russian President Vladimir Putin had offered to extend the New START agreement, which expires in February 2021. The Trump administration has pushed for a new pact that would include China as a signatory, but Moscow described that goal as unrealistic given Beijing's reluctance to discuss any deal that would reduce its much smaller nuclear arsenal.

Billingslea declined to say whether or not he would recommend an extension to New START if China is not involved. Billingslea criticized Russia's deployment of the SSC-8, a short-range, nuclear-ready cruise missile. Under any new agreement, Russia would have to adhere to the pledged reductions in theater-ranged systems, including elimination of all its nuclear warheads for ground-based tactical missile systems, he said.

New START, Billingslea said, suffers from "verification inadequacies." A goal of the new talks, he said, is for Russia to agree to provide telemetry on new systems it's developing and agree to close "exploitable loopholes with on-site inspection procedures and the length of time given before inspectors are allowed to the location in question." During a call with U.S. Secretary of State Mike Pompeo on April 17, Ryabkov said that Russia's new Sarmat heavy intercontinental ballistic missile and the Avangard hypersonic glide vehicle could be counted along with other Russian nuclear weapons under the treaty.

The Sarmat is still under development, while the first missile unit armed with the Avangard became operational in December. The Russian military has said the Avangard is capable of flying 27 times faster than the speed of sound and could make sharp maneuvers on its way to a target to bypass missile defense systems. It has been fitted to the existing Soviet-built ICBMs instead of older-type warheads, and in the future could be fitted to the more powerful Sarmat.

As Congress mulls future defense budgets, Billingslea said it should steer away from cuts to nuclear modernization, which would rob the U.S. of leverage in its arms control negotiations.

"It would be incredibly counterproductive, and I would urge them not to do it," Billingslea said. "I would also say that such cuts, given what I've said about the Chinese buildup, would be extremely ill-advised."

The Associated Press contributed to this report.

# Trump Arms Control Envoy Says U.S. Expects Russia to Help Bring China Into Nuclear Weapons Talks

By James Walker for Newsweek // On 5/22/20 at 5:58 AM EDT

President Donald Trump's arms control envoy said he expects Russia to help the U.S. bring China into nuclear weapons talks as uncertainty surrounds the future of a key treaty.

Marshall Billingslea told the <u>Hudson Institute</u> on Thursday that he spoke to Russia's deputy foreign minister Sergei Ryabkov about the importance of involving Beijing in future nuclear arms control negotiations. The special presidential envoy also said U.S. and Russian officials had "concrete ideas" for their next meeting on arms control talks, and had settled on a venue for discussions.

Speaking to the Hudson Institute, Billingslea said that he discussed the "crucial role" compliance played in effective nuclear arms control deals in a call with Ryabkov earlier this week. "But above all, I made perfectly clear that it is our expectation that Russia help us to bring China to the negotiating table," he added. "Just as the deputy minister himself said needed to happen." He later said that a multilateral deal would "not be easy," but added that the administration would not be "serving the national interest" if it only did easy things.

"We must understand the world as it is today, not as we wish it to be," Billingslea said. "Nor can we keep pretending that the two-party construct for nuclear arms control, which comes from the Cold War, is able to address satisfactorily the security issues of a multi-polar world." Addressing the build up of China's nuclear arsenal, Billingslea said: "Beijing has stubbornly refused to share any significant information about its plans, its capabilities, its intentions regarding its move to a triad of delivery vehicles—a launch on warning posture, an exploration of low-yield nuclear weapons."

The arms control envoy added that it was a display of "outdated cold war logic" to only expect China to engage with America and Russia once it had a nuclear arsenal of a similar size. "A three-way arms control agreement would provide the best way to avoid an unpredictable, three way arms race," he added. Billingslea issued his statement on the need for Chinese involvement in nuclear weapons talks as <u>former arms control officials</u> have fretted about the chances of the New START treaty being renewed before it expires next year.

Under the terms of the deal enacted in 2011, caps apply to the number of nuclear warheads and bombs deployed by the U.S. and Russia. Restrictions are also levied against ballistic missiles, submarine-launched missiles and heavy bombers. Russia wants to renew the arms control deal before it runs out on February 5, 2021. But the Department of State said it has been directed to "think more broadly" than the Obama-era treaty.

In his video call with the Hudson Institute on Thursday, Billingslea said he believed the New START deal had "serious verification inadequacies" and "exploitable loopholes." "We are not in the business of negotiation new agreements, or extending old ones, if we cannot be sure other parties will 53

hold up their end of the bargain," the arms control envoy said. "When it comes to Russia, we have little reason to be confident." Newsweek has contacted the Chinese and Russian embassies for comment. This article will be updated with any responses.

# A Cold War Is Heating Up in the South China Sea

U.S.-China tensions over trade and the coronavirus epidemic are playing out dangerously on contested waters. By <u>James Stavridis</u> for Bloomberg News // May 21, 2020, 6:00 PM EDT

I spent most of my seagoing career in the Pacific, and sailed many times through the humid waters of the South China Sea. It's a big body of water, the size of the Caribbean and Gulf of Mexico combined.

The sea bottom is full of oil and natural gas. Nearly 40% of the world's international shipping passes through it. China wrongly claims most of it as territorial seas. And as relations between the U.S. and China deteriorate into coronavirus finger-pointing and election-year posturing, the chances for a conflict in those waters are rising. In recent weeks, several U.S. warships — including a destroyer I commanded in the early 1990s, the Barry — have been <u>confronted</u> by the Chinese while conducting patrols.

Why has this body of water become such a flashpoint, and what can be done to avoid an incident that could set off something bigger? The historical underpinnings of China's claims go back to the voyages of a 15th-century admiral, Zheng He. I wrote about him in my <u>recent book</u>, "Sailing True North," and every time I met my Chinese counterparts at port visits and exercises, they would toast Zheng He. And with good reason. His explorations of the South China Sea, Indian Ocean and African and Arabian waters are legendary.

But they're no legal basis for China to claim the entire South China Sea as its private lake. The argument has been firmly rejected by all other nations that surround that body of water, and by <u>international courts</u>. To push back against Chinese claims, the U.S. Navy conducts so-called freedom of navigation patrols, designed to demonstrate that these are international waters — "high seas" in the parlance of international law.

These patrols can be tense. A couple of decades ago, when I was a commodore in command of a group of destroyers there, several of my ships conducted such missions. They consisted of sailing right through Chinese-claimed waters, which today contain artificial islands that the Chinese have built and militarized with missiles, airstrips, long-range guns and troops. The Chinese will often overfly the destroyers — the jets sometimes just a few dozen feet in front of the bow — or send their own frigates and destroyers to challenge the U.S. warships.

This can consist of hailing and making threats on bridge-to-bridge radios, shining precise fire-control radars to "illuminate" our ships, pointing missiles and guns in the general direction of U.S. forces and sailing far too close for safety. I counseled each of my destroyer captains to remain steady, avoid unnecessary confrontation and report back to me continuously, while I made reports to high authorities. It was always a white-knuckle experience, and my staff and I breathed a sigh of relief each time one of our ships finished the job.

During the recent patrols, the Barry and another destroyer, the Bunker Hill, were confronted by Chinese vessels, but they avoided an escalation. These missions will continue to inflame U.S.-Chinese relations, and are likely to be repeated more often as the year goes on. Much as U.S. ships are

now finding the balance between confrontation and harassment from <u>Iranian boats in the Gulf</u>, they will need to do so in the South China Sea, where the stakes are higher.

The key for the U.S. is to gradually bend Chinese behavior without breaking the international relationship in a way that leads into a Cold War or armed conflict. The best way to do that is to bring more international allies into the freedom of navigation patrols (including North Atlantic Treaty Organization partners along with Australia and Japan); increase U.S. engagement with Taiwan, particularly in military-to-military cooperation; insist on a full-blown international investigation into the Wuhan outbreak of the coronavirus; and build stronger relations with other nations around the littoral of the South China Sea.

These confrontational measures should be accompanied by a basket of offers to gain China's cooperation. These could include furthering trade and tariff agreements that provide access to U.S. markets beyond the "phase one" measures negotiated shortly before the pandemic; cooperating on Arctic trade routes and environmental norms there, something Beijing highly desires; conducting joint humanitarian operations; working to create "norms of behavior" between the two nations' naval forces (much as Russia and the U.S. have hammered out); and exploring strategic and tactical arms-control agreements.

In essence, confront where we must, but cooperate where we can. Henry Kissinger warned several months ago that he sees the U.S. and China as being "in the foothills of a Cold War." While I like his mountainous metaphor, we should also look to the sea to gauge how contentious this relationship is about to become. The forecast for the South China Sea is choppy weather indeed.

#### How Do We Know the Nukes Still Work?

Gizmodo.com, 14 May 20 Ryan F. Mandelbaum

Scientists at U.S. National Laboratories are still testing nuclear weapons among the mountains, desert, and chaparral of the American West. High-tech machinery and warehouses stocked with supercomputer processors take data on warheads and explosions—yes, there are still explosions, which crack like rifle fire on schedule in the distance.

But there are no nuclear explosions. Though the treaty explicitly banning all nuclear weapons tests has not yet entered into force, the United States has not detonated a nuclear weapon since 1992. The American nuclear strategy still relies on the nuclear weapons working, but without full-scale tests, the Department of Energy's National Labs now operate the Stockpile Stewardship program, which relies on theory, simulations, and experiments to deliver annual weapons assessments to the federal government. Science and computing initiatives, such as increasing supercomputing speed and investing in new processing technology like quantum computing, may one day make simulated testing as effective as actually detonating a device.

"The [Stockpile Stewardship program] has gone through a number of administrations, and the Defense Department hasn't said that we have to go back to testing," Victor "Vic" Reis, former assistant secretary of energy for defense programs at the Department of Energy and one of the program's architects, told Gizmodo. "We understand enough of what's happening with the current stockpile of weapons—they're safe and reliable."

From the start of the nuclear era, ensuring that nuclear devices worked relied, in part, on detonating them. But growing public concern in the 1950s regarding the health and environmental effects of nuclear fallout and the overall unease with the devastating potential of these weapons slowly led to treaty negotiations. The start-and-stop efforts were closely tied to the U.S.-Russia tensions surrounding the Cold War. But thanks in part to the Cuban Missile Crisis in 1962 (when the U.S. and Russia very nearly kicked off a nuclear war), countries around the world signed the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, called the Partial Test Ban Treaty (PTBT).

The treaty didn't stop nuclear arms proliferation, and testing moved underground. Further treaties followed, limiting the size of the weapons that could be tested and introducing ways to verify that each country was complying with the terms of the treaties. But it took until the end of the Cold War for the next big push to end nuclear weapons testing. The PTBT's signers met and negotiated a stronger treaty, the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which would ban all nuclear explosions for all purposes. That treaty has not yet gone into effect; China, Egypt, India, Iran, Israel, North Korea, Pakistan, and the United States have not ratified it.

In a 1993 radio address, President Bill Clinton said that "To assure that our nuclear deterrent remains unquestioned under a test ban, we will explore other means of maintaining our confidence in the safety, the reliability, and the performance of our own weapons." After all, the principle of nuclear deterrence requires a guarantee that the nuclear weapons actually work. Clinton did not say how this assurance would play out, however. When Vic Reis became the assistant secretary of energy for defense programs at the Department of Energy, he made this matter his highest priority.

"The issue became, how do you maintain the lab's competence to be able to confidently tell the President that the weapons were still OK as they aged—or did we have to return to testing?" Reis told Gizmodo. "Did we understand the aging process? What were the effects of aging, and were we able to provide high-confidence fixes, if necessary?"

Reis teamed up with senior scientists and military personnel to draft a program that could validate the performance of the weapons and simulate the effects of aging on the weapons and their safety—what he called Science Based Stockpile Stewardship. The three national labs with weapons programs—Los Alamos National Lab, Lawrence Livermore National Lab, and Sandia National Laboratories—were already working on large experiments for testing components of nuclear weapons. However, there wasn't nearly enough computing capacity to run all of the required simulations. Fortunately, Reis had previously been the director of DARPA and convinced a manager there to lead what would become the Accelerated Strategic Computing Initiative, a program that would significantly increase the computing power available to the weapons labs. Today, the Stockpile Stewardship program operates on a three-pillared approach, combining theory, simulation, and experiment, and runs mainly out of those three labs as well as the Nevada National Security Site.

The goal of the program is to issue an annual report to Congress offering complete confidence that the nuclear arsenal is 100 percent reliable, even as the radioactive pits inside of the weapons age and undergo molecular changes. But the pit is just one part of a weapon; there are several thousand other components that go into the device. Conventional explosives must set off chain reactions. The pit must be secured so it doesn't jostle around and detonate accidentally, and the weapon must sit inside a casing that protects it from the outside world. Nuclear warheads require a delivery method, such as a gravity bomb from inside a plane, an intercontinental ballistic missile, or a submarine-launched ballistic missile. The nuke must continue to work even if another country attempts to stop it (say, with another nuke).

I visited Los Alamos in June 2019 to learn more about this program. Experiments there attempt to recreate the conditions that a nuclear device might face as it approaches its target. A steel tube about the height and width of a semi-truck but much longer sits in the scrubby fields behind security-guarded outposts at the lab, which is located about 60 miles northeast of Albuquerque. Warheads with dummy nuclear pits are placed at one end of the pipe, and more than 100 pounds of the conventional explosive C4 is set off at the other. The tube guides the shockwave toward the warhead, where scientists image the interaction using high-speed cameras. Beside the shock tube, a low concrete building contains a blue-and-white centrifuge that can spin test warheads to 200 revolutions per minute to ensure they can survive the 12-g force of reentry into the atmosphere. The centrifuge weighs 10 tons but has low-enough friction that I was able to move it with a hard push. It was hypnotizing to watch the centrifuge spin at 60 rotations per minute in person and downright upsetting to see a video of a test nuclear warhead attached to the centrifuge, whipped around at full speed like a tetherball. These experiments are operated remotely or from bunkers. Detonations of C4 and other explosives are heard daily around the lab's vast campus and occasionally from the neighboring towns.

Other experiments simulate the explosive triggering of a nuclear weapon without the pit inside. At the Dual-Axis Radiographic Hydrodynamic Test Facility, or DARHT, x-rays produced by an on-site particle accelerator are used to image material imploding as it undergoes shock. At Lawrence Livermore's National Ignition Facility, the highest-energy laser ever built is stored in a sports stadium-sized building, where it focuses beams onto a target to set off fusion.

The data from these experiments, as well as data from the 1,054 officially counted U.S. nuclear tests that occurred between 1945 and 1992, are incorporated into the simulation phase of the Stockpile Stewardship program. Understanding how the weapons age is a crucial component to the simulations. "There's a whole aspect of what happens to various materials and how they interact with metals, or with components of the devices themselves, that's all aging. We have no data on what happens when something is 40 years old," Irene Qualters, associate laboratory director for simulation and computation at Los Alamos National Lab, told Gizmodo.

Improving the simulations requires ever-more-powerful and advanced computers. Today, Los Alamos hosts the world's seventh-fastest supercomputer, called Trinity. Aisles of black monoliths behind clear doors in a loud, white-tiled room act as an enormous processor for running simulations, as well as storage for simulation results on tapes. Small stickers reading "secret restricted data" decorate the stacks, a reminder of these processors' true use. Lawrence Livermore National Lab hosts the world's second-fastest supercomputer, used for similar purposes, called Sierra. Each lab has a backup of the other's data in case one is taken offline or destroyed—say, in a nuclear blast. An endless race to boost supercomputer performance aims to improve the speed, detail, and efficiency of these simulations.

Meanwhile, other researchers study the limits of high-performance computing and try to understand what the next computers might look like. They write new algorithms and push computational theory. Los Alamos owns and tests a D-Wave quantum computer, a black cube emblazoned with LED lights that uses quantum effects to perform certain optimization problems. Other researchers try out new algorithms on quantum computers over the cloud from the likes of IBM and IonQ. These research areas are meant to advance the general understanding of computation and to ensure that scientists understand the highest-performance devices that might one day be useful for nuclear weapons simulations, all in the name of making sure the nukes still work. Building faster, better computers is a proxy for an arms race itself.

As I spoke to scientists at Los Alamos, I wondered how they felt working on maintaining the nuclear arsenal. Many of these scientists were initially

interested in studying physics, nuclear power, or computing for peaceful purposes. "Nuclear weapons and the stockpile are important to this country," Qualters said. "I would rather be a part of maintaining that with integrity than to abdicate the responsibility." This sentiment was mirrored by others who work on the nuclear stockpile.

The program has been successful—the United States hasn't detonated a nuclear weapon in almost 30 years. But the facilities have also allowed the U.S. to continue maintaining and upgrading its nuclear arsenal; the Obama administration committed hundreds of billions of dollars to rebuilding nuclear weapons, an effort that has continued under the Trump administration. But is there anything to stop the federal government from ordering new nuclear tests?

"I'm more worried about... members of Congress that just want to do a nuclear test, not for reliability but to send a signal, up the ante, what have you," Lisbeth Gronlund, senior scientist and co-director of the Global Security Program at the Union of Concerned Scientists, told Gizmodo. It's possible that lawmakers will doubt the effectiveness of the Stockpile Stewardship program alone and ask to resume detonations, Gronlund said.

Still, Reis told Gizmodo that he thinks the strategy should last at least another generation. The U.S. has found an effective workaround to true nuclear testing—it's not quite as showy as nuking ships in the Pacific, but scientists each year report to Congress with 100 percent confidence that the nuclear arsenal is reliable.

"But beyond 20 to 25 years, who knows," Reis said. Future politicians will eventually have to decide what to do about the aging nuclear arsenal.

#### **Report:** China preps for space warfare

By Bill Gertz - The Washington Times - Wednesday, May 13, 2020

China's space warfare capabilities, including anti-satellite missiles and directed-energy weapons, pose growing threats to U.S. national security, according to a think tank report made public Wednesday.

"China's zero-sum pursuit of space superiority harms U.S. economic competitiveness, weakens U.S. military advantages, and undermines strategic stability," says the report, produced for the congressional U.S.-China Economic and Security Review Commission. "In short, it represents a threat to U.S. national security." The report details a projected 15-year buildup of multiple counterspace systems capable of destroying or disrupting U.S. satellites, including directed-energy weapons, satellite jammers and anti-satellite (ASAT) missiles, with some systems already deployed.

The report was written by four China experts with the Project 2049 Institute, a think tank, and Pointe Bello, a strategic intelligence company. The study says military units in the People's Liberation Army have begun training with anti-satellite missiles. "On the non-kinetic side, the PLA has an operational ground-based satellite electronic countermeasures (ECM) capability designed to disrupt adversary use of [satellite communications], navigation, [search and rescue], missile early warning, and other satellites through use of jamming," the report said.

The ground-based jammers were acquired from Ukraine in the late 1990s, and China has developed domestic satellite jammers since then. The jammers can "disrupt, deny, deceive or degrade space services," the report said, adding that "jamming prevents users from receiving intended signals 58

and can be accomplished by attacking uplinks and downlinks." The jammers are being upgraded to target satellite communications over a large range of frequencies, including those used for dedicated military signals.

Advanced cyberweapons also are deployed with the PLA that would be used in space warfare attacks. "While the PLA capabilities have improved, the U.S. is assumed to maintain a lead in counterspace," the report said. Other Chinese space warfare tools include small, maneuvering satellites that can grab or damage orbiting satellites. As reported in this space March 19, the military's new Space Command has deployed its first offensive space weapon: an electronic jammer that can disrupt satellite communications called the Counter Communications System Block 10.2.

The U.S. Air Force abandoned an air-launched anti-satellite missile that was tested in the 1980s. A modified Navy SM-3 anti-missile interceptor was used in 2008 to shoot down a falling satellite, showing some anti-satellite missile capability. Air Force Col. Stephen Purdy, programs director for the Space and Missile Systems Center at Los Angeles Air Force Base, said the jammer is an important weapon.

Beijing's military buildup for space warfare is being assisted by U.S. technology, talent and capital. The report recommends tougher policies prohibiting U.S. government departments and agencies, national labs, universities, companies, fund managers and individual investors from supporting China's military space program and activities. The report also recommends that Congress pass legislation aimed at better educating the public about China's capabilities, adding that the Pentagon should produce an annual unclassified report on Beijing's space weaponry.

# CONGRESSIONAL

# By Susan Cornwell

#### HASC

- 29 House Democrats sent a letter to the HASC that the NDAA budget should be "below last years authorized level"
  - They suggested money should go towards fighting the Coronavirus
  - The letter was organized by Rep. Mark Pocan (D-Wis.), a co-chair of the Congressional Progressive Caucus, and Rep. Barbara Lee (D-Calif.).
  - President Trump and congressional leaders locked in a \$741 billion topline for fiscal 2021 last year as part of two-year deal on spending.

# Smith, Cooper Statement on Trump Administration's Withdrawal From the Open Skies Treaty

May 21, 2020

WASHINGTON, D.C. – Representatives Adam Smith (D-Wash.), Chairman of the House Armed Services Committee, and Jim Cooper (D-TN), Chairman of the House Armed Services Subcommittee on Strategic Forces, today issued the following statement in response to reports that the Trump Administration plans to withdraw from the Open Skies Treaty:

"The Administration's decision to withdraw the United States from the Open Skies Treaty is a slap in the face to our allies in Europe, leaves our deployed forces in the region at risk, and is in blatant violation of the law. This decision weakens our national security interests, isolates the United States since the Treaty will continue without us, and abandons a useful tool to hold Russia accountable.

"What's more, this decision has been made without any consultation with Congress. Not only does the FY20 National Defense Authorization Act require a minimum 120-days' notification of the withdrawal notice, but also multiple communications from the House Armed Services Committee and other congressional chairmen have gone unanswered.

"The Trump Administration continues to give Russia the upper hand with regards to arms control, which leaves our allies and deployed forces less protected in Europe. Despite the Department of Defense's rhetoric about the dire need to prepare for 'great power competition,' this decision will undoubtedly do the exact opposite, and further fracture our relationships with allies needed to push back against Russian aggression in

# THORNBERRY ON CHINA REPORTTHORNBERRY ON CHINA STRATEGY REPORT

May 21, 2020 Press Release

WASHINGTON- Ranking Member Mac Thornberry (R-TX), made the following statement on the United States Strategic Approach to the People's Republic of China report recently released by the White House. The report was required by the FY2019 National Defense Authorization Act, which mandated a whole-of-government strategy with respect to China.

"The Administration's report is a good first start to articulating a whole of government approach to China. Only by focusing on all elements of national power can we effectively compete with China and deter China's malign activity in the Indo-Pacific region and around the world. The strategy also reinforces the need to invest in the military elements of that strategy, as well as increased engagement with our allies and partners." Earlier this year, Rep. Thornberry released a proposal for an Indo-Pacific Deterrence Initiative, modeled on the European Deterrence Initiative, and is working for its inclusion in the FY21 NDAA.

#### **SASC**

• Markup is planned for June

#### McConnell promises NDAA action in June

Senate Majority Leader Mitch McConnell on Thursday said that the fiscal 2021 defense authorization bill would be a priority for the Senate when it returns for its June work period.

"We'll have the National Defense Authorization Act so that we do not let this pandemic let us take the eye off the ball of our nation's security," McConnell, speaking from the Senate floor, said.

Though the coronavirus pandemic has thrown off legislative schedules for both chambers of Congress, the Senate is currently set to recess for Memorial Day next week and return in June.

When it does, the NDAA will be front of mind for both McConnell and Senate Armed Services Chairman James M. Inhofe. In a statement Thursday, Inhofe said that he had spoken with Defense Department officials about "how the coronavirus has affected our ability to recruit and to train our warfighters and what actions the Department of Defense is taking to mitigate these impacts."

"Addressing this issue is absolutely a top priority for me and for the committee as a whole," Inhofe said. "As we finalize the National Defense Authorization Act for Fiscal Year 2021, this information will help us ensure our troops have the training and equipment they need to complete their missions — no matter what."

Inhofe's panel still must markup the bill, a days-long process that takes place almost entirely behind closed doors.

As the Senate prepares to move on the NDAA next month, it took the chance Thursday to act on another Defense Department priority. The chamber confirmed Kenneth Braithwaite as the new Navy secretary, putting an end to a string of acting officials in the job.

# **SASC Advances DOD Civilian, Military Nominations**

Tuesday, May 19, 2020

The Senate Armed Services Committee today voted by voice to favorably report out a list of 2,647 pending military nominations in the Army, Navy, Air Force, and Marine Corps, as well as the following civilian and general officer nominations:

- The Honorable Kenneth J. Braithwaite to be Secretary of the Navy;
- The Honorable James H. Anderson to be Deputy Under Secretary of Defense for Policy;
- Mr. Victor G. Mercado to be Assistant Secretary of Defense for Strategy, Plans, and Capabilities; and
- General Charles Q. Brown, Jr., USAF, for reappointment to the grade of general and to be Chief of Staff, United States Air Force.

All nominations were immediately reported to the Senate floor following the Committee's action.

# Progressive lawmakers push to slash defense budget during pandemic

The left flank's early opposition to increased defense spending could throw a wrench into House leaders' aims to pass a bipartisan policy bill with fewer headaches than last year.

By CONNOR O'BRIEN for POLITICO // 05/19/2020 11:27 AM EDT

A bloc of progressive House lawmakers wants to slash the Pentagon's budget in defense policy legislation, arguing extra money that would go toward military hardware would be better spent fighting the coronavirus.

Twenty nine House Democrats insisted in a letter to leaders of the House Armed Services Committee that the National Defense Authorization Act should outline a budget that is "below last year's authorized level." "Congress must remain focused on responding to the coronavirus pandemic and distributing needed aid domestically," the lawmakers wrote. "In order to do so, appropriators must have access to increased levels of non-defense spending which could be constrained by any increase to defense spending.

"Right now, the coronavirus is our greatest adversary," they argued. "We must remain focused on combating the coronavirus and not on increasing military spending that already outpaces the next 10 closest nations combined." The left flank's early opposition to increased defense spending could throw a wrench into House leaders' aims to pass a bipartisan policy bill with fewer headaches than last year. House Armed Services Chairman Adam Smith (D-Wash.) and Rep. Mac Thornberry of Texas, the committee's top Republican, have said they want a bipartisan bill.

The letter was organized by Rep. Mark Pocan (D-Wis.), a co-chair of the Congressional Progressive Caucus, and Rep. Barbara Lee (D-Calif.). Both are critics of the defense budget, which has soared to more than \$700 billion. The letter was first reported by The Washington Post. In a statement, the lawmakers implied that they would vote against the legislation if it didn't cut defense spending. They noted that while 29 lawmakers signed the letter, only 19 would need to vote "no" to tank the defense bill, assuming Republicans don't support it.

House Democrats passed their first defense bill in the majority last year without Republican support. Negotiations with Senate Republicans dragged on for months, and progressive lawmakers were largely dissatisfied with the product. A compromise bill dropped Democratic proposals to rein in Trump's war powers, overturn the administration's transgender troop ban and block money for the border wall.

Progressive lawmakers have signaled they will push many of those same issues again, which would drive House Republicans to once again oppose the bill. Liberal Democrats have also sought to put the brakes on a buildup in military spending that was launched by President Donald Trump and congressional Republicans. Republicans defense hawks would almost certainly cry foul if Democrats attempted to cut the defense budget.

Trump and congressional leaders locked in a \$741 billion topline for fiscal 2021 as part of two-year deal on spending. GOP lawmakers have argued that level still doesn't adequately address the needs of the military as it pivots from the Middle East toward competition with China and Russia. The pandemic has added fuel to the Democrats' fire. Some lawmakers argue the spread of coronavirus shows the futility of traditional spending on military hardware as it didn't shield the U.S. from the virus.

But the defense budget has continued to grow amid the pandemic. Lawmakers approved an extra \$10.5 billion for the Pentagon's coronavirus response — including National Guard deployments, purchases of equipment under the Defense Production Act and vaccine research. Pentagon leaders have indicated they will ask Congress for more money as weapons programs slow down and costs increase.

But progressive and anti-war groups have pushed to hold the line on defense spending during the pandemic. Smith said he doesn't support more money for the Pentagon in a new round of economic stimulus. A \$3 trillion economic relief package backed by House Democrats last week doesn't include any new money for the Pentagon. The House Armed Services Committee scratched a planned April 30 markup of the defense authorization bill due to the pandemic. The committee has not yet said when the bill will be considered, but House leaders are calling it a top priority as lawmakers return to legislative business in the coming weeks.

#### Plans to boost LANL pit production get mixed reactions from CD3 candidates

Santa Fe New Mexican Online, 16 May 20 Scott Wyland

Controversial plans to ramp up plutonium pit production at Los Alamos National Laboratory have drawn mixed support from candidates running for an open seat in the 3rd Congressional District — a shift from state leaders' traditional bipartisan backing of the lab's nuclear weapons program.

U.S. Rep. Ben Ray Luján, a Democrat who is running for the U.S. Senate, has been a stalwart supporter of the lab and the push to get it producing 30 pits — the explosive cores in warheads — by 2026. Plans also call for the Savannah River Site in South Carolina to make an additional 50 pits by 2030.

Luján is aligned with Democratic Sens. Tom Udall and Martin Heinrich, who say they support the lab's pit production because it will boost the regional economy and strengthen national defense. All three have been cautious in criticizing the lab's environmental cleanup and worker safety issues.

But the seven Democratic candidates vying for the 3rd District seat are split on pit production, perhaps reflecting national polls that show the public has mixed opinions about the U.S. bolstering its nuclear arsenal for the stated goals of deterrence and defense.

There's also a growing generational divide: Younger voters feel less of a need to defend against a nuclear attack than older voters, who came of age during the Cold War under the threat of nuclear annihilation, studies show.

Five Democratic candidates offered support for pit production. Most want the lab to do sufficient waste cleanup, protect workers and enhance its scientific research in other areas such as the COVID-19 pandemic.

Candidates Valerie Plame and Kyle Tisdale say they oppose expanding pit production. An ex-CIA operative, Plame said her former job was to ensure rogue nations didn't obtain nuclear technology.

"I do not support increased plutonium pit production, as it will not enhance our national security," Plame said. "I understand that a nuclear arsenal is an important part of our national defense strategy, but it is not incompatible with continuing counterproliferation efforts. We have more than enough nuclear weapons to defend our country."

Los Alamos is very well placed to be a leader in counterproliferation, she said.

Opposing pit production could be politically out of step with some regional voters, who value the thousands of jobs the lab creates even if they don't wholly approve of its nuclear programs, said Lonna Atkeson, political science professor at the University of New Mexico.

"In terms of what are people's attitudes toward LANL — it's always been a mixed relationship," Atkeson said. "It doesn't fit with our values, but we need the jobs."

There are regional anti-nuclear groups vehemently opposed to the lab's weapons programs, including pit production, but the larger public doesn't seem nearly as concerned, Atkeson said, adding, "it's not a top issue."

The lab employs almost 13,000 people. Given the ripple effect, it creates a total of 24,000 jobs in New Mexico and injects about \$3 billion into the state economy, according to a 2019 study by the University of New Mexico.

The U.S. Energy Department's proposed budget for 2021 would bump LANL's funding to \$3.4 billion from \$2.6 billion. It would almost triple funding for the lab's plutonium operations to \$845 million.

State Rep. Joseph Sanchez, a Democratic candidate and LANL electrical engineer, said his support for lab operations is absolute and unwavering because they create so many jobs and inject billions of dollars into the state economy.

"They also contribute millions of dollars in tax revenue to the state of New Mexico and Los Alamos County," Sanchez said.

"The laboratory has made warheads for 75 years," said Harry Montoya, the lone Republican candidate who responded to emailed questions on pit production. "The No. 1 job of the laboratory will be their important work in keeping these weapons and the nation secure. The stockpile will be greater than before."

Other Democratic candidates who support pit production added stipulations — namely that the lab not cut corners on cleanup. The Energy Department's budget proposes slicing \$100 million from the cleanup of LANL's massive legacy waste generated during the Manhattan Project and Cold War.

"I call for a full environmental impact statement to ensure that any increased production can be done in a safe and environmentally responsible way, and that we follow the science ... so we don't put our communities at risk," said Teresa Leger Fernandez, considered a front-runner by some in the Democratic primary. "We also must responsibly clean up the existing legacy of pollution and waste at Los Alamos."

Laura Montoya, another Democrat, said she opposes any pit production that doesn't have the necessary cleanup and safety standards to protect New Mexicans and the air, water and land.

But while she supports the lab overall and appreciates the employment it provides, she questions whether the billions of dollars that will be spent long term on pit production might be better invested in education, health care and economic development.

Marco Serna said caution is required when dealing with plutonium and uranium, but the nuclear arsenal is aging and must be modernized.

"I believe that there is no better facility or well-trained and equipped personnel than the Los Alamos National Laboratory in the country to take on this task safely," Serna said. "I would recommend that for every warhead created, two are dismantled and removed from our nuclear arsenal."

John Blair said he supports nuclear nonproliferation and efforts to reduce such weapons worldwide. But as long as the United States maintains a nuclear stockpile, he said, the government must ensure the weapons' safety and reliability and replace necessary components.

"New production of plutonium pits is needed as part of this effort," Blair said. "I'd see to it that labor and environmental safety are strictly enforced to ensure the well-being of everyone in the region."

Udall, who will retire at the end of his term, and Heinrich have condemned the Energy Department's proposal to cut the lab's waste cleanup funding almost in half, which critics contend is being done partly to divert money to pit production.

But both remain steadfast in supporting the lab's nuclear programs, contending the nation's stockpile must be modernized to protect America from terrorists and adversaries such as China and Russia that are strengthening their first-strike capabilities.

Their support of pit production has stirred the rancor of anti-nuclear groups.

Military spending gets mostly bipartisan support in Congress, but efforts to boost nuclear weaponry and loosen arms control spur more resistance from Democrats.

Still, it's not too surprising that New Mexico's delegates, regardless of party, support beefing up nuclear funding that funnels money to the lab, Atkeson said.

With Los Alamos and Sandia labs, the Waste Isolation Pilot Plant and military bases, New Mexico is one of the most federally funded states in the country, Atkeson said. Defense spending is its economic lifeblood, she added.

Advocating for the lab's nuclear programs became a political blueprint both parties in New Mexico have used for decades, Atkeson said.

But will that change as younger voters who are less concerned about nuclear defense become the majority of the electorate?

A survey by the Bulletin of the Atomic Scientists showed support for nuclear modernization decreased with voters' age, with only 17 percent of people 18 to 34 backing such moves. A Rand Corp. study also found millennials less interested than older voters in national security issues such as strengthening the nuclear arsenal.

Atkeson said lack of interest is different from zealous opposition. If opposition did grow, a political leader would have to champion it to create policies and legislation that curb LANL's role in weapons production, she said.

There's never been a New Mexico political leader who has pushed a staunch anti-nuclear agenda, nor has there been a groundswell of public opposition as seen in Nevada regarding Yucca Mountain, a proposed storage site for high-level nuclear waste, Atkeson said.

"It's one of those issues people don't talk about a lot," she said. "And without a champion, how is that ever going to get on the top burner?"

# **Defense Budgets Could Fall Victim to COVID-19**

National Defense, 19 May 20 Jon Harper

The coronavirus pandemic, which has already exacted a staggering human and economic toll, may soon take a bite out of Pentagon spending.

The Congressional Budget Office recently estimated that the federal budget deficit will be upwards of \$3.7 trillion in the current fiscal year and exceed \$2 trillion in fiscal year 2021 as a result of spending on COVID-19 response and recovery.

"This is just off the charts compared to what we have seen in the past," said Todd Harrison, director of defense budget analysis at the Center for Strategic and International Studies. Once the crisis subsides, there will be increasing pressure in Congress to reduce the deficit and government spending, he predicted during a recent webinar.

There is a history of military cuts when deficits get high, including in the 1980s during the later years of the Reagan administration, and in the 2010s during the Obama administration following the 2008-2009 recession, he noted.

"When Congress and fiscal conservatives come out and get serious about reducing the debt and reducing spending, defense is almost always part of what they come up with for a solution," he said. "We could be looking at a deficit-driven defense drawdown coming in the next two to three years."

House Armed Services Committee Chairman Rep. Adam Smith, D-Wash., suggested there may be a push to trim the Pentagon budget.

"Even in the best case scenario, this [pandemic] is going to have a profound economic impact on us, so I think it's going to become even more important that we look for ways to save money within DoD," he told reporters. The nuclear enterprise is an example of a place where savings could be found, he added.

The Pentagon requested \$705.4 billion for fiscal year 2021. Defense Secretary Mark Esper said efforts to control the deficit may jeopardize U.S. military modernization efforts.

"I am concerned that the massive infusion into the economy by the Congress and the executive branch — nearly \$3 trillion — may throw us off that course," he said during a recent webinar.

At a press conference he was asked what programs would be in jeopardy if defense spending is constrained.

"We are going to look at those things in due course," he said. "My inclination is ... to go back and pull out more of the legacy programs. We need to move away from the legacy, and we need to invest those dollars into the future [systems]. We have a lot of legacy programs out there right now. I could pick dozens out from all branches of the service. So that is where I would start."

Esper isn't the only Pentagon leader concerned about the situation.

"On the other side of COVID-19 in terms of funding, I think everyone will be worried about what will the defense topline move to and what choices will that push upon us," Assistant Secretary of the Air Force for Acquisition, Technology and Logistics Will Roper told reporters.

Nuclear modernization is the Pentagon's top priority right now, he noted.

"If the budget comes down there will be more tough choices ahead," he said. "My worry is less about any individual program in the nuclear triad; it's more outside of that — where will we find that bill payer?"

Previous concerns about deficits led to the 2011 Budget Control Act, which put in place spending caps and a sequestration mechanism for a 10-year period, although lawmakers repeatedly raised the limits as part of a series of subsequent bipartisan budget agreements. Smith doesn't anticipate Congress will enact another BCA-type of law to deal with COVID-19-related deficits.

"It didn't control the budget particularly well, led to several government shutdowns, a number of continuing resolutions, and more threatened government shutdowns than frankly I can even remember," he said. "There's going to be considerable skepticism that a Budget Control Act-like approach is the right approach to any sort of [new] fiscal policy. I would think there would be considerable pushback on that."

# AROUND THE WORLD



#### Russia warns US against deploying nuclear weapons to Poland

By: News Desk for Almasdar News // 2020-05-19

The redeployment of US nuclear weapons from Germany to Poland would serve to further damage already strained Russia-NATO relations and escalate tensions, Russian Foreign Ministry spokeswoman Maria Zakharova announced Tuesday.

"We hope that Washington and Warsaw recognize the dangerous nature of such statements, which exacerbate an already difficult period of relations between Russia and NATO, and threaten the very basis of European security, weakened as a result of unilateral steps by the United States, first and foremost through their exit from the INF Treaty," Zakharova said. "The US could make a real contribution to strengthening European security by returning American nuclear warheads to US territory.

Russia did so a long time ago, returning all its nuclear weapons to its national territory," she added. The foreign ministry spokeswoman's comments follow remarks by US Ambassador to Poland Georgette Mosbacher last week indicating that "if Germany wants to reduce its nuclear sharing potential and weaken NATO, maybe Poland, which honestly fulfills its obligations, and understands the risks on NATO's eastern flank, could use this potential at home."

Mosbacher's comments came in the wake of an ongoing debate inside Germany's coalition government on whether US nuclear weapons should be removed from the country's airbases. The SPD, Germany's second-largest party and member of the CDU-run governing coalition, brought up the subject of US-NATO nuclear sharing arrangements in early May, with party leader Rolf Mutzenich arguing that nukes on German soil "do not heighten our security," but "just the opposite," make it more vulnerable to attack. CDU officials poured cold water on the idea, suggesting removing the nukes would "undermine trust" between Berlin and Washington.

#### Russia's Aerospace Forces Prepare Training for Kinzhal Hypersonic Missiles

Publication: Eurasia Daily Monitor Volume: 17 Issue: 67

By: Roger McDermott for EDM // May 13, 2020 05:41 PM Age: 2 days

Russia's Aerospace Forces (Vozdushno Kosmicheskikh Sil—VKS) are preparing to create a MiG-31K regiment in the Siberian city of Kansk, in the Central Military District (MD), fully equipped with Kh-47M2 Kinzhal hypersonic missiles.

The training of flight crews will commence in late 2021, with the switch to the new weapons systems complete by 2024. The preparations at the VKS base in Kansk will also likely serve as a model for equipping other VKS regiments. However, the location itself confirms the strategic importance of the new hypersonic missile system and its importance to the Aerospace Forces (Ferra.ru, May 10).

President Vladimir Putin places great emphasis on Russia developing and introducing such hypersonic weapons, while also suggesting that the country is far ahead of peer competitors in this field (see <u>EDM</u>, September 4, 2019). The role of such systems in the strategic thinking and planning of Moscow's political-military leadership will continue to burgeon in the future as more of these enter service. It marks Russia's further advance into high-precision strike capability, which will greatly enhance its overall deterrence as well as offer additional options to target enemy forces at depth (see <u>EDM</u>, February 26, 2019).

The Kh-47M2 Kinzhal is a nuclear-capable air-launched ballistic missile (ALBM) with a claimed range in excess of 2,000 kilometers, achieving Mach 10, with the ability to perform evasive maneuvers at every stage of its flight. It can also be armed with a conventional high explosive fragmentation warhead. By introducing the Kinzhal to the VKS regiment in Kansk, it offers the capability to cover potential threats in all strategic directions across the Russian Federation. Flight crews of the 712th Fighter Aviation Regiment, based in Kansk, will train in their MiG-31K aircraft to master the Kinzhal ALBM. The commander of the Central MD, Lieutenant General Alexander Lapin, confirmed that the rearmament of the fighter regiment to hypersonic missile systems is scheduled for completion in 2024 (Izvestia, May 10).

The training will prepare pilots for flights in the special circumstances necessary for the use of the Kinzhal ALBM. Russian military specialists have noted the significance of creating such a powerful "operational fist" in the Central MD, which can be used to strengthen Russian military forces in any required strategic direction at short notice. Moscow-based Russian military expert Vladislav Shurygin highlighted the selection of Kansk and its strategic importance: "The place of this deployment was chosen as rationally as possible. From Siberia, MiGs with a long flight range can be thrown to the north, south, west or east of the country. The situation in all these areas cannot be called calm. In particular, after the withdrawal of the American army from Afghanistan, the situation in Central Asia, where militants will come, may worsen. In the Far East, we have not resolved territorial disputes with Japan.

There are disagreements in the Arctic with a number of NATO [North Atlantic Treaty Organization] countries over the use of the Northern Sea Route. Hypersonic missiles will certainly cool any hotheads" (<u>Izvestia</u>, May 10). The Kinzhal was first tested using a MiG-31B, in the Southern MD, in March 2018. The weapon first entered service in that military district in May 2018, equipping ten MiG-31Ks (<u>Bmpd.livejournal.com</u>, May 6, 2018). In addition to the hypersonic capability of this ALBM, the Kinzhal flies at the stratosphere boundary to minimize air resistance and is specially designed to evade enemy air defenses and offer improved high-precision targeting.

It can be launched from Tu-22M3 bombers or MiG-31K interceptors. Its overall weight and characteristics of the ALBM compelled the defense ministry to specially modernize the existing MiG-31B to the MiG-31K. The newer model of this interceptor received new onboard equipment, increased fuel supply, and communications equipment to facilitate the receipt of target designation data. These changes forced the VKS to redevelop the methodology for the combat use of the MiG-31K and to retrain its pilots (Izvestia, May 10). The MiG-31K accelerates to Mach 2.3 to provide the Kinzhal with the necessary launch speed to then accelerate to Mach 10. With its 2,000-kilometer range, the Kinzhal avoids requiring the MiG-31K to enter the coverage area of enemy air defenses (Rossyiskaya Gazeta, November 31, 2019).

It is planned that the Kinzhal equipped regiment in Kansk will, in the future, be protected by the S-350 Vityaz surface-to-air missile (SAM) system, which will be put into service in another city in Krasnoyarsk Territory, Achinsk, by the end of 2025 (Ferra.ru, May 10). Military expert Shurygin explained, "The MiG-31 with Kh-47M2 missiles must be reliably covered by air-defense systems. The S-350 [see EDM, April 7] will meet enemy aircraft and cruise missiles on the far approaches to the airfield. The Pantsir-S1, armed not only with anti-aircraft missiles but also with an artillery mount, will cover the MiG-31 and finish off the enemy that has broken through" (Izvestia, May 10).

Russian defense specialists noted that following the first appearance of the Kinzhal in the country's military inventory, experts from the United States initially dismissed the new ALBM. Nevertheless, Lockheed Martin has since received an almost \$1 billion contract from the US Air Force to develop an air-based hypersonic Air-Launched Rapid Response Weapon (ARRW) missile. It is planned to achieve initial operational readiness by 2022. Russian defense officials see such developments in the US as an attempt to play catch up in the field of hypersonic missile systems (Regnum, April 29, 2020; Naukatehnika, December 4, 2019).

The Kh-47M2 Kinzhal hypersonic missile is an invaluable asset for the VKS, providing high-precision strike and nuclear options. The refitted MiG-31K has been modernized to suit the new ALBM. Over a three-year period, the regimental flight crews will be trained, doubtless drawing on the experience of testing the ALBM in the Southern MD and (in November 2019) over the Arctic, before this advanced system is fully functional within the Central MD. The hypersonic Kinzhal ALBM fits a pattern of concerted state investment in high-precision systems to offer scope and depth to the non-nuclear elements in Russia's deterrence strategy.

#### Russia says US cannot trigger snapback of UN sanctions on Iran

See article on: www.presstv.com, PRESS TV // 1 day ago

Russia has slammed the United States' wrong interpretation of the UN resolution that enshrined a 2015 nuclear deal, stressing that the document does not allow Washington to trigger the so-called snapback of all UN sanctions on the Islamic Republic.

In a series of tweets on Saturday, Russia's Permanent Representative to International Organizations in Vienna Mikhail Ulyanov said paragraphs 10 and 11 of UN Security Council (UNSC) Resolution 2231 permit the return of anti-Iran sanctions only through the procedures specified in the Joint Comprehensive Plan of Action (JCPOA), which the US scrapped in May 2018. The "US mistakenly believes that para 10&11 of UNSC res. 2231 allow US to invoke SnapBack to restore UN sanctions against Iran. US partners need to read the text more carefully.

Both paras clearly indicate that it can be done only through the procedures specified in JCPOA," he wrote. Ulyanov also noted that the US should restore its status as a member of the JCPOA Joint Commission and ensure full compliance with the accord before invoking the snapback of UN sanctions against Iran. The Russian official further described those opposing the JCPOA as "helpless" and "ignorant", saying that they resort to insulting critics after the exhaustion of their arguments.

"The opponents of the #IranDeal are helpless and even ignorant. In the beginning of a dispute they provide 2-3 counterarguments and slogans. As soon as these arguments and slogans are exhausted, they move on to insulting opponents without proper justification. Not surprising!" The UN 70

Security Council endorsed the JCPOA under Resolution 2231, after which the 15-member body agreed to lift a UN embargo on the sales of conventional weapons to Iran on October 18, 2020.

Despite being not a party to the JCPOA any longer, Washington has recently launched a campaign to renew the Iran arms ban — in place since 2006/2007 -- through a resolution at the Security Council, but Russia and China are most likely to veto it. To circumvent the veto, the US says it will argue that it legally remains a "participant state" in the nuclear pact only to trigger the snapback that would restore the UN sanctions, which had been in place against Iran prior to the JCPOA's inking.

Tehran says Washington, through its unilateral withdrawal from the JCPOA, forfeited all rights to have a say in the agreement. On Thursday, Iran's Foreign Minister Mohammad Javad Zarif said the Americans will realize in the future that the hostile measures they have taken to undermine the agreement "will be to their own detriment."

# US may deploy intermediate-and shorter-range missiles in Europe, says Russian diplomat

From Russia News Service – TASS // 18 May, 11:23

MOSCOW, May 18. /TASS/. The United States may start deploying land-based intermediate-and shorter-range missiles in Europe after their deployment in the Asia-Pacific region, Russian Deputy Foreign Minister Sergey Ryabkov said during a video lecture for students of the Moscow State Institute of International Relations (MGIMO) titled: "Essential Issues of US Foreign Policy."

After the Intermediate-Range Nuclear Forces (INF) Treaty ceased to exist, Russia proposed that Moscow and the United States with its allies agree on restraint in the future to avoid the escalation of tension, the Russian diplomat said. "However, in their reply, they let us know that they did not intend to follow our example and would not introduce a moratorium on the deployment of their new missiles. By all indications, their corresponding test programs will be activated in the short term and subsequently such systems may begin to be deployed on the ground," Ryabkov said.

As the Russian diplomat pointed out, Washington has directly stated its intention to start deploying land-based intermediate-and shorter-range missiles in the Asia-Pacific region soon.

"After that, this process may begin in Europe. Therefore, we face a real prospect of the emergence of US land-based missile and nuclear weapons of the corresponding types in various regions of the world," the Russian diplomat said.

On August 2, 2019, the Intermediate-Range Nuclear Forces (INF) Treaty was officially terminated at the US initiative. The US claimed that its actions were provoked by Russia's refusal to comply with the American ultimatum-like demand to eliminate the new 9M729 cruise missiles, which, as Washington and its NATO allies believe, violate the INF Treaty. Moscow rejected these accusations, saying that the technical parameters of the 9M729 missiles were within the characteristics allowed by the treaty and laying counterclaims to Washington.

In an interview with Fox News in July last year, US Secretary of State Mike Pompeo did not rule out that Washington might deploy new intermediate-range missiles in Asia after withdrawing from the INF Treaty. US Under Secretary of State for Arms Control and International Security Andrea Thompson said on August 13 that Washington was discussing this possibility with its allies.

# Russia says U.S. cannot be participant to JCPOA

From the Tehran Times // May 18, 2020 - 16:43

**TEHRAN** — Mikhail Ulyanov, Russia's permanent representative to the Vienna-based international organizations, says those who don't comply with sunset provisions of Annex B of Resolution 2231 cannot be recognized as a JCPOA participant.

"Annex B of resolution 2231 is a trap for US," Ulyanov tweeted on Monday. "If US is a #JCPOA participant, it cannot question current provisions on arms embargo. If Wash. tries to revise decisions on arms embargo, it becomes yet another (one of many) reasons to reject US ridiculous claims to be a participant." "US hopes to retain rights of a #JCPOA participant. Groundless. Not only b/c of withdrawal from #IranDeal," he wrote, adding,

"According to Annex B of res.2231 participation of China, France, Germany, RF, UK and US in JCPOA is contingent upon compliance with "sunset" provisions, incl. arms embargo." He further explained, "In other words those who doesn't comply with sunset provisions of Annex B of resolution 2231 can not be recognised to be as #JCPOA participant by definition." "This is dispute-ending point forever," the Russian diplomat concluded.

Two years after the United States withdrew from the Iran nuclear deal, the Trump administration is looking to extend a UN ban on conventional arms sales to and from Iran, a strategy designed to kill the deal for good. In a May 9 statement marking the second anniversary of the Donald Trump administration's withdrawal from the Iran nuclear deal, U.S. Secretary of State Mike Pompeo pledged to "exercise all diplomatic options" to extend the UN ban on conventional arms sales to and from Iran beyond its current expiry date on October 18.

In recent weeks, Russia has leveled strong criticism against the U.S. for trying to kill the deal, officially called the Joint Comprehensive Plan of Action (JCPOA). On Saturday, Ulyanov advised Washington to read the text of UN Security Council Resolution 2231 more carefully. "#US mistakenly believes that para 10&11 of #UNSC res. 2231 allow US to invoke SnapBack to restore #UN #sanctions against #Iran," Ulyanov said via Twitter. "US partners need to read the text more carefully.

Both paras clearly indicate that it can be done only through the procedures specified in JCPOA." Russian Deputy Foreign Minister Sergey Ryabkov said on Thursday that no country is allowed to implement the United Nations Security Council resolutions selectively. Ryabok was openly referring to Resolution 2231 that endorsed the 2015 nuclear deal but the U.S. violated it by quitting the JCPOA.

"No one is allowed to implement UN Security Council resolutions selectively and extremely fragmentarily," Ryabkov said. The actions of the United States to extend the arms embargo and launch the process of returning sanctions against Iran are "cynical" and could lead to a crisis in the UN Security Council, the top Russian diplomat added.



#### Sub-launched nuclear missile that China hasn't confirmed it's developing

Researchers nominated for award for discovery

By: Liu Zhen, for the South China Morning Post // May 15, 2020, 9:02 AM

- China's sub-launched JL-3 missile could reach the US if launched from Chinese coast.
- The Chinese military plans to arm the Type 096 submarine with the missiles, a process that could take years.

Researchers involved in the development of China's most advanced submarine-launched nuclear missile, the JL-3, have been recognised in one of the country's top science awards.

The team that worked on the "underwater-launched large solid-fuel carrier rocket," or SLBM, is among the 10 nominated to receive a National Award for Excellence in Innovation. China has not officially confirmed it is developing the JL-3 – or Big Wave – missile, but the <u>Chinese navy</u> has tested it, as reported by the South China Morning Post. The People's Liberation Army (PLA) Rocket Force is developing its third-generation SLBM JL-3, with a range of over 12,000 km (7,450 miles), far enough to hit the United States if the missile was launched from the Chinese coast. China conducted a few test flights in 2018 and 2019.

Chinese military observers have said the missile tests were in response to US President Donald Trump's targeting of China in his deterrence strategy. This missile's predecessor, JL-2, which had a range of 7,400km, was deployed on Type 094A nuclear submarines for operational patrol in 2015, signalling that China finally had a credible sea-based nuclear capability. The new intercontinental-range solid-fuel JL-3 is estimated to be fully integrated with the next-generation submarine Type 096 in 2025.

Its last test, in December, was conducted using the Type 094 nuclear submarine, but the Chinese military plans to arm the Type 096 submarine with the missiles, a process that could take years to complete. A number of individuals from military and space research institutions were also nominated for commemorative decorations and honorary mentions. Personnel working on the "hypersonic pre-cooled aerospace engine" and "vehicle system for high-speed interconnection in space" — for space station docking — were also nominated.

Last year, the revelation of China's DF-17 missiles represented the world's first hypersonic glider weapons in service. But the DF-17 is believed to be propelled by a traditional rocket engine before its payload-carrying vehicle enters unpowered glide. The hypersonic pre-cooled aerospace engine is more advanced and can be used to power hypersonic cruise missiles and aircraft, as it sustains cruise flights at over five times the speed of sound, and even aerospace planes when fully developed.

It breathes in and pre-cools the air that overheats during hypersonic flying as the oxidant. The leader in this area is Britain's Sabre engine, originally designed for the space plane Skylon. Britain is expected to start building and testing a prototype this year. The extent of China's progress in such engines is unknown, but the award nomination suggests that significant research work has been completed.

The scientists behind the docking system won their award for working out how to safely and efficiently connect spaceships to a space station in orbit when both are moving at the first cosmic velocity of 7.9km/s (4.9 miles a second). Last week, a new design of spaceship was launched into space then retrieved, taking another step towards building a permanent Chinese space station, which is set to be completed in 2022.

With the improved quick docking technologies, the time a spaceship takes preparing for docking to the station could be reduced from two to three days to six hours, saving significantly on fuel, making time for emergency missions and improving astronauts' space experience. China tested quick docking in 2017 using a cargo spaceship and experimental space station Tiangong-2, after extensive manned and unmanned conventional docking and detaching in space with Tiangong-1 and Tiangong-2.

The National Award for Excellence in Innovation was launched in 2017 and intended to be held every three years. The first edition's winners included teams working on the BeiDou satellite system, the Long March-5 rocket and the warship integrated electricity system at the PLA Naval University of Engineering.

# China's DF-26: A Hot-Swappable Missile?

by Joshua Pollack for Arms Control Wonk // May 17, 2020 |

P.W. Singer and Ma Xiu have an <u>important story in PopSci</u> with a nifty find about China's DF-26 intermediate-range ballistic missile (IRBM), which carries <u>either nuclear or conventional payloads</u>. It goes some way toward resolving a debate among English-speaking analysts about how these missiles are operated. Here, we flesh out the story with some additional textual and visual evidence.

#### A multi-purpose missile

First, some background on the debate. Unlike other Chinese missiles associated with more than one warhead type, the DF-26 lacks publicly declared sub-designations indicating which sort of warhead it is meant to carry. For example, the DF-21A is nuclear, the DF-21C is conventional, and the DF-21D carries a conventional anti-ship warhead. These designations are acknowledged by the PLA Rocket Forces and appear in U.S. government reports. But the DF-26 has only ever been identified as DF-26, without any suffixes, by either government.

This terminological quirk raises a question: is the PLA Rocket Force deploying the DF-26 in the same manner as the DF-21, with separate, dedicated nuclear, conventional, and anti-ship brigades? Or is each and every DF-26 unit trained and equipped to launch any or all available payload types, as the lack of any "A," "C," or "D" suffixes seems to imply? Singer and Ma have unearthed a <u>fascinating CCTV feature from 2017</u> describing the training of a missile brigade, which they identify as the 646 Brigade.

The CCTV report makes it abundantly clear that this unit's personnel train to operate both conventional and nuclear weapons, potentially within the span of a single operation: an exercise is described in which launch units fire conventionally armed missiles, then promptly relocate, reload, and prepare to conduct "nuclear counterstrikes." This may well be the common pattern for all current and planned DF-26 brigades, although there's not enough information in this story to be confident of that.

As it turns out, this isn't the first Chinese source to describe this feature, although it's probably the most explicit. An article by Wang Changqin and Fang Guangming of the PLA Academy of Military Science appeared in China Youth Daily in November 2015, and was <a href="helpfully translated by Andrew Erickson">helpfully translated by Andrew Erickson</a> soon afterward.

### Wang and Fang write (in Erickson's translation):

In contrast with the DF-21D is the DF-26's distinct characteristic of being nuclear and conventional all in one; that is, the one missile body can carry a nuclear warhead (singular or plural not indicated) for a nuclear strike against the enemy, or it can carry a conventional warhead (singular or plural not indicated) for a conventional firepower attack against the enemy. That "change the warhead, not the missile" feature provides a rapid switch between nuclear and conventional....

China has only a limited number of nuclear weapons, and as a medium range ballistic missile, by changing to a nuclear warhead at the last minute it (the DF-26) can as needed form up a nuclear deterrent and nuclear counterattack capability linking long and short ranges and strategic and campaign roles.... The DF-26 has numerous "fast" features such as fast switch between nuclear and conventional, fast road movement, fast launch preparation, and fast displacement and withdrawal....

[An] emphasis was put on improving reliability, maintainability, and supportability, with a modular design of the missile's structure. Significant is a carrier to which several types of warhead can be fitted, including two types of nuclear warhead [on this point, see the note below] and several types of conventional warhead which use different destructive mechanisms to attack specific targets.

For example, penetration warheads would be used to damage area type targets such as airfields and ports, piercing and exploding warheads would be used to destroy hardened targets such as bunkers and cave depots, and fuel-air explosive warheads would be used against electromagnetic targets such as command organizations and computer centers. Such a "one carrier, many warheads" design enables the DF-26 to execute long and medium-range precise strikes against many kinds of targets.

[Note: <u>Tong Zhao</u> of the Carnegie-Tsinghua Center kindly offers a correction: the article quoted above says, "two types of warheads: nuclear and conventional," and not "two types of nuclear warhead." We've adjusted the following paragraph to reflect that understanding. Thanks for the assistance!] This account of a fast-switch capability, along the slogan "change the warhead, not the missile," implies that a warhead could be replaced in the field, even after a missile has been loaded onto a launch vehicle.

This impression is reinforced by the enumeration of at least four types of warhead (nuclear, conventional submunitions, conventional penetrator, and thermobaric), which probably means that alternative warheads are brought along in another vehicle or vehicles, rather than hauling a large number of differently preloaded missiles into the field. As Wang and Fang put it, "one carrier [i.e., booster], many warheads." Four warhead types may not even be a comprehensive listing, considering the anti-ship role that they mention elsewhere in the article.

This would mean that the DF-26 is not only dual- (or multi-) capable, but that each individual launcher and its crew are prepared to handle all warhead types, just as the 2017 CCTV feature suggests. Even more than that, it suggests that each individual missile could carry any of the available

warhead types, which can be exchanged in the field. Still, this article is subject to interpretation. Back in 2016, Jordan Wilson took a different view of Wang and Fang, writing in a <u>USCC staff research report</u>,

"As China's launch brigades have in the past been dedicated to either nuclear or conventional missions, but not both, the 'modularity' of the design likely means these launch vehicles can be assigned to either nuclear or conventional brigades, rather than that an individual brigade could quickly switch between warhead types."

## Everything hinges on... a hinge

Here's where it gets interesting. In all subsequent images of the DF-26 broadcast on Chinese television, its TEL is unlike the model that appeared in the 2015 parade. Instead, we see a slightly different vehicle. What catches the eye most of all: the canister isn't elevated at all, but is shown in its resting position. It's almost horizontal, and the nose of the canister is about halfway submerged into the cab of the TEL.

Judging by its appearance, the hinged clamshell cover on the DF-26 TEL could be opened and closed as often as required. This feature permits the crew ready access to the warhead. Consistent with our understanding of the Wang and Fang article from 2015, this feature could enable rapid switching of warheads on a launch-ready missile, making it "hot-swappable." What's less clear is whether the warhead swapping is supposed to happen right on top of the TEL.

One possibility is that a loader vehicle removes the missile canister, holds it while crew members replace the warhead, and then puts it back on the TEL. This approach strikes us as perhaps more practical. But either way, it would involve just a single missile, which can carry any sort of available warhead and is never removed from its canister in the field.\* ---- \*Not counting, you know, launches.

(The only other large launchers in the PRC that are known to have anything resembling this sort of separate payload cover are the TELs for the KZ-1A and KZ-11 space launch vehicles, which are considered to be derived from, or heavily influenced by, PLARF missile systems.) We don't know why this sort of TEL didn't appear on television until after the September 2015 parade. But that was before the November 2015 publication of the China Youth Daily article, so it's possible that the modularity of the design had not yet been cleared for public release, in a manner of speaking.

We also don't know why prefixes and suffixes appear on some post-test DF-26 debris in pictures and videos that have popped up online at different times. Judging by the paint job in one such instance, it was a developmental test, not involving production missiles. But another image shows what looks like a solid rocket motor painted green, which suggests a launch exercise. The circumstances that produced these images are somewhat murky.

# What you don't know actually can hurt you

There's a moral to this story. In his impressively rich and detailed paper on the problem of "pre-launch ambiguity," James Acton describes the risks that nuclear-armed countries run in a crisis or in wartime if they are mistaken or simply uncertain about the presence of enemy nuclear weapons. As Acton explains, this is a real-world phenomenon, not hypothetical, underscored by errors and gaps in knowledge during past episodes, including the Cuban Missile Crisis and the Yom Kippur War.

Does the PLA see the intensification of these risks as advantageous? One way of looking at it is that the PLARF is preparing to play a "shell game" with its relatively scarce nuclear warheads, making them harder to find and target by unobtrusively salting them into a large, mostly conventional missile force. But another way of looking at it is "Russian roulette," in which an attack on missiles, presumed to be conventionally armed, risks hitting a nuke.

Whatever the idea was, any attempts by the U.S. to engage an alerted DF-26 will probably involve significant uncertainty about whether its forces might be about to strike at enemy nuclear weapons. Here's a little parable about the risks associated with attacking the deployed missile forces of another nuclear-armed country. Slightly over a decade ago at a U.S.-Chinese "Track II" meeting in Beijing, American participants were reported to have pressed their Chinese counterparts about the limits of China's nuclear no-first-use (NFU) commitment.

One of them raised the possibility of U.S. conventional strikes against Chinese nuclear forces: what would happen then? Would China adhere to NFU in the strictest sense, or would it use its remaining nuclear weapons to retaliate against a conventional counterforce attack? One of the Chinese participants, a retired senior military official, is said to have responded, "Try it and see." Facing ambiguously armed missiles, the U.S. military could find itself running that sort of risk, even without any intention of attacking Chinese nuclear weapons. Whether that's by accident or by design, it raises the stakes of a shooting war. That's something that we hope defense planners and senior decision-makers will keep in mind.

#### China updates its 'Art of (Hybrid) War'

Chinese General Qiao Liang argues, 'If we have to dance with the wolves, we should not dance to the rhythm of the United States' by Pepe Escobar for Asia Times // May 19, 2020May 19, 2020

In 1999, Qiao Liang, then a senior air force colonel in the People's Liberation Army, and Wang Xiangsui, another senior colonel, caused a tremendous uproar with the publication of <u>Unrestricted Warfare: China's Master Plan to Destroy America</u>.

Unrestricted Warfare was essentially the PLA's manual for asymmetric warfare: an updating of Sun Tzu's Art of War. At the time of original publication, with China still a long way from its current geopolitical and geo-economic clout, the book was conceived as laying out a defensive approach, far from the sensationalist "destroy America" added to the title for US publication in 2004.

Now the book is available in a new edition and Qiao Liang, as a retired general and director of the Council for Research on National Security, has resurfaced in a quite revealing interview originally published in the current edition of the Hong Kong-based magazine Zijing (Bauhinia). General Qiao is not a Politburo member entitled to dictate official policy. But some analysts I talked with agree that the key points he makes in a personal capacity are quite revealing of PLA thinking. Let's review some of the highlights.

### **Dancing with wolves**

The bulk of his argument concentrates on the shortcomings of US manufacturing: "How can the US today want to wage war against the biggest manufacturing power in the world while its own industry is hollowed out?" An example, referring to Covid-19, is the capacity to produce ventilators: "Out of over 1,400 pieces necessary for a ventilator, over 1,100 must be produced in China, including final assembly. That's the US problem today. They have state of the art technology, but not the methods and production capacity. So they have to rely on Chinese production."

General Qiao dismisses the possibility that Vietnam, the Philippines, Bangladesh, India and other Asian nations may replace China's cheap workforce: "Think about which of these countries has more skilled workers than China. What quantity of medium and high level human resources was produced in China in these past 30 years? Which country is educating over 100 million students at secondary and university levels? The energy of all these people is still far from being liberated for China's economic development."

He acknowledges US military power even in times of epidemic and economic difficulties is always capable of "interfering directly or indirectly in the Taiwan straits question" and finding an excuse to "block and sanction China and exclude it from the West." He adds that, "as a producing country, we still cannot satisfy our manufacturing industry with our own resources and rely on our own markets to consume our products."

In consequence, he argues, it's a "good thing" for China to engage in the cause of reunification, "but it's always a bad thing if it's done at the wrong time. We can only act at the right time. We cannot allow our generation to commit the sin of interrupting the process of the Chinese nation's renaissance." General Qiao counsels, "Don't think that only territorial sovereignty is linked to the fundamental interests of a nation.

Other kinds of sovereignty – economic, financial, defense, food, resources, biological and cultural sovereignty – are all linked to the interests and survival of nations and are components of national sovereignty." To arrest movement toward Taiwan's independence, "apart from war, other options must be taken into consideration. We can think about the means to act in the immense gray zone between war and peace, and we can even think about more particular means, like launching military operations that will not lead to war, but may involve a moderate use of force."

In a graphic formulation, General Qiao thinks that, "if we have to dance with the wolves, we should not dance to the rhythm of the US. We should have our own rhythm, and even try to break their rhythm, to minimize its influence. If American power is brandishing its stick, it's because it has fallen into a trap." In a nutshell, for General Qiao, "China first of all must show proof of strategic determination to solve the Taiwan question, and then strategic patience. Of course, the premise is that we should develop and maintain our strategic force to solve the Taiwan question by force at any moment."

#### Gloves are off

Now compare General Qiao's analysis with the by now obvious geopolitical and geo-economic fact that Beijing will respond tit for tat to any hybrid war tactics deployed by the United States government. The gloves are definitely off. The gold standard expression has come in a no-holds barred Global Times <u>editorial</u>: "We must be clear that coping with US suppression will be the key focus of China's national strategy. We should enhance cooperation with most countries.

The US is expected to contain China's international front lines, and we must knock out this US plot and make China-US rivalry a process of US self-isolation." An inevitable corollary is that the <u>all-out offensive to cripple Huawei</u> will be <u>counterpunched</u> in kind, targeting Apple, Qualcom, Cisco and Boeing, even including "investigations or suspensions of their right to do business in China."

So for all practical purposes, Beijing has now publicly unveiled its strategy to counteract US President Donald Trump's "We could cut off the whole relationship" kind of assertions. A toxic racism-meets-anti-communism matrix is responsible for the predominant anti-Chinese sentiment across the 78

US, encompassing at least 66% of the whole population. Trump instinctively seized it – and repackaged it as his re-election campaign theme, fully approved by Steve Bannon.

The strategic objective is to go after China across the full spectrum. The tactical objective is to forge an anti-China front across the West: another instance of encirclement, hybrid war-style, focused on economic war. This will imply a concerted offensive, trying to enforce embargoes and trying to block regional markets to Chinese companies. Lawfare will be the norm. Even freezing Chinese assets in the US is not a far-fetched proposition anymore.

Every possible Silk Road branch-out – on the energy front, ports, the Health Silk Road, digital interconnection – will be strategically targeted. Those who were dreaming that Covid-19 could be the ideal pretext for a new Yalta – uniting Trump, Xi and Putin – may rest in peace. "Containment" will go into overdrive. A neat example is Admiral Philip Davidson – head of the Indo-Pacific Command – asking for \$20 billion for a "robust military cordon" from California to Japan and down the Pacific Rim, complete with "highly survivable, precision-strike networks" along the Pacific Rim and "forward-based, rotational joint forces" to counteract the "renewed threat we face from great power competition." Davidson argues that, "without a valid and convincing conventional deterrent, China and Russia will be emboldened to take action in the region to supplant US interests."

# **Watch People's Congress**

From the point of view of large swathes of the Global South, the current, extremely dangerous incandescence, or New Cold War, is mostly interpreted as the progressive ending of the Western coalition's hegemony over the whole planet. Still, scores of nations are being asked, bluntly, by the hegemon to position themselves once again in a "you're with us or against us" global war on terror imperative.

At the annual session of the National People's Congress, starting this Friday, we will see how China will be dealing with its top priority: to reorganize domestically after the pandemic. For the first time in 35 years, Beijing will be forced to relinquish its economic growth targets. This also means that the objective of doubling GDP and per capita income by 2020 compared with 2010 will also be postponed.

What we should expect is absolute emphasis on domestic spending – and social stability – over a struggle to become a global leader, even if that's not totally overlooked. After all, President Xi Jinping made it clear earlier this week that a "Covid-19 vaccine development and deployment in China, when available," won't be subjected to Big Pharma logic, but "will be made a global public good. This will be China's contribution to ensuring vaccine accessibility and affordability in developing countries." The Global South is paying attention.

Internally, Beijing will boost support for state-owned enterprises that are strong in innovation and risk-taking. China always defies predictions by Western "experts." For instance, exports rose 3.5% in April, when the experts were forecasting a decline of 15.7%. The trade surplus was \$45.3 billion, when experts were forecasting only \$6.3 billion. Beijing seems to identify clearly the extending gap between a West, especially the US, that's plunging into de facto New Great Depression territory with a China that's about to rekindle economic growth. The center of gravity of global economic power keeps moving, inexorably, toward Asia.

Hybrid war? Bring it on.

### If the US seeks 'to contain China', the country will firmly defend its interests, top Chinese legislature official says

- 'China never starts trouble and never flinches when trouble comes its way,' says Zhang Yesui
- The country will firmly defend its sovereignty, security and development interests, the official adds

By: Linda Lew for the South China Morning Post // Published: 1:24am, 22 May, 2020

A top official of China's legislature said the country will firmly defend its interests if the US seeks to contain it, and hinted it will not reduce military spending in the coming year despite the Covid-19 outbreak.

Zhang Yesui, a spokesman for the National People's Congress Foreign Affairs Committee, met the press on Thursday evening in Beijing to announce the agenda for the upcoming parliamentary session and took questions from reporters. "If the US insists on a Cold War thinking, and carries out strategies to contain China, damage China's core interests, the result can only hurt itself and others," he said in response to a question on the two countries' relationship.

"China never starts trouble and never flinches when trouble comes its way. China will firmly defend its sovereignty, security and development interests." The spokesman also said the country's defence budget has been consistent at 1.3 per cent of GDP, which is below the global average of 2.6 per cent. Relations between China and the US have been fraught in the past two years, but reached a new low amid the Covid-19 pandemic.

While a bilateral phase-one trade deal was signed on January 15, the goodwill evaporated as the new coronavirus spread widely in the US in March. As of Thursday, the US has the highest number of confirmed cases in the world at over 1.5 million and the highest death toll at over 93,000. More than 38 million people in the US have lost their jobs due to the pandemic. US President Donald Trump has <u>blamed</u> China for the coronavirus, as it was first identified in the central city of Wuhan at the end of 2019.

China warns US of 'strong response' regarding Taiwan, saying island's independence is 'dead end' Tensions are also high over Taiwan, as the US government told Congress of a possible sale to Taiwan of advanced <u>torpedoes</u> worth around US\$180 million, according to a statement this week by the US Defence Security Cooperation Agency. This disclosure coincided with Taiwan President Tsai Ing-wen's second-term <u>inauguration</u> on Wednesday, which saw her receive both congratulations from US Secretary of State Mike Pompeo.

And <u>warnings</u> from Chinese authorities over her refusal to accept Beijing's "one country, two systems" proposal for cross-strait unification. US navy vessels have passed through the Taiwan Strait six times this year. In April, the guided missile destroyer USS Barry sailed through the strait on the same day as Chinese fighter jets carried out a drill in waters close to Taiwan.

## China Says: US Space Force devt risks new arms race in outer space

By Liu Xuanzun Source: Global Times // Published: 2020/5/20 22:04:50

US President Donald Trump on Friday held an event at the White House in which US Defense Department officials unveiled the official flag of the US Space Force for the first time. Trump said the space is going to be the future both in terms of defense and offense, adding "we're now the leader in space."

The flag, very much resembling the logo of China's state-owned space industry giant China Aerospace Science and Technology Corporation, received scornful comments from Chinese netizens. Was the design a coincidence? Or was it indicating the newly established force has China in mind? Nevertheless, the US space force's establishment and development could trigger new arms race in the outer space. It will bring space militarization that will threaten the whole world.

In early May, the US Space Force revealed its first recruitment video. Reports said more than 2,000 airmen have applied in just two weeks. Social network reactions show that the US Space Force has garnered a considerable attention. Many of them grew up watching Hollywood movies that portray Americans fighting in space, even against aliens. From these science fiction films, many fantasized the US Space Force could boost space technology development and contribute to humanity's exploration of space.

# This, however, will not likely become true.

During the Cold War, the US and Soviet Union's arms race expanded to space exploration. This indeed accelerated space technology development and exploration of space. But the US slowed down the process following the collapse of the Soviet Union.

Any country's attempt to militarize space will result in changes in the international strategic balance. Other major countries will not stand by and watch. In modern warfare, information is key to victory, and space is one of the most important places to gather and transfer information. Why? Because technologies like satellite navigation, ground observation and information transmission have become integrated parts of combat systems of major military powers. This includes nuclear-armed intercontinental ballistic missiles and new hypersonic weapons that can also fly in outer space.

No major military power will accept facing threats that their navigation systems could fail, communications may become jammed, or command systems go blind and deaf, and nuclear deterrence could run amok. But the US Space Force is becoming a reality. Countries will face huge strategic pressures and be forced to respond. They will naturally want to develop space forces of their own as a direct solution.

Following the US, Japan recently also announced the establishment of its Space Operations Squadron. It aims to track suspicious satellites and space debris to protect Japanese satellites. It also plans to cooperate with the US. If this trend continues, other countries with technological or economic strength will be tempted or forced to follow. This will result in a large scale space arms race.

In a worst case scenario, an arms race in space might result in space militarization. This would make every person on Earth under threat of the Sword of Damocles and more terrible than nukes. Space debris created by combat in outer space could get out of control and risk colliding into civilian spacecraft, or fatally fall down to Earth killing innocents.

China has gained amazing achievement in space exploration in recent years. Its related technologies are seeing continued progress. But as the US has begun to see China as a strategic competitor and attempts to contain China in all fields, this has become a sting in the eye for the world's most powerful country. The US has huge advantage in space technology over China, and we should continue to push forward our space programs as scheduled.

China upholds the ideals for peaceful use of outer space and opposes weaponizing it or seeking out a celestial sprint to arms. For many years, China, Russia and other countries have been working hard and trying to reach an international legal instrument to fundamentally prevent the weaponization of outer space or an arms race there. This will not change. China will not want to join an arms race in space initiated by the US. But if China's national security is at serious risk because of this, China will certainly take measures to ensure its security is not harmed. The author is a reporter of the Global Times. liuxuanzun@globaltimes.com.cn

# China to impose sweeping national security law in Hong Kong, bypassing city's legislature

By: Shibani Mahtani, Anna Fifield and Tiffany Liang, The Washington Post // Published 3:38 pm EDT, Thursday, May 21, 2020

China to impose sweeping national security law in Hong Kong, bypassing city's legislature

HONG KONG - China's Communist Party will impose a sweeping national security law in Hong Kong by fiat during the annual meeting of its top political body, officials said Thursday, criminalizing "foreign interference" along with secessionist activities and subversion of state power. The move is the boldest yet from Beijing to undercut Hong Kong's autonomy and bring the global financial hub under its full control, as it works to rewrite the "one country, two systems" framework that has allowed the territory to enjoy a level of autonomy for the past 23 years.

After steadily eroding Hong Kong's political freedoms, Beijing signaled that the national security law will be a new tool that allows it to directly tackle the political dissent that erupted on Hong Kong's streets last year. The months-long and sometimes violent protests began last June and fizzled out only over public health concerns related to the coronavirus outbreak. The new tactic marks an escalation in Beijing's crackdown in the former British colony and the clearest indication that it views Hong Kong as a restive region to be brought to heel after last year's protests.

The city's future has become a point of contention in the intensifying rivalry between China and the United States; on Wednesday, Secretary of State Mike Pompeo said Washington was "closely watching what's going on" in Hong Kong. Pro-democracy protesters in Hong Kong have directly appealed to Washington for intervention, frequently waving American flags on the streets, and see themselves as the last bastion of resistance against an increasingly assertive Beijing under President Xi Jinping.

"Beijing has opted for the most risky route," said Ho-Fung Hung, a professor of international relations at Johns Hopkins University. "It will show the world that 'one country, two systems' is, if not already over, almost over." He added: "It will be very difficult for anyone, especially the United States, to say Hong Kong is still autonomous and viable." On Thursday, China made clear it was asserting control over Hong Kong through "improvement" of its governance.

"We will ensure the long-term stability of 'one country, two systems,' "Wang Yang, head of the Chinese People's Political Consultative Conference, said at the opening of the annual meeting of China's top political advisory body. The meeting is the first part of the Two Sessions political gatherings, which will continue Friday with the National People's Congress (NPC), the rubber-stamp parliament.

"We will continue to support the improvement of the implementation of the systems and mechanisms of the constitution and Basic Law," Wang said in a report to the meeting. Later Thursday, representatives from Beijing's Hong Kong and Macao Affairs Office met with Hong Kong delegates to China's legislature to explain the details of the national security law. The law, a direct response to last year's protests, will ban secession, subversion of state power, foreign interference and terrorism, said Stanley Ng, a Hong Kong deputy to the NPC, who attended the meeting.

The legislation could pass as early as next week and will bypass all of Hong Kong's usual processes. Similar laws were proposed in 2003 and would have allowed authorities to conduct searches without warrants. But they were abandoned after mass protests and never picked up locally again. "The social unrest last year showed that the Hong Kong government was unable to handle passing [national security legislation] on its own," said Ng, a Beijing loyalist who has for years pushed for a similar law.

"Hong Kong's status will be sacrificed with or without this law if society is unstable due to the protesters' violence." Zhang Yesui, the spokesman for the NPC session, said in comments to Chinese media that Hong Kong is an "inseparable" part of China and that national security is the cornerstone of stability in the country. "In light of new circumstances and needs, the National People's Congress is exercising the power that is enshrined in the [Chinese] constitution to establish and improve" Hong Kong's legal framework, he said.

The Hong Kong dollar weakened sharply against the U.S. dollar as the reports emerged. Beijing blamed last year's unrest on secessionist forces and foreign influence. A government proposal to allow extraditions to mainland China touched off the unrest, but the movement grew into a broader and sometimes violent rebellion calling for full democracy and opposing China's efforts to chip away at Hong Kong's firewall with the mainland.

President Donald Trump has sharply stepped up denunciations of China over his claims it failed to warn the world of the coronavirus dangers in the outbreak's early weeks. But his comments on Hong Kong were less direct. "I don't know what it is because nobody knows yet," Trump told reporters as he left the White House. "If it happens, we'll address that issue very strongly." He did not elaborate.

At the State Department, spokesman Morgan Ortagus called China's expected move "highly destabilizing" for Hong Kong. "Any effort to impose national security legislation that does not reflect the will of the people of Hong Kong would be highly destabilizing," she said, "and would be met with strong condemnation from the United States and the international community." Wang did not elaborate on what "improvement" meant.

But he also referred to the Chinese territory of Macao, a gambling hub where open displays of political dissent are rare and where most leaders toe Beijing's line. The shift will have far-reaching effects. Under the agreement Britain signed with China before it handed back Hong Kong in 1997, the territory is supposed to enjoy its relative freedoms until at least 2047 under the "one country, two systems" framework.

This arrangement helped Hong Kong to flourish as a global financial center even after returning to Beijing's overall control, and has allowed the United States and other nations to treat the city differently to China. It also allowed Hong Kong to run its own affairs, except foreign affairs and defense. But under Xi's leadership, the Communist Party has encroached on Hong Kong's autonomy with stunning speed.

"I'm speechless," said Dennis Kwok, a pro-democracy lawmaker, of the proposed national security legislation. Kwok was singled out for criticism by Beijing and was recently removed from his chairmanship of a key legislative council committee. "This is a complete and total surprise and I think it 83

means the end of one country, two systems." Kwok said that the Hong Kong government and Beijing had used the coronavirus pandemic as cover to clamp down on the city.

"When the world is not watching they are killing Hong Kong, killing one country, two systems, and using social distancing rules to keep people from coming out to protest," he said. "This is the most devastating thing to happen to Hong Kong since the handover." On Wednesday, Pompeo warned China about its actions in Hong Kong, saying that the city's pro-democracy lawmakers had been "manhandled" this week "while trying to stop a procedural irregularity by pro-Beijing legislators."

"Leading Hong Kong activists like Martin Lee and Jimmy Lai were hauled into court," Pompeo told a news conference in Washington. "Actions like these make it more difficult to assess that Hong Kong remains highly autonomous from mainland China," he said. For the United States to treat Hong Kong as a separate entity, mostly for commercial purposes, the State Department must certify that the city retains "a high degree of autonomy" from China. Pompeo said its latest decision on this was still pending.

The Chinese Foreign Ministry, through its office of the commissioner to Hong Kong, said Thursday that Pompeo was "blackmailing" the Hong Kong government and accused him of "blatant interference" in China's internal affairs. It also took aim at Sen. Marco Rubio, R-Fla., for placing "unjustifiable pressure on China's central government." "Certain U.S. politicians are repeatedly carping on about [Hong Kong's] legislative and judiciary branches in a vain attempt to glorify and exculpate the rioters who oppose China and seek to stir up trouble in Hong Kong," it said.

"They just don't want to see Hong Kong heal its divides and get back on track: Their sinister motives are thoroughly exposed, and their 'black hands' are bared for all to see." In recent months, Beijing has installed a tough new representative in Hong Kong, called for patriotic education to instill more allegiance to China, and promoted a bill that would make it a criminal offense to disrespect China's national anthem.

Delegates from Hong Kong, including Carrie Lam, the city's chief executive, arrived in Beijing on Thursday for the Two Sessions. Wang said Beijing supports the Hong Kong deputies' efforts to "avoid violence in Hong Kong and to restore order." But as news of the proposal spread, calls were issued for more mass protests in Hong Kong. "The arms of tyranny have reached Hong Kong," said Ted Hui, a pro-democracy lawmaker who was a regular participant in protests last year. "Darker days are coming."

Fifield reported from New Zealand. The Washington Post's Timothy McLaughlin in Hong Kong, Yuan Wang in Beijing and Carol Morello in Washington contributed to this report.



North Korea Post-Kim Jong Un Reappearance: Expect Business as Usual in the Hermit Kingdom

by Soo W. Kim from RAND // May 19, 2020

If North Korea's fate begins and ends with the Kim family, then whither U.S.-North Korea relations for the remainder of the year?

Kim Jong Un broke his twenty-day submergence by attending a ribbon-cutting ceremony at the Sunchon Phosphatic Fertilizer Factory—a facility that may serve a dual-purpose of fertilizer production and uranium extraction to make nuclear weapons. Granted, his skin color and gait appeared off-kilter to even the less discerning spectator, but Kim seems to have moderately succeeded in keeping up appearances of a functioning regime by Pyongyang's standards.

In time-tested North Korean fashion, several days following Kim's resurfacing, Pyongyang's military fired multiple shots at a South Korean guard post in the demilitarized zone. Seoul's military returned with a short volley of shots, but perhaps in an effort to downplay tensions, ROK officials have promptly dismissed the incident as a mishap. Kim's return, while it leaves much to be desired in the way of explanation, should send one message to the international audience:

North Korea's fate rests still in the hands of Kim Jong Un. And judging by appearances in recent days, Kim does not appear to have the intention to change the course of his strategy to reduce tensions with Washington. This means, of course, a continuation in the buildup of nuclear tensions and missile provocations—as alluded to in the recent analysis by the Center for Strategic and International Studies.

Illicit trade, ship-to-ship transfers, and cybercrimes will continue to serve as funding sources for Kim's nuclear arsenal and indulgent lifestyle. South Korea and Japan, Washington's two critical allies in the region, will continue to bear the brunt as unwilling targets of Pyongyang's shorter-range missile intimidation and conventional military aggression. If North Korea's fate begins and ends with the Kim family, Kim Jong Un's return signifies plainly that by and large, it's business as usual in the Hermit Kingdom.

Soo Kim is a policy analyst at the nonpartisan, nonprofit RAND Corporation.

# Kim Jong Un's reappearance in North Korea reignites fears about nuclear weapons and ballistic missiles

By: Scott Snyder, World Politics Review // May 12, 2020, 5:12 PM

North Korea leader Kim Jong Un's reappearance this month allays for now concerns about contested succession.

But Kim's reemergence and continued rule mean that North Korea's development of nuclear weapons and ballistic missiles are still cause for worry. When North Korean leader Kim Jong Un mysteriously disappeared from public view for three weeks last month, triggering widespread rumors about his health, many international observers speculated about what could come next. His possible demise might lead to a contested succession that sparked domestic instability and the proliferation of North Korea's stockpiles of nuclear weapons and fissile material.

Kim's reemergence on May 2, at the opening of a fertilizer plant in the city of Sunchon, has taken succession concerns off the table for now. But it is time to worry once again about North Korea's development of its nuclear and ballistic missile programs under Kim's continued rule. During a 85

marathon New Year's Eve speech at the fifth party plenum of the Central Committee of the Workers' Party of Korea last December, Kim threatened to unveil a "new strategic weapon" and floated the possibility of returning to tests of long-range ballistic missiles, which Pyongyang has refrained from since November 2017.

His aggressive speech marked a deadline that Kim had set in April 2019 for the US to agree to substantial concessions in its negotiations with North Korea, primarily the lifting of economic sanctions. But a single day of working-level talks in Stockholm last October broke down without any progress. In November, Deputy Secretary of State Steven Biegun, who was then serving as the Trump administration's special envoy for negotiations with North Korea, publicly called Kim's end-of-year deadline an "artificial" one that the North Koreans had "set upon themselves."

He invited Pyongyang to return to negotiations. North Korean leader Kim Jong Un watches a Hwasong-12 missile launch in an undated photo released by KCNA on September 16, 2017. KCNA via REUTERS In his speech at the party plenum, Kim essentially refused Biegun's offer, prioritizing economic self-reliance in the absence of prospects for easing tough international sanctions. He added that North Korea would pursue military modernization to counter the perceived "hostile policy" of the US, which Kim sees as unlikely to change despite his warm personal relationship with Trump.

For now, the coronavirus pandemic and the upcoming US presidential election have forced Kim and Trump to prioritize domestic matters, mitigating the near-term likelihood of conflict. But North Korea has also ramped up its testing of conventional military weapons in recent months, and it is likely to continue developing its nuclear and ballistic missile programs. Pyongyang tested a variety of short-range missile systems on at least five occasions in April, and March was the busiest single month for North Korean missile launches in the country's history. Recent tests included a short-range ballistic missile similar in size to the US MGM-140 Army Tactical Missile System, with a range of roughly 250 miles, and large-scale multiple rocket launchers.

When deployed, these systems would add to the North's extensive artillery capabilities and ensure that US and South Korean command centers south of Seoul remain vulnerable to a conventional attack. North Korea's short-range testing of ballistic missiles violates United Nations Security Council resolutions, but Trump has dismissed concerns over these tests in the past, implying he may only respond more firmly to a longer-range missile test capable of striking the US.

The testing of large multiple rocket launchers aligns with North Korea's aim to extend its strike range deep enough into South Korea to target the consolidated US base at Camp Humphreys, 40 miles south of Seoul, and the South Korean F-35 fighter jets stationed at Cheongju Air Base, in central South Korea. Pyongyang's recent tests also appear focused on improving its ability to precisely and simultaneously deliver multiple projectiles to many different targets.

North Koreans watch a news report on North Korea's Hwasong-12 intermediate-range ballistic missile launch in Pyongyang. Kyodo/via Reuters The recent tests are also significant for their focus on short-range solid fuel missiles, which have potential applications for the future development of solid fuel medium-range and intercontinental ballistic missiles, as well as a submarine-launched ballistic missile.

Solid fuel missiles can be stored more safely and launched more quickly, with less advance warning, than North Korea's current liquid fuel versions. As a result, Pyongyang could be tempted to soon move to testing of longer-range solid fuel missiles. Kim's visit to the Sunchon fertilizer plant reflected his plans for dual military and economic development, as outlined at last December's party plenum. He visited the construction site for the plant in January, shortly after his plenum speech, and it was telling that his first public appearance this month after being out of sight for weeks was to attend the plant's opening ceremony.

It signified North Korea's renewed commitment to independent economic development. Fertilizer is an important agricultural input, and May is generally the beginning of the planting season in North Korea. More ominously, the visit is a significant sign of support for North Korea's nuclear program. A recent reportby Margaret Croy of the James Martin Center for Nonproliferation Studies at the Middlebury Institute showed that North Korea's phosphatic fertilizer production process allows the potential dual-use extraction of uranium. Kim's appearance at the new plant will strengthen North Korea's chemical industry and boost agricultural productivity, while adding a possible additional pathway for expansion of fuel production for its nuclear arsenal.

It ultimately represents North Korea returning to its policy of simultaneous military and economic development, known as byungjin, which Kim originally adopted in 2013, shortly after coming to power. He had signaled in 2018 that he would make economic development the nation's top priority, but now appears to have reversed course. Despite North Korea's continued advances in its weapons systems, the coronavirus pandemic keeps the immediate risk of a military confrontation with the US and its allies in the region at bay. But the public health crisis has also turned the focus of leaders in Pyongyang and Washington inward, reducing the likelihood of a diplomatic breakthrough.

North Korea continues to officially report no cases of the virus, but there are uncorroborated reports of virus-caused deaths in the country, including in the military. The top US military commander in South Korea, Robert Abrams, stated last month that the North Korean military was on "lockdown" for 30 days in February and early March due to COVID-19, and only resumed its activities afterward.

The pandemic has negatively affected force readiness of the US and South Korean militaries, too. The early spread of COVID-19 to South Korea resulted in the postponement of the spring military exercises between the US and South Korea that North Korea has routinely objected to. The trajectory of North Korea's nuclear and economic development is clear, and with it the chances of more negotiations with the US on denuclearization. Kim has yet to test his promised "new strategic weapon," but if he does, it appears less likely to be a game changer than further affirmation that leader-level diplomacy has run its course and that the nuclear gap between the United States and North Korea remains unbridgeable. Kim's reappearance only underscores that Pyongyang is on track to continue expanding its military, making it an even bigger source of instability.

Scott A. Snyder is senior fellow for Korea studies at the Council on Foreign Relations and author of "South Korea at the Crossroads: Autonomy and Alliance in an Era of Rival Powers."





# Iran's Khamenei says US will be expelled from Iraq, Syria

From the <u>AFP</u> // May 17, 2020

Tehran (AFP) - Iran's supreme leader said Sunday that the United States will be expelled from Iraq and Syria and alleged that even Washington's allies "abhor" it now.

The US "will not be staying either in Iraq or Syria and must withdraw and will certainly be expelled", said Ayatollah Ali Khamenei, according to his official website. Both the US and Iran have weighed into Syria's conflict -- Tehran backing the Damascus regime, while Washington supported the Kurds against the Islamic State group -- and both have been major geopolitical players in Iraq since the toppling of dictator Saddam Hussein in 2003.

"Even the leaders of some of America's allies... abhor American statesmen and government, do not trust them and are indifferent towards them," Khamenei added during a video conference meeting with university students. He claimed this was due to what he called the US' "warmongering, helping notorious governments, training terrorists, unconditional support for the Zionist regime's increasing oppression and their recent awful management of the coronavirus" pandemic.

Both countries have been hit hard by the COVID-19 disease, with the US recording the highest number of fatalities in the world and Iran battling the Middle East's deadliest outbreak. Tensions between the arch enemies have escalated since 2018, when US President Donald Trump withdrew the US from a landmark nuclear accord and reimposed crippling sanctions on Iran's economy. They have appeared to come close to direct military confrontation twice since June last year, when Iran shot down a US drone in the Gulf.

On that occasion, Trump cancelled retaliatory air strikes at the last minute. Trump also opted not to take any military action in January after Iran fired a barrage of missiles at US troops stationed in Iraq. Iran launched the missiles after a US drone strike near Baghdad airport killed Qasem Soleimani, the top general who headed the Revolutionary Guards' foreign operations arm, the Quds Force.



### Architect of Pakistan's nuclear weapons programme tells court he is 'kept prisoner'

By: Gibran Naiyyar Peshimam for Reuters news Wire // Reuters // May 15, 2020

ISLAMABAD (Reuters) - Abdul Qadeer Khan, who made international headlines in 2004 after publicly confessing his role in global nuclear proliferation, has petitioned Pakistan's top court to say he is being "kept prisoner" by government agencies and not allowed to plead his case for freedom of movement.

Khan, widely described as the architect of the nuclear weapons programme in Pakistan, which tested its first atomic bomb in 1998 to rival that of neighbouring India, was sacked from his official position after his confession, but granted clemency by then President Pervez Musharraf. He has since lived a heavily guarded and mostly secluded life in an upscale Islamabad neighbourhood. Authorities say he is under guard for security reasons.

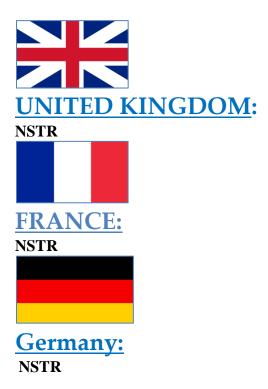
"I had been kept as a prisoner having no free movement or meeting with anybody," Khan said in a handwritten note submitted to the Supreme Court on Thursday. The 84-year-old is said to have helped supply designs, hardware and materials to make enriched uranium for atomic bombs to Iran, Libya and North Korea. Global nuclear watchdog the International Atomic Energy Agency had said Khan was an important part of the nuclear black market and had help from people in many different countries.

In a televised statement in 2004 after meeting then president Musharraf, who was also the chief of Pakistan's powerful Army, Khan stressed he acted independently and the government had not authorised his activities. Western diplomats have long doubted whether he could have acted alone. Talking to the Guardian newspaper in 2008, Khan said the confession "was handed into my hand".

Khan filed a petition last year saying that, despite earlier court orders allowing him freedom of movement under agreed terms, he was still kept under restraint and in fear of "physical harm". On Thursday, he sent a note to the judges hearing his case saying he was to appear before them the day before, but agents of the Strategic Plans Division (SPD) did not take him to the courtroom despite bringing him into the court building.

The SPD is headed by the Pakistani military and responsible for handling the country's secretive nuclear weapons programme. The government of Pakistan, which has been made respondent in the case, did not reply to Reuters' requests for comment. The court has directed the government to respond to Khan's petition. "We haven't received notice yet but it will come," Pakistan's Attorney General Khalid Jawed Khan told Reuters by text, adding the court has to decide if it will accept the petition for regular hearing. Khan also said in his note to the Supreme Court that he was being forced to withdraw his petition to that court and take it to a lower court.

(Reporting by Gibran Peshimam; Editing by Giles Elgood)





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