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ADMINISTRATION/PROGRAM SPECIFICS

Trump Signs Executive Order Shielding Nation's Power Grid From Attack

by James G. Dalton for Maga News // May 3, 2020

President Trump on Friday signed the <u>Executive Order on Securing the United States Bulk-Power System</u> over threats foreign adversaries could exploit vulnerabilities in the nation's power supply network.

The executive order identifies emerging threats by America's adversaries as they could be plotting attacks. The order establishes a task force to defend the power grid from attacks and interlinks various governmental agencies to share vital information about the network. It also prohibits the use of equipment for the power grid that is manufactured by a foreign adversary. "I, DONALD J. TRUMP, President of the United States of America, find that foreign adversaries are increasingly creating and exploiting vulnerabilities in the United States bulk-power system, which provides the electricity that supports our national defense, vital emergency services, critical infrastructure, economy, and way of life," the order reads.

President Trump notes in the order that power grids are a target for those "seeking to commit malicious acts," specifically pointing out that "malicious cyber activities" are significant risks to the economy. "The bulk-power system is a target of those seeking to commit malicious acts against the United States and its people, including malicious cyber activities, because a successful attack on our bulk-power system would present significant risks to our economy, human health and safety, and would render the United States less capable of acting in defense of itself and its allies.

"I further find that the unrestricted acquisition or use in the United States of bulk-power system electric equipment designed, developed, manufactured, or supplied by persons owned by, controlled by, or subject to the jurisdiction or direction of foreign adversaries augments the ability of foreign adversaries to create and exploit vulnerabilities in bulk-power system electric equipment, with potentially catastrophic effects."

The signing of the order comes as the <u>US economy has crashed</u>, triggered by a pandemic that led to lockdowns across the country. In six weeks, <u>30</u> <u>million folks have lost their jobs</u>, as it appears, at this moment, America's adversaries could find an opportunity to strike. Secretary of Energy Dan Brouillette praised the executive order and President Trump's efforts to secure the grid, saying in a <u>Department of Energy press release</u> on Friday that it would "greatly diminish the ability of foreign adversaries to target our critical electric infrastructure."

"Today, President Trump demonstrated bold leadership to protect America's bulk-power system and ensure the safety and prosperity of all Americans," said Brouillette. "It is imperative that the bulk-power system be secured against exploitation and attacks by foreign threats. This Executive Order will greatly diminish the ability of foreign adversaries to target our critical electric infrastructure."

The order gives Brouillette and his agency the task of identifying equipment in the power grid that poses a danger. The Office of Cybersecurity, Energy Security, and Emergency Response tweeted Friday that it "stands ready to work with its partners to secure" the grid and protect it from "malicious actors." We have <u>outlined that America's power grid "was never built</u> with attacks in mind, it has plenty of vulnerabilities."

"Everything from **malware cyber-attacks**, to **geomagnetic storms**, to **nuclear detonations** in the atmosphere above the US, even **sophisticated electronic weapons from Russia and China** --all these threaten to shut down our grid and sow chaos." And with pandemic and economic crash currently sending the country into turmoil, <u>the executive order suggests emerging threats are fast developing by adversaries could be preparing</u> <u>to strike.</u>

via zerohedge

How the nuclear force dodged the coronavirus

By BRYAN BENDER for Politico // 04/23/2020 04:25 PM EDT

The nation's nuclear forces, which prepare for the worst even on good days, were among the earliest and most aggressive in planning for the coronavirus pandemic, according to interviews with military officials and an internal timeline of key actions. --- And the efforts appear to have paid off.

While other parts of the military have been hard-hit by the virus — including hundreds of sailors assigned to the aircraft carrier USS Theodore Roosevelt and dozens of new Army recruits packed into barracks — bomber squadrons, ballistic missile submarines and intercontinental ballistic missile crews have been largely spared, despite their similarly close quarters. Commanders attribute the success to their early response, which began with a directive in January to review "disease containment plans" at bases around the country and included staggering and extending deployment schedules, tracking the virus in surrounding communities, and deploying inspection teams on bases to ensure social distancing measures were being followed.

"It became clear that this was moving across the globe and we wanted to kind of get in front of it," Air Force **Lt. Gen. Anthony Cotton**, deputy commander of the Global Strike Command, said in an interview. "We just saw what was happening and hoped that it wasn't gonna come our way, but we wanted to prepare." That included understanding "what happened, what could happen, and what steps would be necessary that we would have to take to protect our force and mission," he said.

The number of personnel assigned to the three legs of the nuclear triad that have tested positive for Covid-19 is not being publicly released for security reasons. But when asked whether an estimate that the number of cases were in the ballpark of "onesies and twosies" was on target, Cotton responded, "that's a fair assessment." "I'm knocking on wood right now [but] so far our measures are working," he said.

"We're still flying sorties, the ICBM forces are still on 24 hours, we're still doing training. You're not getting headlines that our community is all bedridden because it's just not happening. We were able to kind of get it after it from the beginning." And the top brass wants to keep it that way. On Wednesday <u>the Pentagon announced</u> a new tiered approach to testing military personnel for the virus, giving top priority to the nation's nuclear forces. Some of the preparations began weeks before the rest of the military, let alone civilian institutions.

On Jan. 22, a day after the first coronavirus case was reported in the U.S., the chief of aerospace medicine at the Air Force Global Strike Command issued a directive to its bases across the country: Review your "disease containment plans" in anticipation of a worldwide outbreak. Days later, the

Louisiana headquarters that oversees nuclear bombers and missiles was conducting daily virus briefings and tracking the health statistics of far-flung units. As February arrived, it put in place plans for remote operations and teleworking.

By the end of February, all of its bomber and missile wings were ordered to conduct tabletop exercises to game out how extensive a localized outbreak could be and identify procedures to keep bomber squadrons, intercontinental ballistic missile crews and nuclear-armed submarines on alert 24 hours a day without interruption. For instance, one base that is home to dozens of bombers simulated a scenario in which an arriving aircraft carried passengers who were later confirmed to have Covid-19.

Base inspectors war-gamed how to respond, including what roles security forces, fire personnel, maintenance units and aircrews would need to do to prevent the spread. Some of the actions were taken well over a month before the military command responsible for the defense of North America decided to prepare for the worst by standing up a backup command center deep inside Cheyenne Mountain in Colorado on March 19.

A major contributor was the very structure and culture of the nuclear weapons community, which is designed to keep operating even in the aftermath a nuclear conflict or amid a biological weapons attack. All three legs of the nuclear triad — bombers, submarines and ICBMs — train to maintain operations and remain in contact even when standard communications are cut off, transportation networks are destroyed and in worst-case, higher commands or the national leadership has been knocked out.

That includes a fleet of airborne command centers that can manage the nuclear force if their primary headquarters have gone dark. "They are geared toward locking down and riding out the worst battle possible so they have these contingencies to do that," said Hans Kristensen, director of the Nuclear Information Project at the Federal of American Scientists. "They have been planning for decades for contingencies against biological attack so that is probably what comes closest to this.

"I think what they've done early on is probably sort of set in motion some of those protocols — isolating crews, extending isolation periods before they go to their post," he added. For example, U.S. Strategic Command in Nebraska, which oversees all the nation's nuclear forces, was well prepared to take swifter action than most. "From our chain of command to the technology we use, we are redundant, resilient and reliable so we can continue operating no matter the crisis or circumstance," said Maj. Kate Atanasoff, a Strategic Command spokesperson.

"In the midst of Covid-19, this is no different." --- "We also have the unique ability to both sequester and disperse, mitigating the threat posed by Covid-19," she added. Commanders altered the schedules of forces in missile fields in North Dakota, Montana and Wyoming — bases originally selected to station ICBMs in part due to their remote locations. That <u>includes extending their tours</u> of duty.

As the ICBM crews rotate, a **"clean team"** is standing by "that can take over if someone gets sick," said Linda Frost, a spokesperson for Global Strike Command. "They are also screened before heading out to the field." Procedures were also put in place early to isolate crews of nuclear-armed ballistic missile submarines, including "14-day in port sequestration onboard ships prior to all ballistic missile submarine patrols," according to Atanasoff.

"Only after a comprehensive evaluation by the command, in consultation with medical authorities, are the submarine crews getting underway," she added. "We are ensuring that our deploying crews have a high confidence of being Covid-19 free prior to departing on their strategic deterrent patrol." As for bombers, Atanasoff said, "flights are continuing as normal to maintain training and readiness, with personnel taking all recommended preventive measures including social distancing, hand-washing, and alerting medical professionals of symptoms."

Additional safeguards have also been put in place aboard the E-6B Airborne Command Post and E-4B National Airborne Operation Centers, the aircraft designed to operate around the clock in the event of a nuclear crisis. Cotton said commanders are also closely watching states where nuclear forces are located that have been harder hit by the virus. But he said he confident the aggressive approach has been able to blunt the spread of the virus so far. "There's been cases," he said. "We won't give details on the numbers. But one of the things we're seeing is our measures are preventing that from doing anything as far as seeing that spread within those forces."

One More \$ For Global Strike? Gen. Ray Picks Better Data

Breaking Defense, 29 Apr 20 Theresa Hitchens

WASHINGTON: If the commander of the nation's strategic bomber fleet, Air Force Gen. Timothy Ray, had one extra dollar to spend, it would not be on more B-21 stealth bombers or a faster deployment of new cruise missiles. It would be on data.

"I would spend it on building the best data lake and analytical tools that I could," Ray, who leads Air Force Global Strike Command (AFGSC) told a Mitchell Institute audience today via videoconference. "That has to be how you leverage some very powerful tools for a small team to do things very strategically."

Ray said that his command is working very closely with the Space Force on building a service-wide data lake. "The Space Force has done some good work with their data efforts; we're tied to them. The task in front of us now is to work with each of the wings in the squadrons to make sure that data becomes more consistently organized and, you know, discoverable; and then to work with Headquarters Air Force on some of the programs they run to let that data be more real-time available."

As Breaking D readers know, then-Air Force Space Command, now Space Force, last summer rolled out a new Enterprise Data Strategy for enabling multi-domain operations, spearheaded by Maj. Gen. Kim Crider. This strategy bounced off the earlier efforts by Crider's team to develop a Unified Data Library (UDL) that allows space situational awareness data — both classified and unclassified; from DoD and allied and even commercial sources — to be stored in the cloud, and accessed by anyone who needed it at the classification level matching their access level.

The UDL has now morphed into a wider effort to mesh data from all types of sensors across all domains, not just those dedicated to monitoring space, called dataONE. That project is part of the Air Force's Advanced Battle Management System (ABMS) family of systems being designed to serve as the tech engine for the US military's high-priority effort to establish Joint All-Domain Command and Control (JADC2).

He said there are three main thrusts where data and data analytics efforts will significantly impact AFGSC operations.

Predictive maintenance: "Where we can actually do the analytic work on which parts are going to timeout, so we can we can make those changes ahead of time." He said the command is getting "some good help" from Microsoft on this effort.

Intelligence, surveillance and reconnaissance (ISR): where the service is building a new model for ISR operations with Strategic Command.

Modernization: using analytics to figure out the best mix of modernization and upgrades to current platforms "to give the best return on investment."

Ray noted that the development of technologies of JADC2 is intimately tied in with efforts to modernize nuclear command, control and communications (NC3). He explained that NC3 modernization is an evolutionary process, one that must move quickly to take advantage of the pace of technology.

"You're not going to have some box show up on your desk with a bow on it that says: 'This is NC3-Next,' because NC3-Next is going to just be this evolutionary thing," he said, and the technologies being developed for JADC2 will be highly relevant to that evolution.

Further, he said, getting JADC2 right also will be fundamental to allowing DoD to make choices across all the services on investment, and all the commands on operations, regarding stand-off long-range strike capabilities. As Sydney reported earlier this week, DoD is seeking to buy hundreds of long-range hypersonic weapons as soon as possible, with the Army, Air Force and Navy each pursuing disparate options.

"The first thing in my mind is: how do you build a kill chain for it? You've got to have Joint All-Domain Command and Control, ABMS and a relevant, you know, future scenario. If you don't have that, you'll just miss fast," Ray said.

Low-Yield Warhead Eliminates Need for Nuclear Buildup, State Says

DefenseDaily.com, 28 Apr 20 Dan Leone

The Department of State on Friday framed deployment of a low-yield warhead aboard U.S. submarine-launched intercontinental ballistic missiles as a means of preventing a nuclear arms race.

The agency's 10-page, election-year publication is part of a series of Arms Control and International Security Papers and takes aim at most critiques against the low-yield warhead leveled by Democrats on the House Armed Services Committee, which is now drafting the 2021 National Defense Authorization Act.

In the 10-pager, State's Bureau of Arms Control, Verification, and Compliance said U.S. deployment of the W76-2 warhead — the first of which the USS Tennessee (SSBN-734) took on patrol in December — prevents reliance on a massive retaliatory nuclear strike in response to a relatively lower-yield nuclear attack by Russia against a NATO target, along with the need to arms-race back toward Cold War-levels of forward-deployed tactical weapons in Europe.

"The United States has no need for a massive buildup," the State Department paper reads. "The United States does not need thousands of non-

strategic nuclear weapons for our strategy because we are explicitly rejecting the notion of a war of attrition via short-range nuclear weapons."

State also refuted critics' idea that the United States built the W76-2 to become its one and only response to an adversary's limited nuclear strike, saying "[t]he United States has no such doctrine" as automatically responding to limited nuclear war with limited nuclear war.

The State Department said the W76-2's ability to strike any target at any time precluded development of a new delivery system for the new low-yield nuclea, and forced Russia to contend with the idea that a low-yield nuclear strike against NATO in Europe might lead to nuclear retaliation on the battlefield or against the nation itself.

A low-yield weapon without global range grants "the Russian homeland as sanctuary, as long as it does not fire nuclear weapons at the U.S. homeland," according to State.

One name-brand arms control advocate on Monday threw cold water on State's contention that painting a bulls-eye on Russian cities with W76-2 was a "restrained" means of holding the Kremlin in check.

"What can the low yield [submarine launched ballistic missile] do that our current low yield nuclear systems cannot?" Vipin Narang of the Massachusetts Institute of Technology mused on Twitter. "Range and penetrate into downtown Moscow. Which doesn't seem all that restrained."

As it sends a small number of W76-2 warheads on patrol aboard Ohio-class submarines, the U.S. is still studying a possible low-yield, sea-based cruise missile to replace the Tomahawk land-attack cruise missile that the Barack Obama administration retired.

The NNSA's share of the research for the planned cruise missile is coming out of the maintenance fund for the W80 warhead, which tips the current generation of air-launched cruise missiles and is salted to tip the next-generation Air Force cruise missile, the Long-Range Standoff weapon that Raytheon Technologies [RTX] will build.

Why we need better science to pinpoint small, underground nuclear tests

Defense News Online, 29 Apr 20 Dale Anderson

During the Cold War, when many underground nuclear tests were measured in kilotons to megatons, data would be collected by literally hundreds of seismic monitoring stations around the world, which would then be analyzed by scientists who would decode the "boom." Today, no one is conducting tests that large, which is good — but it makes small nuclear tests much harder to find and to understand. We're lucky if we get data from more than a dozen monitoring stations.

So how can we get accurate information about a test when we have so little information?

The simple answer is: We need better physics and computer models to compensate for the lack of data. But that's not a simple answer at all. To do this requires that we push the mathematical and experimental boundaries to make these models valid — something that can only be done with

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exceptional computing, analytics and brain power. And these models need to predict all types of sensor data from underground explosions.

When a country tests a nuclear weapon underground, we are confronted with a host of uncertainties in our models that are related to the physical world but can't be accurately determined: What was the interaction of the explosion with the surrounding rock? How much rock was on top of the test? What was the close-in geology for the test? What was the water content in the surrounding rock of the test?

The ability to answer these questions can significantly alter our understanding of an adversary's capabilities — which can, in turn, influence how our government responds.

At the nation's national security laboratories, technical staff are devoted to making sense of all types of sensor data from underground explosions that, at first glance, might appear to be nothing. The ground shakes every day, thousands of times, all over the world. Differentiating between a natural quake and a nuclear one is critical to national security. After all, no one wants to ignore a real signal or respond to a false one. We need to be able to delineate what those real threats are by filtering out the noise, which is only possible when multiple streams of sensor data are mathematically combined.

When the ground shakes in a suspicious way, the first thing decision-makers ask is: What was it? And then: How confident are you that it is what you think it is?

Of course, the answer to the first question means very little if the answer to the second question is "not very."

When we're making our assessments, we're confronted with so many unknowns, which our current models lump into one. We need to be able to individually assess the uncertainties that come with a suspected nuclear test so we can better estimate things like its yield.

One only needs to look at how often initial yield estimates are revised to see that this is true. For example, last year, a paper asserted that the 2017 North Korean underground nuclear test was two-thirds more powerful than previously thought. Better estimations require better math, which means writing out the mathematical details and understanding all the variants, including the location of the explosion and the path the seismic signal followed through the rock.

One of the ways we're improving our estimations is through experimentation. Recently, multiple National Nuclear Security Administration laboratories, including Los Alamos National Laboratory, participated in a series of experiments that analyzed underground chemical explosions to advance nuclear detonation detection capabilities. The experiment used buried explosives in the Nevada desert to generate seismic and acoustic signals similar to those emitted by an underground nuclear detonation — allowing scientists to better understand how certain signals move through the Earth.

This experiment gave us critical understanding that has helped us refine our mathematics, and, by extension, our computer models.

As our models get better, we'll actually see more errors than before. That might seem counterintuitive, but the old adage, "The more you know, the

less you understand," holds some truth in the world of mathematics, too.

As we advance our methods, the uncertainties will increase before we know more. But eventually we will know more because we will ground-truth those formulas with experimentation.

With this knowledge will come the ability to confidently assess the source of the test and the yield — information that decision-makers need to determine how best to move forward. Small nuclear tests are an unfortunate reality in today's world. Our job is to make sure we understand what's happening in hopes of ending them.

-- Dale Anderson is a mathematician specializing in seismology. He is the science lead for explosion monitoring research projects at Los Alamos National Laboratory in New Mexico, which is run by the U.S. Energy Department.

US More Concerned About Iranian Rocket Than New Satellite, General Says

By Richard Sisk for Military.com // 23 Apr 2020

The Iranian rocket that carried a military satellite into space is an immediate concern for the U.S. military because of its implications for the regime's plans to develop long-range missiles, Air Force Gen. John Hyten said Wednesday.

The U.S. has long suspected that Iran's efforts to put satellites into orbit are a cover for development of an intercontinental ballistic missile, and those suspicions were reinforced by Iran's launch Tuesday of what it called a "Noor," or "Light," satellite into low Earth orbit, powered by a three-stage rocket. "We watch every rocket and missile that comes off the face of the Earth, and we track it and characterize it very precisely," Hyten, the former head of U.S. Strategic Command, said at a Pentagon briefing.

"We did that with the most recent Iranian launch. I won't tell you exactly what the intelligence says [about the rocket], but what I can tell you is it went a very long way," Hyten said. "And if you have a missile that goes a very long way, whether it works or not or puts a satellite in space or not, it went a very long way." The apparent advancement in long-range missile technology suggests that Iran "has the ability to threaten our neighbors and allies, and we want to make sure they can never threaten the United States," he said.

Hyten said it is unclear whether the satellite had achieved orbit and is in working order, but Iranian state TV showed the launch and said that ground bases were receiving signals from the satellite circling Earth every 90 minutes. The launch was the first by Iran's Islamic Revolutionary Guard Corps, or IRGC, to put a satellite into orbit, according to Iran's Tasnim news agency. "Today, the world's powerful armies do not have a comprehensive defense plan without being in space, and achieving this superior technology that takes us into space and expands the realm of our abilities is a strategic achievement," said Gen. Hossein Salami, head of the IRGC, Tasnim reported.

Salami succeeded Qasem Soleimani, who was killed in a Jan. 3 U.S. drone strike at Baghdad's international airport. The IRGC operates its own military apart from Iran's regular armed forces, and is answerable only to Supreme Leader Ayatollah Ali Khameini. Secretary of State Mike Pompeo charged that the Iranian satellite launch was in violation of a United Nations Security Council resolution intended to limit Iran's ballistic missile development. "Every nation has an obligation to go to the United Nations and evaluate whether this missile launch was consistent with that Security

Council resolution," Pompeo told State Department reporters. "I don't think it remotely is, and I think Iran needs to be held accountable for what they have done."

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Kim rumors rekindle fears of a 'weak' North Korea

by Brad Glosserman for Japan Times // Apr 27, 2020

One of the most vexing questions for Northeast Asian strategists is whether adversaries are more dangerous when they are weak or when they're strong.

Is North Korea a greater threat when its leadership is confident and ready to assert itself in the world, or when it is weak and instability could spill over its borders and overwhelm its neighbors? That question has assumed new immediacy amid reports that its supreme leader Kim Jong Un is ill or may have died. North Korea tops the list of Japanese security concerns. The 2019 Defense White Paper calls it a "serious and imminent" threat. The chief fear is that North Korea considers a nuclear warhead on an intercontinental missile a blank check that allows it to threaten any government that fails to do its bidding. The danger is not that the combination actually scares governments, but that Pyongyang will think it does — a deadly miscalculation for all concerned. Two weeks ago, North Korea was launching salvos of short-range missiles in what was perceived to be an attempt to remind the world that it remains a force to be reckoned with despite the COVID-19 outbreak that has seized the attention of those governments. The mid-April tests were the fourth set this year, and they underline North Korea's warning last year that the United States had to end its "hostile policy" by the end of 2019 or Kim would take his country on a "new path," one that presumably ends the suspension of long-range missile and nuclear tests and shows Americans and their allies what a truly hostile policy looks like. Concerns about North Korea strength are a relatively new phenomenon.

Until a decade or so ago, the chief concern was North Korean vulnerabilities. Millions of people died of famine and starvation during the 1990s and security planners worried about collapse and the ensuing tumult and turmoil. They anticipated elites fighting for power; waves of refugees, fleeing starvation and deprivation; containing and controlling the military's considerable arsenal of weapons of mass destruction; or destructive spasms as a dying regime rolled the dice on a final desperate gamble to rally the country or to inflict suffering on others equivalent to the pains it was experiencing.

Last week's report of Kim's illness rekindled fears of weakness in the heart of the regime. It also underscored how opaque North Korea remains even though it has been in the headlines for over two and half decades. It is the "hardest intelligence collection target," conceded Lt. Gen. Robert Ashley, head of the U.S. Defense Intelligence Agency, in 2018. The world had no idea for 34 hours that Kim II Sung, founder of the reclusive state, died in July 1994.

When his son and successor, Kim Jong II died in December 2011, only the official announcement two full days later informed the world. Leader summits and the extraordinary relationship between Kim and U.S. President Donald Trump have not changed that. In that vacuum, rumors abound, the more grisly and garish the better. For a while, it was believed that Kim's uncle Jang Song Taek had been killed by a pack of dogs, a claim that

was invented by a satiric Chinese social media network. Officials are frequently executed — according to intelligence reports — only to reappear later.

Skepticism then is the appropriate response to a report that Kim Jong Un was sick, and perhaps dead, after a medical event. The news originated in a single Korean-language news source, Daily NK, a Seoul-based website, which reported that Kim had heart surgery on April 12. Chinese sources subsequently confirmed that a Chinese medical team had been dispatched to the country to look after the leader and a Japanese tabloid reported Sunday that Kim was in a vegetative state.

Official Chinese, U.S. and South Korean sources denied the news. Even Trump dismissed the report as "incorrect." Analysts note the absence of any unusual movements in the city that would indicate a problem in the leadership. Still, analysts noted that Kim skipped the April 15 commemoration of his grandfather's birthday, North Korea's most important national holiday. Since taking office, every year he visited Kumsusan Palace of the Sun, where his father and grandfather lie in state, to mark the occasion.

Kim has vanished before. In 2014, he disappeared from public view for more than a month and was later shown walking with a limp; he reportedly had a cyst removed from his ankle. He is obese, a heavy drinker and a heavy smoker. His family has a history of diabetes and cardiovascular disease (which killed both his father and grandfather). It is reasonable to ask questions about his health.

But to ask questions about Kim's health is to challenge the regime. North Korea is a dynasty and after three generations it isn't clear who would succeed Kim if he passes from the scene. His children are too young. His brother was deemed unfit to govern by his father, and his half-brother Kim Jong Nam was assassinated at Kuala Lumpur airport in 2017, most likely on Kim's orders. Today, speculation focuses on his younger sister, Kim Yo Jong.

An alternative member of the Politboro and a member of the Supreme People's Assembly, she is often at her brother's side, and has played an increasingly public role as well. She was the face of the North Korean delegation during the 2018 Pyeongchang Winter Olympics and hand delivered a letter from her brother to South Korean President Moon Jae-in. Farfetched as the idea might be — experts note that North Korea is a male-dominated society — in conversation a few years ago with a North Korean official, he promised that a Kim would always lead the country, "no matter who he or she might be."

Veteran Pyongyang watcher Bradley Martin is keeping an eye on Kim Pyong II, the younger half-brother of Kim Jong II, Kim Jong Un's father. After being denied the top job, Kim Pyong II was dispatched to Europe, where he quietly served as ambassador to a number of European countries for several decades. He turned 65 last year, retired and returned home last November. Without an heir apparent, a health emergency would provoke a crisis as wannabes jostle for power and that rekindles the "weak North Korea" fears that used to alarm security planners.

Dan Sneider, a lecturer in international policy at Stanford University, has explored the planning for such a contingency. The most important conclusion from his in-depth reporting is how uncertain the response would be. While many in South Korea would delight in the collapse of the Pyongyang regime and try to seize the moment to reunify the peninsula, the current South Korean government is not among them. It isn't clear how far it would go to stabilize and preserve the government in the North, and whether it would prevent others, including the United States, from acting.

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Japan walks a fine line in this situation. It too would like to see the Pyongyang regime gone, although the most steel-eyed practitioners of realpolitik prefer a divided Korean Peninsula. (Their famous retort is, "We like Korea so much, we want two of them.") Japan would be a bystander as events unfolded: In years of meetings at which U.S., Japanese and Korean participants discussed North Korean contingencies, the Koreans insisted that a Japanese military presence on the peninsula in such a situation would be intolerable.

If Seoul, Washington and Tokyo will wait to see how events played out, China will not hesitate. Beijing will move as quickly as possible to prop up (or create) a friendly government to preserve its partner, prevent a flood of refugees into northeast China, and maintain a buffer zone between the Chinese homeland and the democracy — and U.S. troops — in the South. When Kim Jong II died — and a conservative was in office in Seoul — only China rushed to shore up the regime and called on other countries to endorse Kim Jong Un's ascension to power.

One of the greatest dangers of instability in North Korea is a clash between the U.S. and China over the future of the northern half of the peninsula. China has been reluctant to talk to the U.S. about that subject for fear of alienating Pyongyang if word of those discussions got out. The chief U.S. concern is securing North Korea's nuclear weapons and components; that is assumed to be a key part of the contingency plan. But that could result in confrontations with Chinese forces dispatched to shore up a Pyongyang government. That is a compelling reason for talks with China to come to some understanding of the reactions to and resulting risks of a North Korean crisis. It is a reminder of the danger of a weak North Korea and the need to take seriously even thinly sourced reports.

Brad Glosserman is deputy director of and visiting professor at the Center for Rule Making Strategies at Tama University as well as senior adviser (nonresident) at Pacific Forum. He is the author of "Peak Japan: The End of Great Ambitions."

DoD Tries Again on Multi-Billion Missile Interceptor

After a failed attempt to replace the current missile killers, the Pentagon wants to hurry and get the new technology online. By Paul McLeary on April 24, 2020

WASHINGTON: The Missile Defense Agency issued a long-awaited request for proposal today for its next-generation missile interceptor, eight months after the surprise cancellation of its multi-billion dollar attempt to replace the current, aging system.

The Next Generation Interceptor program will replace the Redesigned Kill Vehicle effort, the Boeing and Raytheon project that failed to get off the ground. The new competition calls for contractors to submit bids by July 31, though it will be years before anything can be built and tested. MDA chief Vice Adm. Jon Hill said last month that he wants to field the new system as soon as possible, and a timeline of 2030, is "unacceptable from a warfighter view" and "unacceptable to me as a program manager."

But it's unclear when a system will be ready for testing. "We want to deliver the first round as soon as possible," Hill continued. "That also means we can't take shortcuts in the design or in the requirements or in the flight testing regime, because if you want to go save time that is what most programs will do, so we can't afford that, but I will tell you that timeline will be driven by who we award to."

The RKV program was part of an ambitious technology effort helmed by Boeing — though Raytheon was building the Kill Vehicles — to replace the current Exo-Atmospheric Kill Vehicle. Both are ground-based interceptors designed to defend the US against long-range ballistic missile attacks. The companies won't have to pay back any of the billion-plus dollars the government awarded them to do the work, as Pentagon officials have said some of the effort can be salvaged and used on the new program.

Problems had been mounting in the program's development for years. The Missile Defense Agency said back in 2016 it expected the first RKV flight test by 2019, with fielding in 2020. The last estimate, released with the fiscal 2020 budget request, pushed the fielding date back to 2025.

Hypersonics: DoD Wants 'Hundreds of Weapons' ASAP!

"We want to deliver hypersonics at scale," said R&D director Mark Lewis, from air-breathing cruise missiles to rocket-boosted gliders that fly through space. By Sydney J. Freedberg Jr. on April 24, 2020 at 11:06 AM

WASHINGTON: The Pentagon has created a "war room" to ramp up production of hypersonic weapons from a handful of prototypes over the last decade to "hundreds of weapons" in the near future, a senior official said Wednesday. Those weapons will range from huge rocket-powered boost-glide missiles, fired from Army trucks and Navy submarines at more than Mach 10, to more compact and affordable air-breathing cruise missiles, fired from aircraft at a relatively modest Mach 5-plus.

"It isn't an either-or," said Mark Lewis, modernization director for Pentagon R&D chief Mike Griffin. "It isn't rocket-boost or air-breathing, we actually want both, because those systems do different things." Right now, however, US combat units have neither. Inconsistent focus and funding over the years means that "we had a number of programs in the department that were very solid technology development programs, but at the end of those programs, we would have prototypes and we'd have weapons in the single-digit counts," Lewis said during a webcast with the Air Force Association's Mitchell Institute.

"If you've got a program that delivers eight missiles and then stops, well, which of the thousand targets in our target set are we going to use those eight missiles against?" With hypersonics now a top priority for both Undersecretary Griffin and Defense Secretary Mark Esper, the Pentagon is trying to improve that stop-and-go track record with a new "hypersonic acceleration plan" – no pun intended, Lewis said. Griffin likes to compare the effort to the Cold War, when the US had a massive nuclear weapons infrastructure capable of building complex components by the tens of thousands.

"We want to deliver hypersonics at scale," Lewis said. "That means hundreds of weapons in a short period of time in the hands of the warfighter." Mass-production, in turn, requires production facilities – but today hypersonic prototypes are basically hand-crafted by R&D labs like Sandia. Lewis and his counterpart in the Pentagon's acquisition & sustainment directorate, Kevin Fahey, are "co-chairing what we're were calling a war room ... looking at the hypersonic industrial base," he said. "That's not just the primes, but the entire industrial base" down to small, specialized suppliers.

Controlling cost is both essential to large-scale production and a huge challenge, Lewis acknowledged. "We don't know what these things cost yet," he said. "We've asked the primes to consider costs as they're developing." Which hypersonic weapons the Pentagon buys also makes a major difference. "There are some technology choices we can make that lead us to more cost-effective systems," he said. "I'm especially enthusiastic about

hypersonic weapons that come off the wings of airplanes and come out of bomb bays, [because] I think those are some of the keys to delivering hypersonic capabilities at scale and moderate cost."

Likewise, "[there's] larger investment now in the rocket boost systems," Lewis said, "[but] one of the reasons I'm so enthusiastic about scramjetpowered systems, air-breathing systems is I think that, fundamentally, they can be lower-cost than their rocket-boosted alternatives." Why is that? Understanding the policy, it turns out, requires a basic understanding of the physics.

Four Types of Hypersonics

"Hypersonics isn't a single thing," Lewis said. "It's a range of applications, a range of attributes, [defined by] the combination of speed and maneuverability and trajectory." To put it in simple terms – and I'll beg the forgiveness of any aerospace engineers reading this – there are two kinds of hypersonic projectile, based on how they fly: one is an air-breathing engine flying through the atmosphere, like a jet plane or cruise missile; the other is a rocket booster arcing to the edge of space, like an ICBM. There are also two kinds of platform you can launch from: an aircraft in flight high and fast above the earth, or a relatively slow-moving vehicle on or below the surface, like an Army truck, Navy warship or submarine.

Combine these and you get four types. Lewis thinks all four could be worth pursuing, although the Pentagon currently has programs – that we know about – for only three:

- Air-launched boost-glide: Air Force ARRW (Air-launched Rapid Response Weapon). The Air Force also had another program in this category, HCSW (Hypersonic Conventional Strike Weapon), but they canceled it to focus on ARRW, which the service considers more innovative and promising.
- Surface-launched boost-glide: Army LRHW (Long Range Hypersonic Weapon) and Navy CPS (Conventional Prompt Strike). Both weapons share the same rocket booster, built by the Navy, and the same Common Hypersonic Glide Body, built by the Army, but one tailors the package to launch from a wheeled vehicle and the other from a submarine.
- Air-launched air-breathing: HAWC (Hypersonic Air-breathing Weapons Concept) and HSW-ab (Hypersonic Strike Weapon-air breathing). Arguably the most challenging and cutting-edge technology, these programs are both currently run by DARPA, which specializes in high-risk, high-return research, but they'll be handed over to the Air Force when they mature.
- Surface-launched air-breathing: This is the one category not in development at least not in the unclassified world. But Lewis said, "eventually, you could see some ground-launched air breathers as well. I personally think those are very promising."

Each of these has its own advantages and disadvantages, Lewis explained.

Rocket boosters are proven technology, offering tremendous speed and range. The Minuteman III ICBM, introduced in 1970, can travel over 6,000 miles at Mach 23. Their one drawback is that ICBMs can't steer. Once launched, they follow a predictable course like a cannon ball, which is why they're called ballistic missiles. The big innovation of boost-glide weaponry is that it replaces the traditional warhead with an agile glider. Once the rocket booster burns out, the glide body detaches and coasts the rest of the way, skipping nimbly across the upper layers of the atmosphere like a stone across the pond.

But boost-glide has some big limitations. First, once the rocket booster detaches, the glide body has no engine of its own so it just coasts, losing speed throughout its flight. Second, precisely because the rocket launch is so powerful, it puts tremendous strain on the weapon, whose delicate

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electronics must be hardened against shock and heat. Third, the booster is big, because a rocket not only has to carry fuel, it has to carry tanks of oxygen to burn the fuel.

An air-breathing engine, by contrast, can be significantly smaller. It just has to carry the fuel, because it can scoop up all the oxygen it needs from the atmosphere. That means the whole weapon can be smaller, making it much easier to fit on an aircraft, and that it can accelerate freely during flight instead of just coasting, making it more maneuverable. But while conventional jet engines are well-proven technology, they don't function at hypersonic speeds, because the airflow pours their intakes far too fast. So you need a sophisticated alternative such as a scramjet, a complex, costly technology so far found only on experimental vehicles, like the Air Force's revolutionary Boeing X-51.

Even with a scramjet, you can't fly too high because the air doesn't provide the needed oxygen. That means air-breathing weapons can't reach the same near-space altitudes as boost-glide missiles. They also can't fly nearly as fast. Lewis expects air-breathers will probably top out around Mach 7, half or less the peak speed of a boost-glide weapon. (That said, remember the glider will have slowed down somewhat by the time it reaches the target). The platform you launch from also has a major impact on performance. Warships, submarines, and long-bodied heavy trucks can carry bigger weapons than aircraft, but the weapons they carry need to be bigger because they have to start from low altitude and low speed and go all the way to high-altitude hypersonic flight. By contrast, an air-launched weapon doesn't need to be as big, because it's already flying high and fast even before it turns on its motor.

All these factors suggest that the big boost-glide weapons are probably best launched from land or sea, the smaller air-breathing ones from aircraft in flight. But since boost-gliders go farther and faster than air-breathers, you still want them as an option for your bombers for certain targets. On the flipside, while a naval vessel or ground vehicle has plenty of room to carry boost-glide weapons for ultra-long-range strikes, it can also use the same space to carry a larger number of the smaller air-breathers for closer targets. "We're interested in basically the full range," Lewis said. "We've got some ideas of things we want to put into play quickly, but we're also extremely open-minded about future applications, future technologies."

News & Opinion

Nuclear Modernization Is Essential Business. Don't Let Coronavirus Shut It Down.

You can't put a price in deterrence. by Patty-Jane Geller for The National Interest // April 26, 2020

Since the release of the 2018 National Defense Strategy (NDS), the Pentagon has had to realign priorities to adjust to a slow-down in defense spending. That challenge may be exacerbated by the COVID-19 pandemic.

Some <u>predict</u> the pandemic-induced economic downturn and huge stimulus package will necessitate cuts to the defense budget. Yet Beijing's fatal <u>decision</u> to withhold data about the virus, its malicious <u>misinformation campaign</u> about the virus's origins, and its pernicious <u>influence</u> on the World Health Organization have served to heighten awareness of the dangers posed by the Chinese Communist Party.

As the Pentagon continues to adjust for great power competition with China, its realigned priorities must include bolstering missile defense in the Indo-Pacific, enhancing long-range precision fire capability, and defending critical assets in space. But the bedrock of U.S. national security must remain nuclear deterrence. It's possible to mistake nuclear deterrence for an outdated capability. Nuclear weapons have been around for over seven decades and have not been employed since World War II.

It's fashionable to advocate for hip, new technologies like artificial intelligence, directed-energy railguns and cyber hackers to compete with China. But in a great power competition, nuclear deterrence is an absolute essential. The National Defense Strategy's top <u>priority</u>—to defend the homeland—rests on strong nuclear deterrence. Adversaries must know that a nuclear attack on the U.S. homeland will be met with responsive intercontinental-range ballistic missiles (ICBMs), survivable nuclear ballistic missile submarines, or flexible bombers.

The U.S. ICBM force in particular is key. With 400 Minuteman III missiles spread across the middle of the United States, adversaries know it's impossible to take out all of our ICBMs before we can launch a retaliatory strike. This promise of retaliation is precisely why our adversaries have calculated time after time against using nuclear weapons—it's not because they feel it would be immoral.

But here's the problem: Our nuclear deterrence is deteriorating from old age, even as Russia and China modernize and expand their nuclear forces. Every single element of the U.S. nuclear deterrent has passed its projected life span. As just one example, the air-launched cruise missile carried by the B-52 bomber is now more than twenty-five years past its design life. Meanwhile, both China and Russia have nearly completed updating their nuclear arsenals. China is expected to <u>double</u> its nuclear stockpile in the next decade.

And both Beijing and Moscow continue to develop advanced capabilities—such as hypersonic missiles with intercontinental-range and ICBMs tipped with multiple warheads—that threaten the United States. Opponents of U.S. nuclear modernization have <u>incorrectly cited</u> China's No First Use policy as evidence that Beijing does not have hostile nuclear intentions. But trusting China to adhere to this "good faith" policy ignores its long history of saying one thing but doing another.

For instance, Chinese state media has <u>emphasized</u> China's "model" response to dealing with the COVID outbreak, even as the regime ruthlessly <u>silenced</u> whistleblowers who dared to expose the virus. There's no reason to believe that China would take a different approach to nuclear weapons. In fact, leaders have <u>stated</u> their intention to use nuclear weapons first if the United States intervenes in a conflict with Taiwan.

Admiral Charles Richard, commander of U.S. Strategic Command, put it best when he <u>said</u>: "I think I could drive a truck through that No First Use policy." As China's lack of desire to rise peacefully becomes more apparent, so does the importance of U.S. nuclear modernization programs remaining on schedule. If <u>attempts</u> to delay modernization succeed, the security consequences could be grave.

For example, there is <u>"no margin"</u> for another life extension for our aging Minuteman III missiles. Either the Ground Based Strategic Deterrent goes forward, producing replacements, or our nuclear deterrent is dangerously diminished. Deterrence depends on our adversaries perceiving that our nuclear warheads and delivery platforms will work as intended. If the United States fails to replace aging warheads or timed-out missiles, adversaries might doubt they would actually produce an unacceptable amount of damage.

Further, the perception of weakness may embolden our adversaries. China might view the time as right to invade Taiwan, or Russia might invade a Baltic state. These calculations—which are <u>not at all implausible</u>—could drag the United States into a nuclear conflict. Critics of nuclear deterrence argue that the United States should prioritize arms control over modernization. But if our deterrent strength ebbs, leading adversaries to believe they own the advantage, what incentive would they have to negotiate?

States enter arms control agreements when it is in their interest to reduce or constrain weapons. But if the United States is forced to retire its nuclear forces unilaterally as a result of obsolescence, Russia and China would not reduce their own forces in exchange, just to be nice. Instead, they would gladly accept this most imprudent gift. The Defense Department may need to make changes to its budget due to the pandemic. And, of course, finding ways to reduce the costs of nuclear modernization would be a welcome development.

But we must not allow <u>opponents of nuclear deterrence</u> to use the pandemic as an excuse to advance their categorical anti-nuclear agenda. Rather, in a time of global uncertainty, there is no more important national security priority than ensuring a strong nuclear deterrent. Patty-Jane Geller is a policy analyst specializing in nuclear deterrence and missile defense at The Heritage Foundation's Center for National Defense.

At the edge of a new nuclear arms race

By: Rakesh Sood for The Hundu // April 27, 2020

The U.S.'s moves to resume nuclear testing, also signaling the demise of the ill-fated CTBT, could be the first signs

In mid-April, a report issued by the United States State Department on "Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments (Compliance Report)" raised concerns that China might be conducting nuclear tests with low yields at its Lop Nur test site, in violation of its Comprehensive Nuclear-Test-Ban Treaty (CTBT) undertakings.

The U.S. report also claims that Russia has conducted nuclear weapons experiments that produced a nuclear yield and were inconsistent with 'zero yield' understanding underlying the CTBT, though it was uncertain about how many such experiments had been conducted. Russia and China have rejected the U.S.'s claims, but with growing rivalry among major powers the report is a likely harbinger of a new nuclear arms race which would also mark the demise of the CTBT that came into being in 1996 but has failed to enter into force even after a quarter century.

What does CTBT ban mean?

For decades, a ban on nuclear testing was seen as the necessary first step towards curbing the nuclear arms race but Cold War politics made it impossible. A Partial Test Ban Treaty was concluded in 1963 banning underwater and atmospheric tests but this only drove testing underground. By the time the CTBT negotiations began in Geneva in 1994, global politics had changed. The Cold War had ended and the nuclear arms race was over.

The Union of Soviet Socialist Republics, or the USSR, had broken up and its principal testing site, Semipalatinsk, was in Kazakhstan (Russia still had access to Novaya Zemlya near the Arctic circle). In 1991, Russia declared a unilateral moratorium on testing, followed by the U.S. in 1992. By this time, the U.S. had conducted 1,054 tests and Russia, 715. Negotiations were often contentious. France and China continued testing, claiming that they had conducted far fewer tests and needed to validate new designs since the CTBT did not imply an end to nuclear deterrence.

France and the U.S. even toyed with the idea of a CTBT that would permit testing at a low threshold, below 500 tonnes of TNT equivalent. This was one-thirtieth of the "Little Boy", the bomb the U.S. dropped on Hiroshima on August 6, 1945 — its explosive yield was estimated to be the equivalent of 15,000 tonnes of TNT. Civil society and the non-nuclear weapon states reacted negatively to such an idea and it was dropped.

Some countries proposed that the best way to verify a comprehensive test ban would be to permanently shut down all test sites, an idea that was unwelcome to the nuclear weapon states.

Eventually, the U.S. came up with the idea of defining the "comprehensive test ban" as a "zero yield" test ban that would prohibit supercritical hydro-nuclear tests but not sub-critical hydrodynamic nuclear tests.

Once the United Kingdom and France came on board, the U.S. was able to prevail upon Russia and China to accept this understanding. After all, this was the moment of the U.S.'s unipolar supremacy. At home, the Clinton administration in the U.S. satisfied the hawks by announcing a science-based nuclear Stockpile Stewardship and Management Program, a generously funded project to keep the nuclear laboratories in business and the Pentagon happy. Accordingly, the CTBT prohibits all parties from carrying out "any nuclear weapon test explosion or any other nuclear explosion"; these terms are neither defined nor elaborated.

Why it lacks authority

Another controversy arose regarding the entry-into-force provisions (Article 14) of the treaty. After India's proposals for anchoring the CTBT in a disarmament framework did not find acceptance, in June 1996, India announced its decision to withdraw from the negotiations. Unhappy at this turn, the U.K., China and Pakistan took the lead in revising the entry-into-force provisions.

The new provisions listed 44 countries by name whose ratification was necessary for the treaty to enter into force and included India. India protested that this attempt at arm-twisting violated a country's sovereign right to decide if it wanted to join a treaty but was ignored. The CTBT was adopted by a majority vote and opened for signature. Of the 44 listed countries, to date only 36 have ratified the treaty.

China, Egypt, Iran, Israel and the U.S. have signed but not ratified. China maintains that it will only ratify it after the U.S. does so but the Republican dominated Senate had rejected it in 1999. In addition, North Korea, India and Pakistan are the three who have not signed. All three have also undertaken tests after 1996; India and Pakistan in May 1998 and North Korea six times between 2006 and 2017. The CTBT has therefore not entered into force and lacks legal authority.

Nevertheless, an international organisation to verify the CTBT was established in Vienna with a staff of about 230 persons and an annual budget of \$130 million. Ironically, the U.S. is the largest contributor with a share of \$17 million. The Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) runs an elaborate verification system built around a network of over 325 seismic, radionuclide, infrasound and hydroacoustic (underwater) monitoring stations. The CTBTO has refrained from backing the U.S.'s allegations.

Competition is back

The key change from the 1990s is that the U.S.'s unipolar moment is over and strategic competition among major powers is back. The U.S. now identifies Russia and China as 'rivals'. Its Nuclear Posture Review asserts that the U.S. faces new nuclear threats because both Russia and China are increasing their reliance on nuclear weapons. The U.S., therefore, has to expand the role of its nuclear weapons and have a more usable and diversified nuclear arsenal.

The Trump administration has embarked on a 30-year modernisation plan with a price tag of \$1.2 trillion, which could go up over the years. Readiness levels at the Nevada test site that has been silent since 1992 are being enhanced to permit resumption of testing at six months notice. Russia and China have been concerned about the U.S.'s growing technological lead particularly in missile defence and conventional global precision-strike capabilities.

Russia has responded by exploring hypersonic delivery systems and theatre systems while China has embarked on a modernisation programme to enhance the survivability of its arsenal which is considerably smaller. In addition, both countries are also investing heavily in offensive cyber capabilities. The new U.S. report stops short of accusing China for a violation but refers to "a high level of activity at the Lop Nur test site throughout 2019" and concludes that together with its lack of transparency, China provokes concerns about its intent to observe the zero-yield moratorium on testing.

The U.S. claims that Russian experiments have generated nuclear yield but is unable to indicate how many such experiments were conducted in 2019. It suggests that Russia could be testing in a manner that releases nuclear energy from an explosive canister, generating suspicions about its compliance. The New Strategic Arms Reduction Treaty (New START) limits U.S. and Russian arsenals but will expire in 2021 and U.S. President Donald Trump has already indicated that he does not plan to extend it. Instead, the Trump administration would like to bring China into some kind of nuclear arms control talks, something China has avoided by pointing to the fact that the U.S. and Russia still account for over 90% of global nuclear arsenals.

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Current context

Both China and Russia have dismissed the U.S.'s allegations, pointing to the Trump administration's backtracking from other negotiated agreements such as the Iran nuclear deal or the U.S.-Russia Intermediate-Range Nuclear Forces (INF) Treaty. Tensions with China are already high with trade and technology disputes, militarisation in the South China Sea and most recently, with the novel coronavirus pandemic. The U.S. could also be preparing the ground for resuming testing at Nevada.

The Cold War rivalry was already visible when the nuclear arms race began in the 1950s. New rivalries have already emerged. Resumption of nuclear testing may signal the demise of the ill-fated CTBT, marking the beginnings of a new nuclear arms race. Rakesh Sood is a former diplomat and presently Distinguished Fellow at the Observer Research Foundation

If You Want Peace...

By Dr. Peter Vincent Pry, contributor to THE HILL // 04/27/20 12:00 PM EDT

The State Department has released the unclassified executive summary of its new report — Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments — an annual report focused on arms control violations and noncompliance by **Russia, China, North Korea, Iran** and others.

The State Department finds Russia, China, North Korea, Iran, Syria, Azerbaijan, Armenia and Burma in violation or noncompliance with various arms control commitments, including the nuclear Threshold Test Ban Treaty (TTBT), unratified Comprehensive Test Ban Treaty (CTBT), Intermediate-Range Nuclear Forces Treaty (INF), Presidential Nuclear Initiative (PNI), Nuclear Non-Proliferation Treaty (NPT), Chemical Weapons Convention (CWC), Biological Weapons Convention (CWC), Conventional Armed Forces in Europe Treaty (CFE), and the Open Skies Treaty (OST).

Every year for decades, the State Department has reported significant arms control violations and noncompliance by Russia and other potential adversaries of the United States. Dangerously — with rare exceptions — the White House, Congress and Washington foreign policy and defense establishments regard U.S. unilateral compliance with arms control agreements, while Russia and others routinely violate agreements, with complacency. It's "business as usual."

The State Department's Compliance Reports, so-called in shorthand, do not assess the threat to the United States from unilateral U.S. compliance with all arms control agreements while Russia, China and others are cheating. Perhaps the Department of Defense (DOD) Office of Net Assessment should begin supplementing State's reports with a National Security Impact Report for U.S. unilateral compliance while our adversaries cheat on arms control.

Some examples:

- --Russia's violation of the INF Treaty, by deploying new-generation nuclear missiles threatening Europe, undermines security of NATO and credibility of U.S. extended nuclear deterrence. Fortunately, President Trump and his administration understand this, which is why they withdrew the U.S. from the treaty.
- --Russia's violation of the PNI to dismantle tactical nuclear weapons, while the U.S. proceeded to deeply cut such weapons, has resulted in giving Moscow at least a 10-to-1 advantage in tactical nuclear weapons, and superiority in the overall nuclear balance.
- --Violations of the NPT increase the nuclear threat to the United States from fanatical and unpredictable actors such as Iran and North Korea.
- --Russia, China, North Korea, Iran and others violating the BWC and CWC potentially risks exposing U.S. troops and the American people to "bugs and gas" against which we have no defenses. We could lose a war.
- --Russian violation of the CFE, which Moscow has openly abrogated, could enable Russian tanks, mobilized under the guise of a big exercise, to overrun NATO front-line states in 72 hours. DOD and RAND Corporation have warned about this.
- --Russian violation of OST further diminishes the United States' already grossly inadequate capabilities to verify compliance with arms control agreements.

The big news in the 2020 Compliance Report is that Russia and China have been violating the TTBT and CTBT by conducting nuclear tests, while the U.S. has complied with the agreements and conducted no tests since 1992. "Russia has conducted nuclear weapons experiments that have created nuclear yield and are not consistent with the U.S. 'zero yield' standard," the report cautions. The report further states that China's "possible preparation to operate its Lop Nur test site year-round, its use of explosive containment chambers, extensive excavation activities at Lop Nur

And lack of transparency on its nuclear testing activities — which has included frequently blocking the flow of data from its international monitoring system (IMS) to the international data center operated by the Preparatory Commission for the Comprehensive Nuclear Test-Ban Treaty Organization — raise concerns regarding China's adherence to the 'zero yield' standard." Thus, the U.S. is probably 28 years behind Russia and China in developing advanced nuclear weapons based on new designs and technology.

Russia openly writes about having new-generation nuclear weapons based on "new physical principles" such as Super-EMP, neutron and X-ray warheads; "clean" warheads that produce no radioactive fallout; "dirty" super-high-yield (100 megatons) doomsday warheads; and ultra-low-yield warheads "useable" by land, air and naval forces. What all this means is that the U.S. could lose a nuclear war.

Knowing this, would the U.S. dare risk war with Russia or China? Will U.S. allies trust our security guarantees and continue to be allies? Is the U.S. already losing the "new cold war" because of arms control? Worse, the violations of arms control agreements by Russia, China and others almost certainly are far worse than the Compliance Reports acknowledge. The State Department's bread and butter is arms control.

Historically, State has been reluctant to acknowledge violations of arms control agreements; the department and the intelligence community covered up Russia's violations of the INF Treaty for years during the Obama administration. Both the State Department and the intelligence community are unreformed from the Obama years, still preferring to "see no evil" when it comes to violations of arms control sacred cows.

They still have not declassified President Reagan's General Advisory Committee report, "A Quarter-Century of Soviet Compliance Practices Under Arms Control Commitments, 1958-1983" that exposed the long history of failed arms control. Predictably, many left-leaning organizations — such 21

as the Arms Control Association, the Federation of American Scientists, Union of Concerned Scientists, and former Obama administration officials — will defend Russia and China, claiming that they are not really cheating.

It seems we still have not learned the Latin adage, "Si vis pacem, para bellum" — If you want peace, prepare for war. Dr. Peter Vincent Pry was chief of staff of the Congressional EMP Commission and served on the staff of the House Armed Services Committee and at the CIA. He is the author of several books, including "The Power And The Light: The Congressional EMP Commission's War To Save America 2001-2020" (2020).

Why 'arms control' remains delusional

By: Peter Pry Originally published by Newsmax // April 23, 2020

The coronavirus has killed over 150,000 people globally, but many millions may be killed, and the United States utterly destroyed, by the great plague for decades crippling U.S. defense and foreign policy. --- It's known as arms control.

Since **Pope Urban II in 1097** unsuccessfully tried banning use of crossbows against Christians, indeed since Christ walked the Earth preaching nonviolence and love to fallen humankind, there have been those who would ban arms and armies, perpetually turning the other cheek, and trying tame the world's wolves with the feather of international law. Alas, **Machiavelli's "The Prince" (1532)** has been a more realistic guide to personal and national survival than **Sir Thomas More's "Utopia"(1516)**, over which the latter (an idealist) literally lost his head.

But idealists and utopians never give up, even when confronted with the likes of **Germany's Adolf Hitler, Italy's Benito Mussolini, Japan's Gen. Hideki Tojo, and Russia's Josef Stalin.** Following World War I, the League of Nations, the Versailles Treaty, Washington and London Naval Conferences, and Kellogg-Briand Pact outlawing war, lulled western democracies into complacency; they were then ruthlessly violated by the future Axis powers. This contributed to World War II. --- **60 million died.**

Today, the idealist intellectual tradition continues in "arms control" — a phrase invented by 1950s academics to describe a "new" solution to the existential threat posed by the problem of war in the nuclear missile age. Arms control as taught in universities, propounded by experts, and practiced by policymakers, ignores, or gives short shrift to, its roots in the Christian faith. Instead, arms control is a pseudo-science which argues — regardless of ideology, history, and strategic culture of hostile states — "the rational actor model" logically prefers "strategic stability" and will even latch on to policies such as "Mutual Assured Destruction" (MAD) in order to avoid costly arms racing and deter the existential threat of nuclear war.

Arms control as an intellectual discipline has evolved closer to Marx than to Christ. Arms control "true believers" have imbibed deeply of the 1960s New Left interpretation of American history, a perspective widely taught at universities as gospel. It blames the West and the U.S. for the original sins of capitalism, imperialism, and colonialism; purportedly the corrupt foundations of an inherently unjust and racist world order, one dominated by the United States.

According to this "blame America first" view, the U.S. started the Cold War, and nuclear arms-racing is always provoked by U.S. nuclear forces modernization that, in arms control parlance, triggers an "action-reaction cycle" forcing "innocent" Russia to build more nuclear arms. Perniciously, arms control and its acolytes are deeply embedded in U.S. and Western strategic culture. Policymakers in the White House, Congress, State and

Defense Departments — even when they are arms control skeptics — tend to think and act reflexively as if the assumptions and concepts of arms control are true, so pervasive and influential is the arms control paradigm.

The State Department's recently published report "Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments" (April, 2020) finds that Russia, China, North Korea, Iran, Syria, Azerbaijan, Armenia, and Burma are in violation (or noncompliance) with various arms control commitments, including the Intermediate-range Nuclear Forces Treaty, the Presidential Nuclear Initiative, the Non-Proliferation Treaty, the Chemical Weapons Convention, the Biological Weapons Convention, the Conventional Forces in Europe Treaty, and the Open Skies Treaty.

Thanks to arms control, by cheating on the Presidential Nuclear Initiative, Russia has at least a 10-to-1 advantage in tactical nuclear weapons. Perhaps most disturbingly, the State Department reports Russia and China are violating the Threshold Test Ban Treaty and the unratified Comprehensive Test Ban Treaty. Moscow and Beijing apparently have been conducting low-yield nuclear testing while the U.S. has observed a moratorium on nuclear tests for 28 years — since 1992.

By cheating on arms control, Russia and China have achieved a great leap forward in the design and sophistication of their nuclear weapons, while the U.S. lags far behind. While Russia and China have modernized their nuclear forces, U.S. nuclear weapons and delivery systems are aging toward obsolescence. The Arms Control Association, Federation of American Scientists, Union of Concerned Scientists, and Rebecca Hersman, former deputy assistant secretary of Defense for Countering Weapons of Mass Destruction under President Obama, criticize the State Department report and defend Russia and China. --- They believe the U.S. should continue no unilateral nuclear testing.

Washington prevailed in the Cold War by never allowing Moscow any militarily significant numerical or technological advantage in nuclear arms. U.S. nuclear strength permitted indulging our arms control delusion, concluding treaties of dubious verifiability with a dishonest adversary. We can no longer afford arms control that fails to deliver "strategic stability" while shifting the balance of power against the United States.

Moscow is pressing for renegotiating the New Strategic Arms Reduction Treaty to further weaken America by constraining U.S. non-nuclear Global Strike forces and prohibiting the U.S. Space Force from "weaponizing space" with missile defenses. It's yet another arms control trap. President Trump, before seeking an arms control "grand bargain" with Russia and China, please read my essay "The Case Against Arms Control" (RealClearDefense.com June 24, 2019). Also read an old, but perennially true, book by Sen. Malcolm Wallop and Angelo Codevilla "The Arms Control Delusion" (1987).

U.S. Strategic Nuclear Forces Under New START

Fact Sheets & Briefs- Last Reviewed: April 2020 Contact: Kingston Reif, Director for Disarmament and Threat Reduction Policy, (202) 463-8270 x104

On April 8, 2010, Russia and the United States signed the New Strategic Arms Reduction Treaty (New START).

The treaty requires the sides to limit the number of deployed strategic nuclear warheads to no more than 1,550 and fielded delivery platforms to 700. The treaty also permits the United States and Russia to conduct 18 annual on-site inspections of facilities operated by the other country. Biannual data exchanges indicate the current state of their strategic forces. For a factsheet on Russian nuclear forces, click here.

Both the United States and Russia met these limits by the February 2018 deadline, and the limits will hold until February 2021. As of March 1, 2020, the United States has 655 deployed strategic delivery systems, 1,373 deployed strategic warheads, and 800 deployed and non-deployed strategic launchers. Under New START, the United States retains a deployed strategic force of up to 400 ICBMs, 60 nuclear-capable bombers, and 240 SLBMs.

- As of January 2020, the United States deploys 400 Minuteman III ICBMs, all with a single warhead, and an additional 50 non-deployed silo launchers of ICBMs that remain in a warm, operational status.
- Some bombers were converted to conventional-only missions (not accountable under New START), and 50 nuclear-capable bombers were deployed as of September 2019. Bombers are not on alert or loaded with weapons in peacetime, and New START counting rules allow each bomber to be counted as "one" deployed warhead, even though bombers can carry up to 16-20 nuclear weapons.
- The United States retains all 14 of its strategic nuclear submarines (SSBNs), although it reduced the number of SLBM launch tubes per SSBN from 24 to 20, for a total of 280 tubes across the entire fleet. Between two and four submarines are in dry dock at any given time. The United States deployed 220 submarine-launched ballistic missiles as of September 2019.

In addition to the treaty limit of 700 deployed systems, the treaty allows for 800 deployed and non-deployed missile launchers, and bombers. As of September 2019, the United States retains 454 deployed and non-deployed ICBM launchers, 280 deployed and non-deployed SLBM launchers, and 66 deployed and non-deployed heavy bombers. The strategic forces that remain under the treaty are currently being upgraded or replaced. Over the 30 years, the administration plans to invest an estimated \$1.7 trillion to modernize the nuclear weapons complex and nuclear delivery systems. For more on U.S. nuclear modernization, see U.S. Nuclear Modernization Programs. Under New START, both sides release aggregate data on their stockpiles every six months.

America Needs a Coalition to Win a Space War By: Aaron Bateman for War On The Rocks // April 29, 2020

In February, Gen. Jay Raymond, the new chief of space operations and the head of U.S. Space Command, publicly stated that two Russian spacecraft were tailing a U.S. satellite.

He said that Russia's behavior was "highly unusual and disturbing." On April 15, U.S. Space Command announced that Russia tested an antisatellite weapon. Russia and China both recognize that American high-precision warfighting is dependent on space systems. According to the U.S. director of national intelligence, both Russia and China are developing capabilities to destroy U.S. satellites in all orbital regimes — at all altitudes. But, unlike in the past, the United States is not on its own. It has allies and partners to turn to.

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During the Cold War, the United States and Soviet Union were the two dominant space powers and both worked diligently to develop space weapons. European allies, France in particular, decried efforts to createanti-satellite systems. Since the collapse of the Soviet Union, the number of spacefaring nations has markedly increased. And, as the world has become more dependent on space systems, attitudes about space security have changed.

The United States has demonstrated its commitment to space security through the revival of U.S. Space Command and the establishment of the U.S. Space Force. Other countries have, too. France and Japan, for example, have announced the creation of their own military space commands. NATO has declared that space is an operational domain. Now, the United States has allies who are eager to create a more robust network for monitoring adversary activity on orbit and to establish a unified space doctrine to achieve a resilient space security framework. Washington can build a coalition with its spacefaring allies to effectively prepare for and win a war that extends into outer space. Indeed, the United States should leverage its allies to build a more robust network to monitor and track activities in space. While doing so, Washington should lead its allies and the world to develop norms and practices that prevent destabilizing military activities in space.

The Cold War

During the Cold War, the United States included allies in its national security space activities but only on a limited basis. America's focus was on reconnaissance satellites, which were a closely held secret. The U.S. government did not even acknowledge the existence of the National Reconnaissance Office until 1992. Space reconnaissance activities were not publicly discussed in any detail. Cooperation in this sensitive area of U.S. space activity primarily involved the limited sharing of space-derived intelligence with select allies. Only the heads of NATO members were briefed on the existence of intelligence satellites. Beyond those heads of states, only the British had privileged access to American space capabilities. The United States shared raw images from imagery satellites with the United Kingdom as far back as the 1960s.

The importance of space systems did not reduce allies' concerns about the weaponization of space, even when the Soviet threat became more pronounced. In the 1970s, the Soviet Union possessed a co-orbital anti-satellite weapon — a satellite designed to maneuver next to its target on orbit and destroy it — called Istrebitel' sputnikov or "satellite killer." The United States promptly responded to the threat. In 1976, then-CIA director George H.W. Bush sent a memorandum to the national security advisor, stating that the United States needed to re-evaluate the vulnerability of its overhead reconnaissance systems. Beginning in 1977, the United States reinvigorated its efforts to develop an operational anti-satellite capability.

In the late 1960s, the British had launched the Skynet-series communication satellites that provided secure communications across the European theater; the system is located in geosynchronous orbit — 22,236 miles from Earth. London was primarily concerned with discouraging the United States and Soviet Union from developing anti-satellite weapons that could reach geosynchronous orbit. The British worried that, if the United States developed anti-satellite weapons that could reach geosynchronous orbit, the Soviet Union would follow suit and threaten Skynet. The British did, however, support the United States in matching the existing Soviet anti-satellite capability.

Most European allies were, however, overtly critical — or lukewarm at best — about America's efforts to develop an anti-satellite weapon. The French, in particular, were especially critical and called upon the United States and Soviet Union to prevent an arms race in space and implement arms control for anti-satellite weapons. Even as the allies began building their own space capabilities, they were not supportive of U.S. efforts to respond militarily to the Soviet space threat. Many NATO members were not fully aware of how dependent the alliance had become on information 25

derived from space systems. Washington had grown accustomed to pursuing national security activities in space under a shroud of secrecy with minimal allied consultation. The Cold War legacy of U.S. dominance and secrecy has left many in the space community with the mistaken belief that the United States should again go it alone.

Ready Allies

In the post-Cold War era, the space environment has markedly changed. There has been a proliferation of both American and foreign commercial space capabilities, an expansion of the number of spacefaring nations, a greater reliance on space systems by not just the United States but also its allies, and a significant growth in the number and sophistication of threat actors in space. While the United States, China, and Russia are certainly the most capable spacefaring nations, Washington's allies have much to offer to create greater resiliency for space systems and to win a war that extends into outer space. As the threats expand, U.S. cooperation with allies ought to expand as well. Gen. John Hyten, the vice chairman of the Joint Chiefs of Staff, has emphasized the necessity of expanding allied relationships in the space arena. Unlike during the Cold War, American allies are willing and eager to collaborate with the United States.

For example, last year, NATO declared space an operational domain. However, this announcement should be followed up with doctrine. In 2019, the U.K. Ministry of Defense published a document entitled "Towards a Defense Space Strategy." The British government is intent on creating a cadre of space experts that can ensure the security of U.K. and allied national security space systems. Britain's focus is on space-related training and collaboration with capable spacefaring allies.

Moreover, the United States already cooperates with Australia, Canada, New Zealand, the United Kingdom, France, and Germany at U.S. Space Command's Combined Space Operations Center located at Vandenberg Air Force Base. Additionally, allies participate in the Schriever Wargames that examine "critical space and cyberspace issues in depth." Today, unlike during the Cold War, U.S. allies are more aware of the threats to space systems. The United Kingdom has made it very clear that it views space as a warfighting domain. America's spacefaring allies, therefore, can serve as an important resource for ensuring continued U.S. space dominance.

Leveraging Allies

Current allied involvement is a good start, but more can be done to prepare for war extending into outer space — particularly in two areas: 1) space situational awareness, now more commonly called space domain awareness; and 2) establishing space-behavior norms. In January of this year, Japanese Prime Minister Shinzo Abe announced his country's establishment of a Space Domain Mission Unit. Additionally, the Japanese Ministry of Foreign Affairs has a stated goal of providing high-quality space domain awareness and of "maintaining four information-gathering satellite systems." While the unit will be located at Fuchu Air Base and use a radar "capable of monitoring space systems up to an altitude of 5,800 kilometers [3,600 miles]," the Japanese Ministry of Defense "will share information collected by the facility with U.S. forces." Japan is providing a replicable model for other spacefaring nations.

Allies can make a particularly valuable contribution to space security in the realm of space domain awareness. As an increasingly diverse set of sensors are integrated with U.S. space domain awareness resources, a more accurate picture of adversary activity in space can be achieved. Fundamentally, to obtain better space domain awareness, terrestrial real estate matters. More ground-tracking stations allow the United States and its allies to better track threats on orbit. By using radar and optical systems spread out all over the Earth, it is possible to have much better coverage of 26

potential threats in space. The United States can also work with allies who do not have any space capabilities to install optical telescopes and radar systems that can create a more robust and global network for monitoring space threats. Spacefaring allies, even in the most nascent stage of development, can play an invaluable role in this mission.

In early 2020, French President Emanuel Macron announced his country's establishment of a space command that will be placed under the French Air Force. According to reports by the French Ministry of Defense, the French space command will develop a modified version of its Syracuse satellites that can observe threats on orbit and use on-board weapons to engage them if necessary. Even if France decides not to arm its satellites in the near term, its Syracuse system will have strong potential for expanding allied space domain awareness in space.

Though London has promised to present a formal U.K. space defense strategy, one has not yet materialized. During the Cold War, Britain was the only European ally that provided political support for America's efforts to develop space weapons. Up until very recently, however, Britain has been largely silent on space security issues. Last year, then Defence Minister Gavin Williamson said the United Kingdom would remain at the forefront of the space domain. London is investing more in space intelligence capabilities, but it is not keeping pace with the threats from more sophisticated states.

Smaller allied countries might have limited but highly specialized services to offer a space coalition. Estonia, for example, has a reputation for hightech innovation, especially in cyber security and digital services. Estonia has established its Space Office, which is working with universities and start-ups to develop a broad spectrum of satellites, especially micro-satellites. U.S. investment in countries like Estonia can help create space innovation eco-systems that can contribute to the overall resiliency of allied military space activity.

The integration of allied and international commercial space domain awareness and satellite systems is a necessary task, but there are substantial obstacles to overcome in the process. A RAND report stated that "U.S.-European military space activities suffer a plight equal if not worse than the slate of more traditional interoperability issues that arise among NATO allies." As more countries contribute to space domain awareness, uniformity of data types will be of even greater importance. Many allied space programs are in a nascent stage and their potential has not been fully realized. Washington should actively encourage and work with European partners in their efforts to develop more capable space systems. As European allies develop more sophisticated capabilities for monitoring the space environment, Washington should push for interoperable systems that enable the seamless sharing of data across NATO.

The United States should work with European partners to develop a framework for monitoring and reacting to adversary threat activity such as a joint architecture for processing data from the many different allied space domain awareness sensors. A unified doctrine would focus on measures that enable foreign government and commercial systems to augment any loss of U.S. capability due to an attack. There are, however, potential legal obstacles and data-compatibility issues that will likely prevent the realization of an effective unified doctrine in the near term.

Most importantly, Washington should work with its spacefaring allies to develop comprehensive plans for reacting to an attack on an allied space asset. However, a military response does not have to include an attack on an adversary space system. The fundamental need is having the ability to respond quickly and in a unified manner to any space attack. An integrated diplomatic response should be created for space crises as well.

Establishing Norms in Space

During the Cold War, the United States refused to establish public policies regarding threats to space systems. The State Department and Intelligence Community consistently advised the White House not to even publicly provide a definition of outer space. Refraining from establishing specific and clearly articulated policies is no longer an option in the post-Cold War era. Allies — and potential allies — can assist the United States in establishing norms in space. If Paris moves ahead with deploying on-orbit weapons, the United States and all other NATO members should work with France to develop specific rules of engagement for the use of space weapons.

Fundamentally, France is making it clear that Washington has a potential partner in a space war that is willing to use offensive weapons. It is essential, however, to ensure that there is an agreed-upon framework for using French offensive capabilities to respond to an attack against an allied system. Additionally, Washington should strongly urge Paris not to test any weapon systems against objects in space. Such testing could create debris that is a threat to other satellites and could encourage Russia and China to follow up with similar tests.

Because of greater access to space technology, the number of spacefaring nations will continue to grow while there will be an increase in the number of state actors that possess space weapons. The 2019 Indian anti-satellite weapon demonstration is a case in point. Iran, for another example, could construct a crude anti-satellite weapon in the near term. Therefore, it is imperative for the United States to work with Israel — the most capable spacefaring nation in the Middle East — in monitoring and deterring Tehran from entering the space weapons arena.

Russia's recent anti-satellite weapon test and tailing of a U.S. satellite, and previous U.S. State Department statements about Moscow's destabilizing behavior highlight the lack of established norms for military space operations. For example, how close is too close for a satellite? Clearly, establishing a code of conduct in space is something that the United States cannot do on its own. It should be a joint effort with spacefaring allies around the globe. Additionally, it is imperative that America and its allies publicly confront Russia, in particular, about its dangerous behavior in space.

Russia, China, and the United States are especially concerned about rendezvous and proximity operations such as maneuvering close to another space object. If a country conducts rendezvous and proximity operations without providing any warning or explanation, the action could be treated as a hostile military act. Just as an uncoordinated approach by a foreign vessel to a U.S. Navy ship would be treated as an aggressive act, so too should similar maneuvers that involve American and allied spacecraft. Therefore, it is vital for Washington to work with its allies to establish what specific space behaviors will be considered unacceptable and to communicate — and enforce — such standards with aggressive spacefaring nations like Russia and China.

The United States and its allies should work collectively to prevent the testing of weapons in space. The debris generated from these tests poses a threat to the satellites of all spacefaring nations. If more nations begin testing anti-satellite weapons, military space systems could be inadvertently damaged. This situation could lead to an overall escalation in preexisting tension. The United States and its allies providing a clearly defined code of conduct for national security space activities is a feasible and necessary step to take in the immediate term.

Stronger Together

Certainly, though no one wants a war to begin in or extend into outer space, ignoring this possibility would be extremely negligent. The United States possesses highly sophisticated national security space systems that will be a prime target for capable spacefaring adversaries if a conflict should arise. In the past, the United States has presumed it can and will fight alone in space — but that is no longer necessary. Washington can better ensure its dominance in space if it more fully embraces its allies.

Washington would be wise to build a coalition that creates a more robust system for monitoring the space domain, reacting to space threats, and prevailing in a war that extends into outer space. Building a space coalition — especially one that includes allies from Europe, the Middle East, and Asia — is no simple task. But, working towards systems integration and also a common space doctrine is positive step forward towards increased resiliency of the space systems that are essential for precision warfighting. Of course, technical systems cannot be the only focus of the coalition; it should also devote attention to the development of norms for military space activity. Hyten has stated that "trying to fight alone in space would be a mistake" — a mistake that we cannot afford to make.

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At the edge of a new nuclear arms race

By: Rakesh Sood for The Hundu // April 27, 2020 00:02 IST -- Updated: April 27, 2020

The U.S.'s moves to resume nuclear testing, also signaling the demise of the ill-fated CTBT, could be the first signs In mid-April, a report issued by the United States State Department on "Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments (Compliance Report)" raised concerns that China might be conducting nuclear tests with low yields at its Lop Nur test site, in violation of its Comprehensive Nuclear-Test-Ban Treaty (CTBT) undertakings.

The U.S. report also claims that Russia has conducted nuclear weapons experiments that produced a nuclear yield and were inconsistent with 'zero yield' understanding underlying the CTBT, though it was uncertain about how many such experiments had been conducted. Russia and China have rejected the U.S.'s claims, but with growing rivalry among major powers the report is a likely harbinger of a new nuclear arms race which would also mark the demise of the CTBT that came into being in 1996 but has failed to enter into force even after a quarter century.

What does CTBT ban mean?

For decades, a ban on nuclear testing was seen as the necessary first step towards curbing the nuclear arms race but Cold War politics made it impossible. A Partial Test Ban Treaty was concluded in 1963 banning underwater and atmospheric tests but this only drove testing underground. By the time the CTBT negotiations began in Geneva in 1994, global politics had changed. The Cold War had ended and the nuclear arms race was over. The Union of Soviet Socialist Republics, or the USSR, had broken up and its principal testing site, Semipalatinsk, was in Kazakhstan (Russia still had access to Novaya Zemlya near the Arctic circle). In 1991, Russia declared a unilateral moratorium on testing, followed by the U.S. in 1992. By this time, the U.S. had conducted 1,054 tests and Russia, 715. Negotiations were often contentious. France and China continued testing, claiming that they had conducted far fewer tests and needed to validate new designs since the CTBT did not imply an end to nuclear deterrence. France and the U.S. even toyed with the idea of a CTBT that would permit testing at a low threshold, below 500 tonnes of TNT equivalent. This was one-thirtieth of the "Little Boy", the bomb the U.S. dropped on Hiroshima on August 6, 1945 — its explosive yield was estimated to be the equivalent of 15,000 tonnes of TNT. Civil society and the non-nuclear weapon states reacted negatively to such an idea and it was dropped.

Some countries proposed that the best way to verify a comprehensive test ban would be to permanently shut down all test sites, an idea that was unwelcome to the nuclear weapon states.

Eventually, the U.S. came up with the idea of defining the "comprehensive test ban" as a "zero yield" test ban that would prohibit supercritical hydro-nuclear tests but not sub-critical hydrodynamic nuclear tests.

Once the United Kingdom and France came on board, the U.S. was able to prevail upon Russia and China to accept this understanding. After all, this was the moment of the U.S.'s unipolar supremacy. At home, the Clinton administration in the U.S. satisfied the hawks by announcing a science-based nuclear Stockpile Stewardship and Management Program, a generously funded project to keep the nuclear laboratories in business and the Pentagon happy. Accordingly, the CTBT prohibits all parties from carrying out "any nuclear weapon test explosion or any other nuclear explosion"; these terms are neither defined nor elaborated.

Why it lacks authority

Another controversy arose regarding the entry-into-force provisions (Article 14) of the treaty. After India's proposals for anchoring the CTBT in a disarmament framework did not find acceptance, in June 1996, India announced its decision to withdraw from the negotiations. Unhappy at this turn, the U.K., China and Pakistan took the lead in revising the entry-into-force provisions.

The new provisions listed 44 countries by name whose ratification was necessary for the treaty to enter into force and included India. India protested that this attempt at arm-twisting violated a country's sovereign right to decide if it wanted to join a treaty but was ignored. The CTBT was adopted by a majority vote and opened for signature. Of the 44 listed countries, to date only 36 have ratified the treaty.

China, Egypt, Iran, Israel and the U.S. have signed but not ratified. China maintains that it will only ratify it after the U.S. does so but the Republican dominated Senate had rejected it in 1999. In addition, North Korea, India and Pakistan are the three who have not signed. All three have also undertaken tests after 1996; India and Pakistan in May 1998 and North Korea six times between 2006 and 2017. The CTBT has therefore not entered into force and lacks legal authority.

Nevertheless, an international organisation to verify the CTBT was established in Vienna with a staff of about 230 persons and an annual budget of \$130 million. Ironically, the U.S. is the largest contributor with a share of \$17 million. The Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) runs an elaborate verification system built around a network of over 325 seismic, radionuclide, infrasound and hydroacoustic (underwater) monitoring stations. The CTBTO has refrained from backing the U.S.'s allegations.

Competition is back

The key change from the 1990s is that the U.S.'s unipolar moment is over and strategic competition among major powers is back. The U.S. now identifies Russia and China as 'rivals'. Its Nuclear Posture Review asserts that the U.S. faces new nuclear threats because both Russia and China are increasing their reliance on nuclear weapons. The U.S., therefore, has to expand the role of its nuclear weapons and have a more usable and diversified nuclear arsenal.

The Trump administration has embarked on a 30-year modernisation plan with a price tag of \$1.2 trillion, which could go up over the years. Readiness levels at the Nevada test site that has been silent since 1992 are being enhanced to permit resumption of testing at six months notice. Russia and China have been concerned about the U.S.'s growing technological lead particularly in missile defence and conventional global precision-strike capabilities.

Russia has responded by exploring hypersonic delivery systems and theatre systems while China has embarked on a modernisation programme to enhance the survivability of its arsenal which is considerably smaller. In addition, both countries are also investing heavily in offensive cyber capabilities. The new U.S. report stops short of accusing China for a violation but refers to "a high level of activity at the Lop Nur test site throughout 2019" and concludes that together with its lack of transparency, China provokes concerns about its intent to observe the zero-yield moratorium on testing.

The U.S. claims that Russian experiments have generated nuclear yield but is unable to indicate how many such experiments were conducted in 2019. It suggests that Russia could be testing in a manner that releases nuclear energy from an explosive canister, generating suspicions about its compliance. The New Strategic Arms Reduction Treaty (New START) limits U.S. and Russian arsenals but will expire in 2021 and U.S. President Donald Trump has already indicated that he does not plan to extend it. Instead, the Trump administration would like to bring China into some kind of nuclear arms control talks, something China has avoided by pointing to the fact that the U.S. and Russia still account for over 90% of global nuclear arsenals.

Current context

Both China and Russia have dismissed the U.S.'s allegations, pointing to the Trump administration's backtracking from other negotiated agreements such as the Iran nuclear deal or the U.S.-Russia Intermediate-Range Nuclear Forces (INF) Treaty. Tensions with China are already high with trade and technology disputes, militarisation in the South China Sea and most recently, with the novel coronavirus pandemic. The U.S. could also be preparing the ground for resuming testing at Nevada.

The Cold War rivalry was already visible when the nuclear arms race began in the 1950s. New rivalries have already emerged. Resumption of nuclear testing may signal the demise of the ill-fated CTBT, marking the beginnings of a new nuclear arms race. Rakesh Sood is a former diplomat and presently Distinguished Fellow at the Observer Research Foundation.

A China-U.S. Cold War?

By Charles Lipson - RCP Contributor // April 27, 2020

China's problems are mounting.

As Beijing works frantically to cover up its responsibility for the global pandemic, Western intelligence is trying to find out exactly how the outbreak began and how much China's leaders knew. It is already clear that China's secrecy and deception imposed huge costs in lives and livelihoods around the world. Their regime will pay a heavy price as world politics is reshaped to see China as a dangerous adversary, not a benign partner.

U.S. intelligence agencies, working with epidemiologists, believe that the new virus first detected in Wuhan was a natural strain, not a man-made bioweapon. What they still don't know is whether it spread from a wild bat or, as they increasingly believe, from poor containment at a virology lab. They still don't know the identity of "patient zero." They still haven't been able to visit the region, the lab, or its researchers.

They still haven't been able to review essential medical data, much of it now deliberately destroyed. Chinese researchers and early patients have disappeared and may be dead. Official tallies of the dead and infected are obvious fakes. It's a grim picture. The orchestrated coverup by the Chinese Communist Party cannot obscure it. Despite this bodyguard of lies, Western intelligence agencies are confident the CCP's top officials knew in December that the virus was highly contagious.

Internal communications reveal party officials discussing the problem in mid-January, even as they told the world the opposite. Their deception mattered since Western health officials had no idea the virus spread so rapidly -- or that their nations were unwittingly importing it. In late January and early February, most Western specialists still believed the outbreak could be contained, much as SARS had been. In early March, Dr. Anthony Fauci, the government's top expert on infectious diseases, said he believed it was fine for younger, healthier people to travel on cruise ships. It wasn't. The Chinese knew, but he didn't. China's leaders not only knew how contagious the virus was, they acted on that inside information. In December, they stopped all internal flights from Wuhan to protect Shanghai, Beijing, and other population centers. Yet they allowed international flights to continue. Flights from Wuhan to Madrid. Wuhan to Rome. Wuhan to Seattle. Wuhan to Los Angeles. Why? Probably to hide the health crisis from global scrutiny.

Meanwhile, they began secretly scooping up the world's supply of N95 masks and personal protective equipment. For years, China had been a major exporter of those products. Now, surreptitiously, they were becoming net importers. They used some of the purchases at home and then, when the pandemic hit other nations, began re-exporting them at sharply inflated prices. Since then, China has ramped up its own production for foreign sales, although many buyers have found the rapidly produced medical products, from masks to ventilators, are defective and worthless.

Whatever Wuhan officials knew in late November, they surely knew the truth a few weeks later and so did their bosses in Beijing. They knew health care workers were falling ill from contact with patients, and they knew some infected patients had no contact with the "wet market" or the Wuhan Institute of Virology. The only way they could have contracted the disease was from human contact.

That knowledge was critical. What did China do with it? They arrested, tortured, and silenced anyone who might share it: doctors, researchers, and reporters. Some were coerced into renouncing their earlier warnings, forced to condemn themselves, in writing, for "spreading gossip." Loose lips sink dictatorships. Fortunately, there is an international organization designed specifically to investigate health emergencies like this and warn the world. Unfortunately, that institution is the World Health Organization.

Its leader, Tedros Adhanom Ghebreyesus, was handpicked by Beijing, and the CCP got exactly what it wanted: a toady. When the WHO first learned of the viral outbreak in Wuhan, it should have investigated immediately and sounded the alarm. It didn't. Instead, the WHO rubber-stamped China's deceptions, refused to disseminate timely information from Taiwan, and, knowingly or not, spread misinformation to the world.

These were deadly blunders, and the Trump administration has rightly condemned the WHO for them. As the organization's largest donor, America has leverage, and President Trump is using it. He has suspended contributions until his administration completes an investigation, first of this failure and then of the WHO's overall performance. Trump will undoubtedly demand a thorough housecleaning before sending any more money, probably at a much-reduced level.

China's campaign of deception is not in the rearview mirror. It is ongoing. For one thing, the government is believed to be significantly downplaying the number of infections and deaths of Chinese citizens. Instead of taking responsibility, Beijing is still spinning a ludicrous tale that American soldiers are somehow responsible for the pandemic. They offer no evidence. China, they say, is the world's savior during this crisis, its source of lifesaving medical supplies.

Actually, it is the angel of death. Beijing is now so committed to this fable it is hard to see how they dig themselves out, at home or abroad. No one can predict what price the communist regime will pay within China. We simply don't know whether the death toll and economic disruption will foster widespread unrest — and, if they do, whether the military can smash it and the party remain united behind President Xi Jinping. The military is already cracking down on renewed protests in Hong Kong, fearing they might spread to the mainland.

Whatever Beijing's success in controlling the home front, it cannot control the battlefields abroad. Once the immediate health crisis is over, voters and politicians will survey the wreckage and conclude that much of it could have been avoided if Chinese officials had told the truth, and told it promptly. Only then would public health authorities have known what to expect and how to react. The CCP deliberately denied the world that essential information.

Equally troubling, Beijing spread the virus -- knowingly, deliberately -- by allowing regular flights to Europe and America. Those travelers caused deadly outbreaks across the continent and on America's West Coast. From there, it spread to the East Coast as infected travelers arrived from Europe. What quickly became the worst health crisis in a century could have been avoided, or significantly minimized, if Chinese officials had simply told the truth. Americans understand that. According to recent polls, four out of five blame China for this crisis.

They want answers, and they want China held accountable. The first step, already beginning, is a much darker global view of China and its communist regime. Once seen as economic partners and occasional security rivals, they are now seen as dangerous, predatory foes. That reassessment will fundamentally reshape world politics, and the Trump administration is leading it. It considers China the greatest military threat, far more formidable than Russia, Iran, or North Korea.

Coping with that threat won't require larger U.S. defense budgets since military funding and readiness have already been increased significantly since Trump took office. What's new is the economic response. The Trump administration is beginning a systematic policy to reduce dependence on China. There is already a bipartisan consensus that sensitive production should be brought home, beginning with pharmaceuticals, medical supplies, telecommunications, high technology, and artificial intelligence.

Other sectors deemed important for national security will soon follow. Washington will demand similar policies from allies, especially those who share intelligence. The obvious loser will be Huawei's 5G telecom network. The U.S. will also begin restricting Chinese ownership of strategic

assets, such as ports, and will urge our allies to do the same. Even commonplace items, such as Chinese-made drones, will be questioned since they offer a hostile regime a possible window on Americans.

The same is obviously true for home-security devices and networked appliances. This new "Internet of things" is becoming embedded in American lives, including those with high-level security clearances. The danger of espionage is obvious. It's obvious, too, that Americans will want to sue China for economic damages. Some lawsuits have already been filed. To win, they need a waiver of China's "sovereign immunity," and some members of Congress have proposed it.

What about the annual influx of Chinese students and research scientists who come to America's top research universities? Serious questions will arise on policy after policy, all giving China broad access to America. Expect serious debate and big changes. If China's access is squeezed, it will respond ferociously. Beijing would demand foreign companies leave production in China if they want to sell there.

It would leverage its global trade and investment ties and continue using loans to gain access to poor countries. It would ramp up cyberattacks, election interference, and industrial espionage. It is already doing so. It would tighten military relationships with regimes already confronting America: Russia, Iran, North Korea, Venezuela, and Cuba. And it would seek closer relations with Pakistan, Turkey, and central Asia. The result would be an alliance system centered on Beijing, opposed to Washington, trying to neutralize Europe with economic ties.

Decoupling from China is a costly, difficult undertaking, and one sure to prompt pushback from Western corporations. Europeans, who have few strategic interests in Asia, will want to sustain their profitable stake in China. They will want to take advantage of America's harsher policies, hoping to sell Airbus planes to replace Boeing, for example. Israel, where China has invested heavily in high technology, will face intense pressure from Washington to reduce those ties.

It will follow Washington's line, but reluctantly. Nearly all international companies will quietly resist pressure from the Trump administration. They don't want to relinquish China's vast, profitable market. Nor do they wish to uproot supply chains that run through factories there, although they are moving quickly to find other, less risky sources. Finally, the Trump administration itself doesn't want to decouple too quickly, and the president has said as much.

He certainly wants China to continue making the huge purchases it promised recently. In the Phase 1 trade deal, China committed to buy \$250 billion annually from the U.S., including \$40 billion-\$50 billion in agricultural goods. Trump would hate to see that deal collapse before November. Farmers and factories across the South and Midwest need those sales, and Trump badly needs those votes.

So far, the Democratic Party has not adopted a clear stance on China. Most prominent figures have avoided blaming Beijing since doing so might seem to absolve Trump. Foreign policy elites, such as Fareed Zakaria, take that line and defend economic interdependence. They were already appalled by Trump's nationalism and protectionism. They continue to attack the president and downplay malfeasance by China and the WHO. A few have taken a different approach, reminding voters of Trump's early praise for Xi. But that's really an opportunistic attack on Trump, not a hard-line policy on China.

Most Democrats won't run to Trump's right on China. Rather, they will say he is too belligerent, too nationalistic, too eager to blame others for his own mistakes. As Sen. Chris Murphy (D-Conn.) put it, "The reason that we're in the crisis that we are today is not because of anything China did." Adam Schiff, chairman of the House Intelligence Committee, said almost the same thing. On April 18, he tweeted that President Trump should "Stop blaming China, the WHO, or the states."

For now, Joe Biden is playing both sides of the fence. Early on, he disparaged Trump's Jan. 31 decision to restrict flights from China. Yet the political action committee working for Biden's election recently aired a nasty campaign ad asserting Trump has "rolled over for the Chinese" during the pandemic. The ad also claimed that Trump "sent China our [medical] supplies," a falsehood that even the anti-Trump media exposed. But the Democrats' presumptive presidential nominee hasn't publicly done any reevaluating of U.S.-Sino relations.

Biden has long favored cooperation with Beijing and has not signaled any basic change in that position. He will probably focus less on new policies and more on Trump administration's faults during the pandemic: poor initial testing (due to contamination at CDC labs), too few ventilators, too little personal protective equipment, misleading "happy talk" before the crisis' scale was known, and the slow ramp-up of testing.

But all of these issues are ultimately linked to China as well, and all of them will matter in November. The overriding question is whether the administration did a good job handling the health crisis and economic reopening. Everything else pales beside it. Democrats will say the medical response was botched and the economic reopening came too soon or too late, depending on which criticism has more traction this summer.

A secondary question is whether the Democratic nominee could have done any better. Beyond that, expect to see U.S. foreign policy reshaped by the deepening Sino-American conflict. Republicans normally gain when security issues are prominent and should again this time. But the most profound questions are not partisan at all. Can Washington deter China's expansive global role? Can these nuclear superpowers avoid direct engagement in contested areas like the South China Sea and Korean Peninsula? And are we beginning yet another "long twilight struggle," another Cold War? Charles Lipson is the Peter B. Ritzma Professor of Political Science Emeritus at the University of Chicago, where he founded the Program on International Politics, Economics, and Security. He can be reached at charles.lipson@gmail.com

US Navy stages back-to-back challenges to China's South China Sea claims

By Brad Lendon, CNN

A United States Navy warship conducted a "freedom of navigation operation" Wednesday aimed in part at challenging China's claims in the South China Sea, the second such operation in as many days near disputed islands that the US has accused Beijing of militarizing.

The operations come amid heightened tension between Washington and Beijing over the handling of the coronavirus and after US Secretary of State Mike Pompeo accused China of exploiting attention given the pandemic to "bully" its neighbors in the South China Sea (SCS). The guided-missile cruiser USS Bunker Hill on Wednesday "asserted navigational rights and freedoms in the Spratly Islands, consistent with international law," said Cmdr. Reann Mommsen, a spokesperson for the Navy's 7th Fleet, in a statement.

The Spratlys, called the Nansha Islands by China, are in the southern portion of the 1.3 million square mile South China Sea. While several countries have claims on the island chain, the US has long accused China of militarizing the Spratly Islands by deploying anti-ship cruise missiles and long-range surface-to-air missiles to Chinese outposts there. "This freedom of navigation operation upheld the rights, freedoms, and lawful uses of the sea recognized in international law by challenging the restrictions on innocent passage imposed by China, Vietnam, and Taiwan," Mommsen said. On Tuesday the guided-missile destroyer USS Barry conducted a freedom of navigation mission near the Paracel Islands, which are called the Xisha Islands by China, challenging Beijing's claims to the waters around the islands in the northern areas of the South China Sea. US freedom of navigation operations in the South China Sea are not rare, but they typically occur weeks or more apart.

New US strategy

The back-to-back missions are indicative of a new Pentagon strategy -- "strategic predictability, operational unpredictability" -- to keep foes on their heels, said Timothy Heath, senior defense researcher with the Rand Corp. think tank in Virginia. Heath pointed to a similar move earlier in the month when the US Air Force ended its Continuous Bomber Presence on the island of Guam, opting instead to move B-1s, B-2s and B-52s into the region whenever the Pentagon sees fit.

"Just as the bombers at Guam are no longer consistently present there, US naval forces in the South China Sea are likely to carry out operations and activities in unusual patterns that are inconsistent with past, predictable patterns," Heath said. The US Navy said the back-to-back operations are just business as usual. "US forces operate in the South China Sea on a daily basis," Mommsen said in the statement.

"The United States will fly, sail, and operate wherever international law allows -- regardless of the location of excessive maritime claims and regardless of current events," she said. For its part, Beijing said after Tuesday's US operation in the Paracels that Washington is increasing tensions in the region and at the same time hindering the battle against the Covid-19 pandemic. "China urges the United States to focus on its own business with pandemic prevention and control, make more contributions to the global fight against the Covid-19.

And immediately stop military operations that are detrimental to regional security, peace and stability," Senior Col. Li Huamin, spokesperson for the People's Liberation Army Southern Theater Command, said in a statement. China also said it deployed forces to warn away the USS Barry from waters near the Paracels on Tuesday. Analyst Carl Schuster, a former US Navy captain, said that claim could have had as much to do with Wednesday's repeat operation in the Spratlys as anything. "China has been claiming it has expelled the US Navy from those waters. This is a way of showing they haven't," Schuster said.

Pompeo criticizes China

On April 23, the US secretary of state said it was Beijing that was using the pandemic to further its claims in the South China Sea. "The CCP (Chinese Communist Party) is exerting military pressure and coercing its neighbors in the SCS, even going so far as to sink a Vietnamese fishing vessel. The US strongly opposes China's bullying and we hope other nations will hold them to account too," Pompeo wrote in a joint announcement with the Association of Southeast Asian Nations on efforts to battle the coronavirus.

Pompeo also cited China's imposition of new administrative districts around the island chains past which the US warships sailed this week as an example of its pressure on the South China Sea. China claims almost the entire South China Sea as its sovereign territory, and it has aggressively asserted its stake in recent years. Besides building up and fortifying reefs and islands, Beijing has dispatched survey ships to assert mineral rights and deployed large numbers of coast guard to the area.

It has also worked steadily in recent years to modernize and expand the PLA Navy to protect what Beijing calls its sovereign territory. Earlier this month it established the Xisha District and the Nansha District under Sansha City, a prefecture-level city on Woody Island in the Paracels. The move cements centralized control over the islands from a single city.

"Iran's Space Super-Weapon?"

https://www.newsmax.com/peterpry/nour-soleimani-ramdan-irgc/2020/04/26/id/964732/ By Dr. Peter Vincent Pry for Newsmax // Sunday, 26 April 2020 01:56 PM

While Russia and China condemn the U.S. Space Force for "militarizing space," Iran may be developing — or may already have in orbit — an offensive space super-weapon of awesome power.

On Weds. April 22, Iran successfully orbited its first military satellite, launched by the Islamic Revolutionary Guard Corps (IRGC), the world's most powerful state-sponsored terrorist organization. The satellite on its first orbit apparently passed over the United States. Trajectory of the IRGC's "Nour" ("Light") satellite overflies the United States from south to north, from the U.S. blind and defenseless side where there are no Ballistic Missile Early Warning System radars and no National Missile Defense interceptors.

Satellite altitude is 425 kilometers (264 miles). If nuclear-armed for electromagnetic pulse attack, Nour could project an EMP field covering most of North America, potentially blacking-out power grids and other critical infrastructures that support electronic civilization and the lives of 330 million Americans. If Nour is an experimental or actual space EMP weapon, every nation on Earth is threatened several times daily. Nour's trajectory and current location can be seen here.

While most analysts are fixated on when in the future Iran will develop highly reliable intercontinental missiles, guidance systems, and reentry vehicles capable of striking a U.S. city, the threat here and now from EMP is largely ignored. EMP attack does not require an accurate guidance system because the area of effect, having a radius of hundreds or thousands of kilometers, is so large. No reentry vehicle is needed because the warhead is detonated at high-altitude, above the atmosphere.

Missile reliability matters little because only one missile has to work to make an EMP attack against an entire nation by warhead or satellite. Iran is strategic partners with North Korea, which has nuclear weapons, ICBMs, and has orbited satellites. They share military and missile technology. North Korean scientists work in Iran's space program. The EMP Commission "Chairman's Report" warns two North Korean satellites orbit over the U.S. that may be nuclear-armed for surprise EMP attack:

"We recommend that the President direct the Secretary of Defense to use national technical means to ascertain if there is a nuclear weapon aboard North Korea's KMS-3 or KMS-4 satellites that orbit over the United States. If either or both of these satellites are nuclear-armed, they should be intercepted and destroyed over a broad ocean area where an EMP resulting from salvage-fusing will do the least damage to humanity." (For the EMP Commission "Chairman's Report" see "The Power And The Light")

Moreover, the EMP Commission "Chairman's Report" calls upon the President to protect the nation from a surprise EMP attack delivered by satellite: "We recommend that the President direct the Secretary of Defense to develop a space-surveillance program to detect if any satellites orbited over the United States are nuclear-armed, and develop space-interception capabilities to defend against nuclear-armed satellites that might make an EMP attack."

But the intelligence community and official Washington claim Iran has no nuclear weapons. They also claimed North Korea was a decade away from ICBMs and H-bombs, until proved wrong on both counts in 2017. According to Ambassador **R. James Woolsey** (former Director of Central Intelligence), **Dr. William Graham** (former EMP Commission chairman and White House science Advisor to President Reagan), Ambassador **Henry Cooper** (former director of the Strategic Defense Initiative), and **Fritz Ermarth** (former National Security adviser to President Reagan and chairman of the National Intelligence Council):

"We assess, from U.N. International Atomic Energy Agency reports and other sources, that Iran probably already has nuclear weapons. Over 13 years ago, prior to 2003, Iran was manufacturing nuclear-weapon components, like bridge-wire detonators and neutron initiators, performing non-fissile explosive experiments of an implosion nuclear device, and working on the design of a nuclear warhead for the Shahab-III missile." (National Review "Underestimating Nuclear Missile Threats from North Korea and Iran," Feb. 12, 2016).

Significantly, an Iranian military textbook published ten years ago, ironically named "Passive Defense," describes nuclear EMP attack on the U.S. as potentially decisive in more than 20 passages. ("Passive Defense," Army of the Islamic Republic of Iran, Martyr Lt. General Sayed Shiraz Center for Education and Research, 2010.) Ironically, while electric power lobbyists resist EMP protection of the U.S. grid, five years ago Iranian press reported Tehran is violating international sanctions and going full bore to protect itself from nuclear EMP attack.

The article "Iran Builds EMP Filter For First Time," Mehr News Agency June 13, 2015, depicts a satellite making an EMP attack. The Islamic Revolutionary Guard Corps claims their satellite is for military communications, global positioning to support precision strikes, reconnaissance against "long-range threats," space-based" missile defense, and can instantaneously "destroy targets in space"—everything but EMP attack (though the last two could be EMP).

Did our all too fallible intelligence community tell President Trump the Nour is for Iranian TV shows? Maybe we should worry a little when the world's deadliest terror organization orbits a satellite over the "Great Satan" the day before Ramadan, a favored time for terror attacks, four months after assassination of IRGC General Suliemani, whose death the Islamic Revolutionary Guard Corps is sworn to avenge. Dr. Peter Vincent Pry is executive director of the Task Force on National and Homeland Security. He served on the Congressional EMP Commission as chief of staff, the Congressional Strategic Posture Commission, the House Armed Services Committee, and the CIA. He is author of "Blackout Wars," and also of "The Power and the Light," available on Amazon.com.

Global defense spending sees biggest spike in a decade

By: Aaron Mehta for Defense News

WASHINGTON — Global defense spending hit \$1.917 trillion in 2019, a 3.6 percent increase over previous year figures and the largest increase in one year since 2010, according to the annual report by the Stockholm International Peace Research Institute.

The United States remains the world's largest defense spender in 2019, with its \$732 billion representing 38 percent of global military spending, SIPRI has reported. That was followed by China (\$261 billion, at 14 percent of global total), India (\$71.1 billion, at 3.7 percent), Russia (\$65.1 billion, at 3.4 percent) and Saudi Arabia (\$61.9 billion, at 3.2 percent). All told, the top five nations accounted for 62 percent of overall military spending.

"Global military expenditure was 7.2 percent higher in 2019 than it was in 2010, showing a trend that military spending growth has accelerated in recent years," SIPRI's Nan Tian said in a statement. "This is the highest level of spending since the 2008 global financial crisis and probably represents a peak in expenditure." Large year-over-year increases were seen in China (5.1 percent), India (6.8 percent), Russia (4.5 percent), Germany (10 percent) and South Korea (7.5 percent).

Regionally, military spending increased in Europe by 5 percent, Asia and Oceania by 4.8 percent, the Americas by 4.7 percent, and Africa by 1.5 percent. Combined military spending by the 29 NATO member states was \$1.035 trillion in 2019.

SIPRI is widely considered to be the authority on military expenditures and exports, having gathered such data for decades.

Other key developments, as noted by the researchers:

Together, the top 15 countries spent \$1.553 trillion, 81 percent of global military spending. All but three countries in the top 15 had higher military expenditures in 2019 than in 2010, the exceptions being the U.S. (15 percent drop), the U.K. (15 percent drop) and Italy (11 percent drop.) Total military expenditures of the 11 countries in the Middle East for which data is available decreased by 7.5 percent to \$147 billion, driven in part by an estimated 16 percent drop from Saudi Arabia. That overall percentage also decreased in 2018. SIPRI was unable to calculate totals from Qatar, Syria, the United Arab Emirates and Yemen.

Military spending in South America was relatively unchanged from the previous year, coming in at \$52.8 billion. Fifty-one percent of that spending, \$26.9 billion, came from Brazil. Combined military expenditures from Africa grew by 1.5 percent to an estimated \$41.2 billion in 2019, the first time that region saw a spending increase in five years. That includes plus-ups in Burkina Faso (22 percent), Cameroon (1.4 percent), Mali (3.6 percent), the Central African Republic (8.7 percent), the Democratic Republic of the Congo (16 percent) and Uganda (52 percent).

Of the 149 countries SIPRI studied, 10 allocated 4 percent or more of their gross domestic product to the military, which the group defines as the "military burden." Thirteen countries had a military burden of 3 to 3.9 percent of GDP; 24 had a military burden of 2 to 2.9 percent; 65 had a military burden of 1 to 1.9 percent; and 34 allocated less than 1 percent of their GDP to the military. Three countries had no military expenditures in 2019: Costa Rica, Iceland and Panama.

Trump could take the lid off the world's largest nuclear stockpiles

By: Dave Lawler for Axios // Apr 30, 2020 - World

There are three truly existential threats to humanity: pandemics, climate change and nuclear weapons.

Why it matters: COVID-19 has rightfully absorbed the world's attention and will for months to come. But the last treaty constraining the world's largest nuclear arsenals is set to expire in nine months. Where things stand: The Trump administration has expressed little urgency over the looming expiration of New START (Strategic Arms Reduction Treaty), which comes two weeks after the next presidential inauguration on Feb. 5.

- The treaty limits the long-range nuclear weapons programs of the U.S. and Russia, and it's verified through regular inspections.
- It was signed in 2010 to replace the 1991 START and could be extended for up to five years by mutual assent (congressional approval is not necessary).
- Russia had previously called for renegotiation, but it's now urging for an extension without preconditions.
- The U.S. wants to negotiate a new deal instead, but time is running out.

The Trump administration has three primary concerns about extending New START, <u>according to Frank Klotz</u>, the former U.S. Department of Energy undersecretary for nuclear security (2014–2018).

- 1. It doesn't cover tactical nuclear weapons. Russia has more short-range, lower-yield weapons and more ways to deliver them.
- 2. It doesn't cover the new nuclear delivery systems Russia is currently developing.
- 3. It doesn't constrain China, which is significantly expanding its nuclear capabilities.

The third point looms largest for the Trump administration.

- The administration is concerned that extending New START would undermine its hopes of a trilateral deal involving China, Foreign Policy reports, citing a State Department document.
- Marshall Billingslea, Trump's newly appointed special envoy for arms control, has been <u>tasked with striking a new deal</u> that restricts both of America's "great power" competitors.

Between the lines: China has no intention and little incentive to join such a deal, Rose Gottemoeller, the lead U.S. negotiator on New START, said Wednesday at an event hosted by the Arms Control Association.

- By the numbers: The U.S. and Russia together have an estimated 91% of the world's nuclear warheads, and both countries have 20 times as many as China.
- Gottemoeller agrees that China should be brought into the arms control framework and that there are thorny issues to be discussed around tactical nuclear weapons and missile defense systems (a top Russian concern).
- But she contends that they can't possibly be negotiated before February particularly amid a pandemic and U.S. general election.

On the one hand: Some China hawks see little reason to agree to an arms control deal that does not involve America's biggest geopolitical adversary.

On the other: Adm. Mike Mullen, the former chairman of the Joint Chiefs, says New START provides "continuous stability in an increasingly uncertain world." The worst-case scenario, Mullen says, is an "arms race that none of us can afford."

In Defense of Deterrence

National Institute for Public Policy, 27 Apr 20 Michael Rühle

Introduction: The Appeal of Deterrence

The concept of deterrence is congenial to Western democracies. As Lawrence Freedman put it, deterrence strategies "appeal to governments because they can be presented as being defensive but not weak, and firm but not reckless." [1] Deterrence implies that one can keep unwelcome developments at bay by remaining essentially passive: the mere show of force can substitute for military action. Military deterrence is essentially a status quo concept. It does not rule out political, social or economic change, nor does it rule out competition between states. However, it seeks to prevent an opponent from using force to achieve its antagonistic political aims, thus making major war less likely. To be sure, the concept has its share of logical inconsistencies and moral dilemmas. When effective, however, its gains far outweigh its costs.

An Anxious Re-Birth

As the international environment is characterized by increased competition, the concept of deterrence, after over two decades of having received scant attention in the West, has re-entered the strategic lexicon. However, this return of deterrence is burdened with a range of problems. On the nuclear level in particular, an international NGO-led effort seeks to de-legitimize the very concept that appears to have contributed to the "long peace" between the world's major powers. Arguing that nuclear deterrence is a myth, or that the system is too prone to failure, supporters of the Nuclear Ban Treaty and of nuclear disarmament in general fundamentally challenge the tenets of established nuclear governance. The Ban Treaty will not lead to nuclear disarmament, nor will it spell the end of nuclear deterrence. However, it will seriously complicate the deterrence policies of, and nuclear cooperation among, Western democracies. By contrast, authoritarian "managed democracies" (V. Putin) will not take it seriously as a policy to follow.

Other familiar criticisms of deterrence focus on the difficulty of proving the concept's effectiveness; the ethical and moral tension between the mere threat of military reprisals and their actual implementation; and the risk that it locks its protagonists into a permanent adversarial relationship. According to deterrence critics, by interpreting an adversary's policies and postures as a threat that requires a resolute response, both sides are condemned to think in "worst case" and "action-reaction" categories, and thus remain unable or unwilling to explore pathways to overcome their hostility.

The end of the Cold War revealed the shaky intellectual foundations of such simplistic action-reaction models. The considerable military downsizing that followed the easing of East-West tensions brought home that once political relations change, so do force levels and postures. Many deterrence critics had misled themselves and others by their "negative militarism", i.e. by their belief that in order to change political relationships one first had 41

to change military strategies and force levels. The actual historical evidence suggests that significantly reducing force levels could only follow changed political relations.

Deterrence critics again confused cause and effect when they tried to give intellectual credibility to the goal of nuclear disarmament, such as President Obama's "Prague agenda." This agenda was bound to fail for numerous reasons, yet in their desire to make it work, many analysts-turnedadvocates employed rather tortuous arguments. Some compared abolishing nuclear weapons to abolishing slavery or even to kicking the habit of smoking. Others tried to prove that nuclear deterrence was a myth, even though their arguments often defied common sense. [2] Still others admitted that achieving a nuclear-free world "would require a fundamental change in geopolitics," [3] yet some tried to create the impression that restructuring international relations was just a matter of sufficient "political will." Put simply, in the context of the Prague agenda, many deterrence researchers were willing to suspend serious research in favor of anti-nuclear activism. In the end, however, the familiar international system and related need for deterrence proved more durable than these critics advertised.

A New Wave of Deterrence Research

However, it is not only the critics of deterrence, but also some of its supporters, that are making it hard to give that concept its rightful, reasonable place. As the international environment is growing more complex, with a increasing number of actors using an ever-broader array of tools to compete, much attention is now being focused on how to apply deterrence to non-traditional, non-kinetic, or hybrid threats. Of course, there is no a priori reason why deterrence could not be applied to the non-military realm. After all, deterrence is a psychological concept that permeates all human activity, from education to criminal law. However, this emerging new research, which labels itself a new – fifth – "wave" in that field, [4] stretches that concept beyond recognition.

The new research acknowledges that deterring non-kinetic, non-existential and sometimes non-attributable actions is far more complex than deterring an adversary's military action. Yet it argues that to deter an adversary from causing harm, the West does indeed have a considerable array of tools available: economic sanctions, freezing financial assets, cyber(counter)attacks, publicly naming and shaming the adversary for his malign actions, expelling diplomats, or closing legal gaps in order to deter illicit activities, to name but a few. These tools, if properly orchestrated, should provide Western nations with a rich menu of options for deterrence by punishment as well as by denial. [5] Others argue that in a world characterized by hybrid threats the punitive aspect of classical deterrence theory is becoming less relevant. Instead, much greater attention should be devoted to the study of incentives, i.e. how to encourage with incentives an adversary to do what one wants it to do. [6] In short, the "fifth wave" contends that the concept of deterrence can be adapted to reach far beyond existential military contingencies and military threats.

Analytical Confusion

The intellectual effort devoted to this new deterrence research is impressive. However, as with probably every "new" research field, it tends to overestimate its own relevance. For example, simply listing the actions that one might be able to apply to cope with a hybrid adversary does not turn them into reality or even suggest if or when they could credibly contribute to deterrence: in non-existential contingencies, governments simply may not wish to make good on previously made deterrence threats, since this may be perceived as incurring other, and possibly much higher, political or economic costs. After all, unlike traditional military deterrence, where the adversaries' militaries stay away from each other, this new ("modern")

deterrence, which is supposed to stretch across the cyber, economic and social domains, takes place in precisely those areas in which the adversaries are most closely entangled. Moreover, much of this research seems to proceed from the assumption that once an attacker is exposed, it will stop attacking. This is optimistic at best: exercises seem to reveal that most of the "softer" tools do not stop a determined aggressor. In short, the inherent assumption that a smaller, non-military challenge can somehow be deterred by an equally small non-military threat, as long as that threat is smartly "tailored," is likely to be proven wrong by the harsh reality of warfare in the grey zone.

And there is more. Among the most important findings of traditional deterrence research was that one had to look not only at the opponent's capabilities, but also at its interests, and that an opponent's actions could well be the (inadvertent) consequences of one's own. In other words, both sides interact on many levels. By contrast, the debate on deterring non-kinetic, hybrid threats thus far remains a one-way street: it postulates malign actors that seek to maximize harm on the West while minimizing cost to themselves. By acting in a grey zone that the West finds much harder to utilize for advancing its own strategic interests, and by using many tools that are off-limits to Western democracies, these adversaries appear even more ruthless and risk-prone than the opponents the West faced during the Cold War.

However, hyping non-existential threats while also hyping deterrence as an appropriate response dramatically drives up deterrence responsibilities and requirements. If deterrence is responsible for preventing every possible malign act an adversary might pursue, be it cutting undersea cables, orchestrating fake news campaigns, or hacking smartphones, deterrence strategies must be organized so as to prevent a nearly unending list of hostile behavior. If the deterrence challenge posed by adversaries is not just to the West's security, but in fact to the West's "way of life," [7] then deterrence as a concept needs to be all-encompassing. Such an endless set of deterrence goals and threats, and such a perfectionist yardstick virtually ensure deterrence failure at some level. In a similar vein, if the West is seen as being in a permanent state of low-level, non-kinetic war with mischievous adversaries, seeking quid pro quos with these adversaries may appear both naïve and futile. Such a view would narrow Western policy options, as it implies a degree of inevitability of conflict that could discourage the search for political solutions. By contrast, traditional deterrence theory, which centers more narrowly on ruling out the use of military force, leaves room for political accommodation—as demonstrated to some extent by the ending of the Cold War.

Getting Back to Basics

The current state of affairs has one school of thought dismissing the value of deterrence, and another setting up unrealistically expansive expectations. These two extremes hinder rather than help efforts to devise plausible, credible deterrence strategies for an increasingly competitive international environment. However, the "deterrence extremists" are not likely to prevail. Three reasons stand out.

First, since any major debate about deterrence always reflects the prevailing general political mood, one can assume that much of the alarmism that marks the current discussion on deterring non-existential, hybrid threats will wane, just as the nuclear disarmament camp had its proverbial 15 minutes of fame during in the "yes-we-can" euphoria of President Obama's first tenure. Back then, some observers sensed a window of opportunity to change the global security discourse – an opportunity that made even some hard-boiled realists suddenly believe in the feasibility of nuclear disarmament. However, the issue quickly disappeared from the headlines once its complexities became apparent, particularly including the harsh realities of Russian and Chinese behavior, and once other important challenges demanded the Administration's attention. Today's attempts to deter new, non-military threats proceed against the backdrop of a debate about the decline of an increasingly divided West. Much of this debate rests on the

implicit assumption that the authoritarian, revisionist states are somehow "winning", and that the West needs to scramble in order to avoid defeat. Once the formidable challenges of deterring non-traditional attacks become clear, however, and once it also becomes clear that the West's opponents are not as "successful" as they currently seem, the nervousness of the current debate will subside. In short, the extremes in the deterrence debate are not likely to have enduring influence on Western policy.

Second, deterrence thinking is constantly evolving. Traditional deterrence theory, for example, has long left behind the overly optimistic expectations that characterized its earlier days, when some held the view that that a "balance of terror" would not only deter virtually every kind of conflict among great powers, but also provide ample compellence leverage. Today, it is widely accepted that deterrence – nuclear or conventional – is not a panacea, and that it only works under certain conditions. Among these are that the interests at stake are truly significant, that the opponent's goals, culture and perceptions are taken into account, and that one communicates with an adversary in order to signal clear "red lines" but also to provide possible "off-ramps" for de-escalation. There are indications that the "fifth wave" will undergo a similar evolution. For example, after having started with rather abstract deterrence concepts that were uncritically applied, this research is now getting more concrete. Terms like "hybrid actor" are being replaced with the names of the real countries or terrorist organizations that challenge the West. This allows for a move away from an indiscriminate all-hazards approach and towards a more realistic evaluation of how deterrence might (or might not) work in specific instances.

A third reason for optimism is the broader focus on resilience. While enhancing the resilience of, say, national cyber or energy networks should be seen as a kind of deterrence by denial, deterrence is not the key consideration in the resilience calculus. Rather, it proceeds from the assumption that attacks will happen and, consequently, the stricken company, nation, or alliance must be able to take the hit and bounce back. This does not diminish the value of exploring new ways of deterring such non-kinetic, non-military attacks, in particular those that threaten existential interests. [8] However, as deterrence research in these domains becomes more refined, the opportunities and limits of this concept will become more apparent, and resilience may well emerge as the more useful paradigm for coping with most non-military challenges. Rather than trying to stretch or re-define deterrence to make it more applicable to today's more complex lower-level threats, resilience contemplates the possibility of deterrence failure. This may strike some observers as fatalistic, yet it is the most plausible approach for prevailing in an emerging multi-player world.

Conclusion: Defending Deterrence

Defending deterrence against its most ardent critics is a never-ending story. Despite its common sense appeal and demonstrated great value, the concept – notably its nuclear dimension – contains too many risks and moral challenges to remain uncontested. However, pending a fundamental transformation of the global system, deterrence will remain a major factor in international politics. At the very least, it should serve as a "time-buying strategy" until such fundamental political changes occur. This requires supporters of mainstream deterrence to walk a fine line between defending the concept without trivializing its risks. When it comes to deterring non-military, non-kinetic, and non-existential threats, however, even greater care must be taken not to oversell the concept. Classic deterrence is implemented by governments. The idea that the private sector, financial institutions and other players can be integrated into a coherent, multidimensional deterrence concept against a host of non-military threats risks promising much more than can be delivered. As paradoxical as it may seem, deterrence needs to be defended against not only its critics, but against its unrealistically demanding supporters.

--Michael Rühle is Head, Hybrid Challenges and Energy Security, in NATO's Emerging Security Challenges Division

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CONGRESSIONAL

By Susan Cornwell

Smith, Thornberry Statement on FY21 NDAA Process

April 28, 2020

WASHINGTON, D.C. – House Armed Services Committee Chairman Adam Smith (D-Wash.) and Ranking Member Mac Thornberry (R-TX) today issued the following statement on the FY21 NDAA process:

"This year, Congress will pass the 60th National Defense Authorization Act. This milestone has been made possible by decades of bipartisanship, regular order, and transparency.

"The COVID-19 pandemic will certainly affect how the Committee marks up the FY21 NDAA and how the House considers it on the floor. We are discussing those details and consulting with the Leadership of both parties. At the same time, we remain committed to the principles that have guided the bill in the past – regular order through the committee, transparency, and bipartisanship."

House Armed Services leaders pledge to pass NDAA defense bill 'this year'

By Rebecca Kheel for The HILL // 04/28/20

The bipartisan leaders of the House Armed Services Committee vowed Tuesday to pass the annual defense policy bill this year even as the coronavirus pandemic keeps congressional schedules in limbo.

In a joint statement Tuesday, Armed Services Chairman Adam Smith (D-Wash.) and committee ranking member Mac Thornberry (R-Texas) pledged that "this year, Congress will pass the 60th National Defense Authorization Act" (NDAA). "This milestone has been made possible by decades of bipartisanship, regular order and transparency," they said. Still, the pair acknowledged the pandemic "will certainly affect how the committee marks up the FY21 NDAA and how the House considers it on the floor."

"We are discussing those details and consulting with the leadership of both parties," they said. "At the same time, we remain committed to the principles that have guided the bill in the past — regular order through the committee, transparency and bipartisanship." Smith and Thornberry's statement came hours after House Democratic leaders announced the chamber would not return to session Monday as previously planned. Citing discussions with the Capitol physician, Majority Leader Steny Hoyer (D-Md.) said leadership will instead call members back to Washington, D.C., when the next round of coronavirus relief legislation is ready for a vote. The House Armed Services Committee had initially planned to mark up the NDAA at the end of April, but late last month pushed back the markup amid the pandemic.

Still, Smith and Thornberry have told members they hoped to have a product ready for consideration by May 1 so the committee can mark up the bill as soon as the House reconvenes. The NDAA is considered a must-pass bill, dictating matters as routine as how many planes and ships the military can buy to as sweeping as creating a new military service in the Space Force last year.

AROUND THE WORLD

RUSSIA:

Russia slams US arguments for low-yield nukes

By: The Associated Press for Defense News // 5 hours ago

MOSCOW — The Russian Foreign Ministry on Wednesday rejected U.S. arguments for fielding low-yield nuclear warheads, warning that an attempt to use such weapons against Russia would trigger an all-out nuclear retaliation.

The U.S. State Department argued in a paper released last week that fitting the low-yield nuclear warheads to submarine-launched ballistic missiles would help counter potential new threats from Russia and China. It charged that Moscow in particular was pondering the use of non-strategic nuclear weapons as a way of coercion in a limited conflict — an assertion that Russia has repeatedly denied.

The State Department noted that the new supplemental warhead "reduces the risk of nuclear war by reinforcing extended deterrence and assurance." The Russian Foreign Ministry sees it otherwise. The ministry's spokeswoman, Maria Zakharova, commented on the State Department's paper at a briefing on Wednesday, emphasizing that the U.S. shouldn't view its new low-yield warheads as a flexible tool that could help avert an all-out nuclear conflict with Russia.

"Any attack involving a U.S. submarine-launched ballistic missile (SLBM), regardless of its weapon specifications, would be perceived as a nuclear aggression," Zakharova said. "Those who like to theorize about the flexibility of American nuclear potential must understand that in line with the Russian military doctrine such actions are seen as warranting retaliatory use of nuclear weapons by Russia."

Zakharova cast the U.S. deployment of low-yield warheads as a destabilizing move that would result in "lowering the nuclear threshold." U.S.-Russian differences on nuclear arms issues come as relations between Moscow and Washington are at post-Cold War lows over the Ukrainian crisis and the accusations of Russian meddling in the U.S. 2016 presidential election. Last year, both Moscow and Washington withdrew from the 1987 Intermediate-range Nuclear Forces Treaty.

The only U.S.-Russian nuclear arms control agreement <u>still standing</u> is the New START treaty, which was signed in 2010 by U.S. President Barack Obama and then-Russian President Dmitry Medvedev. The pact limits each country to no more than 1,550 deployed nuclear warheads and 700 deployed missiles and bombers and envisages sweeping on-site inspections to verify the compliance.

Russia has offered to extend the New START that expires in February 2021, while the Trump administration has pushed for a new arms control pact that would also include China. Moscow has described that idea as unfeasible, pointing at Beijing's refusal to negotiate any deal that would reduce its much smaller nuclear arsenal. In a statement Wednesday marking the 10th anniversary of signing the New START, the Russian Foreign Ministry hailed the treaty as an instrument that helps ensure predictability in the nuclear sphere and reaffirmed Moscow's offer to extend it without any preconditions.

The Impact of COVID-19 on the Russian Armed Forces

By: Jörgen Elfving for The Eurasia Daily Monitor Volume: 17 Issue: 54 // April 21, 2020 05:57 PM Age: 2 days

Russia has been invaded once again. But this time, the intruder is the novel coronavirus responsible for the global COVID-19 pandemic, which has already resulted in the deaths of 361 Russians, as of April 19 (<u>StopKoronavirus.rf</u>, April 19). As in past invasions, the country's Armed Forces are playing an important role in combatting the outbreak. The military has already taken a number of measures to cope with the crisis (see <u>EDM</u>, April 15) and plans to support civilian society if the need arises. "All the capabilities" of the Russian military "can and should be used" for this purpose, Russian President Vladimir Putin told government ministers on April 13 (<u>Kremlin.ru</u>, April 13). Indeed, streets in select Russian towns are already being disinfected by troops, and medical personnel from the Armed Forces are working in hospitals in the Moscow area (<u>Function.mil.ru</u>, April 19; <u>Izvestia</u>, April 17).

Entirely avoiding the spread of the coronavirus among military personnel will undoubtedly be nearly impossible, despite recent claims that strict leave rules and discipline will maintain soldiers' health (Voinskaya-chast.ru, April 13). Therefore, the pandemic can be expected to have some level of negative impact on military capabilities, readiness, and the delivery of new equipment. This will be exacerbated by the actual number of infected and deceased personnel, the postponement of the spring draft, and the delayed Victory Day parade, which was supposed to take place on May 9.

Much depends on the number of infected and if key personnel are affected by the virus. As of March 30, there were allegedly only three members of the Russian Armed Forces infected by the coronavirus (<u>Prizyvnik</u>, April 14). Interestingly, on April 4, Interfax quoted an official from the Ministry of Defense who stated that there were no infected persons in the Armed Forces at all (<u>Interfax</u>, April 4). But these numbers, in so far as they are trustworthy, could change rapidly, not least because military barracks are particularly prone to the spread of communicable diseases.

This year's May 9 Victory Day parade was recently postponed, by order of the Russian president (see <u>EDM</u>, April 16). No plans for a new date have been released, but the Russian foreign ministry has stated the parade will take place sometime in 2020 (<u>Russkie.org</u>, April 16). Possible dates might be September 3, which the parliament has just adopted as the official end date of World War II, or November 7, the anniversary of the first parade in 1941. September 3 seems unlikely for a variety of reasons. First, the preparations for the parade this spring began already in March, which means that the planning and training for a parade in September would presumably have to start in July. But the pandemic might not be over by that time.

Second, a parade on September 3 comes close to Army-2020, the international military-technical forum, which takes place from August 23 to August 29. Moreover, the international army games also occur from August 23 to September 5, adding an additional logistical hurdle in this time frame (Rusarmyexpo.ru, accessed April 20; Facebook.com, February 24). Third, the military exercise Kavkaz 2020 will also be held in September (Tvzvezda.ru, February 11). In fact, Kavkaz 2020 might itself be at risk, depending on when the pandemic abates. Larger exercises like Kavkaz are 47

usually preceded by staff and command-post exercises as well as preparatory logistical training. If those cannot be carried out, it will negatively impact the main maneuvers.

The postponement of the May 9 parade will itself have an adverse effect on the Armed Forces if the commemoration is held later at the same level. The original event plans involved parades in approximately 450 cities all over Russia, with the participation of 116,000 military personnel, or about 10 percent of the Armed Forces' peacetime strength (Redstar.ru, February 28). Those personnel had already spent a little more than a month on preparations and would, thus, need to spend at least the same amount of time later this year training for a follow-on parade. A substantial part of the Armed Forces has already been involved in activities other than military training for about a quarter of the year.

The spring draft was officially initiated on April 1, but actually started on April 13 and will be carried out in the shadow of the pandemic. This has led to the introduction of certain precautionary measures such as checking personal documents by telephone, measuring draftees' temperature upon their arrival at military commissariats, disinfecting these premises, as well as wearing masks and special procedures when the conscripts are transported to their units, set to begin on May 20 (Izvestia, March 31; Mil.ru, April 9; Recrut.mil.ru, accessed April 20). After arriving at their units, the conscripts will be quarantined for 14 days, which could lead to disciplinary problems. The induction of 135,000 draftees at present is certainly a high-risk project, and the likelihood that a number of units will end up plagued by COVID-19 looks high. Even if drafted personnel do not make up a large part of the Armed Forces, they still play an important role when it comes to overall military capability.

On April 9, the Russian president met with regional governors and representatives from major defense manufacturers, who reported on how the pandemic has affected their work (<u>Arms Trade</u>, April 9). Reports show that about 30–50 percent of Russia's labor force was present and going to work at offices and factories. Some companies introduced measures enabling employees to work from home; and any problems with fulfilling contracts were not linked to the pandemic. The picture presented at the meeting was likely overly rosy; and in any case, it will be important to monitor the ability of Russian military-industrial subcontractors to fulfill their obligations. Depending on how the pandemic develops inside Russia, the delivery of equipment to the Armed Forces could end up being delayed.

COVID-19's impact on the Russian Armed Forces may range from limited to severe, depending on how the disease outbreak develops and what measures are ultimately taken by the authorities. And though the final outcome is presently hazy, a worst-case scenario for 2020 could effectively mean a "lost year" for the Armed Forces. The political-military leadership would certainly not welcome such an outcome when the results of the military reform initiated in 2008 and ending in 2020 will be summed up. A failure of the spring draft—marred, for instance, by widespread infection and deaths—would reflect badly on the minister of defense as well as the president himself. The consequences could even include demonstrations and social unrest.

Russia calls U.S. claims about Iran's launch of satellite 'hypocrisy'

From Tehran Times // April 27, 2020

TEHRAN - Mikhail Ulyanov, Russia's permanent representative to the Vienna-based international organizations, has said claims by the United States that the launch of a satellite by Iran is a violation of the UN Security Council Resolution 2231 are instances of "double standards" and "hypocrisy".

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"US claims that recent launch of a military satellite by #Iran was a violation of 2231 UNSC res. Wrong interpretation. But there is also a different curious aspect- the US attempt to build on the resolution, which It undermines by all possible means. Double standards and hypocrisy," Ulyanov tweeted on Sunday. The Islamic Revolution Guards Corps successfully launched Iran's first military satellite into the orbit on Wednesday, April 22. U.S. Secretary of State Mike Pompeo claimed the launch violated the Security Council resolution. "I think every nation has an obligation to go to the United Nations and evaluate whether this missile launch was consistent with that Security Council resolution," Pompeo told reporters, according to the Guardian. In a statement on Thursday, France also claimed the launch was in contravention of Resolution 2231 and called on Tehran to immediately cease all activities related to the development of ballistic missiles designed to be capable of carrying nuclear warheads. Britain also claimed on Friday that Iran's launch of the military satellite is inconsistent with a UN Security Council resolution. Germany also said that Berlin's position on the Islamic Republic's missile program has not changed, and the program has a destabilizing impact on the region. In response, Foreign Minister Mohammad Javad Zarif said on Friday that both the U.S. and Europe cannot lecture Iran based on a misreading of Resolution 2231 which endorsed the 2015 Iran nuclear deal.

Zarif said the United States has violated Resolution 2231 and Europe has obeyed Washington instead of abiding by the resolution. "US has been bullying all against UNSC Resolution 2231 since 2017. Europe obeyed US instead of 2231. Neither can lecture Iran based on flimsy misreadings of UNSCR 2231," Zarif tweeted. Zarif said, "Iran neither has nukes nor missiles 'DESIGNED to be capable of carrying' such horrific arms." Zarif also posted news headlines which say the U.S., France, Britain and the Zionist regime of Israel possess and develop nuclear weapons. Iranian Foreign Ministry spokesman Abbas Mousavi said on Friday that France and Britain's stance on Iran's launch of the military satellite shows that Paris and London have given in to the United States' bullying. "The European countries' lack of action against the United States while it violated the United Nations Security Council Resolution 2231 by quitting the JCPOA [the 2015 nuclear deal] shows their double standards and also giving in to the United States' bullying," Mousavi pointed out.

He strongly dismissed France and Britain's biased interpretation of the UN resolution. "Iran's nuclear program is just for peaceful purposes based on the fatwa issued by the Leader of the Islamic Revolution [Ayatollah Ali Khamenei] which has been approved by (numerous) reports of the International Atomic Energy Agency. So, Iran's space program is for defensive objectives and has not been designed for other purposes," he said. Russian Foreign Ministry spokeswoman Maria Zakharova on Thursday dismissed the U.S. claim that Iran violated resolution 2231 and accused Washington of being in violation of the nuclear deal. Addressing a news conference in Moscow on Thursday, she said that this would not be the first time that a nation (U.S.) that has "flagrantly breached the norms of international law and violated the UNSC Resolution 2231".

The 2015 nuclear deal, known as the JCPOA, was endorsed by the Resolution 2231. The United States officially quit the JCPOA in May 2018 and the European countries have since failed to guarantee Iran's benefits from the international deal. Resolution 2231 terminated the provisions of previous UN resolutions against Iran. It also "calls on" Iran "not to undertake any activity related to ballistic missiles designed to be capable of delivering nuclear weapons, including launches using such ballistic missile technology." Tehran has always said it has no nuclear warheads and that none of its missiles have been designed to carry nuclear weapons.

Russia Sides With Iran Over Regime's First 'Military Satellite' Launch

By Patrick Goodenough for CNS News // April 24, 2020 49 (CNSNews.com) – Russia is siding with Iran on the regime's launch of its first military satellite, rejecting as a "dirty trick" the U.S. position that the action violates the 2015 U.N. Security Council resolution that enshrined the Iran nuclear deal.

In doing so, Moscow is indirectly underlining the fact that resolution 2231 removed an earlier prohibition on Iran undertaking any ballistic missilerelated activity. The regime had insisted – with Russia and China's backing – that missiles be off the table in the nuclear negotiations, and the Obama administration acceded. Previous UNSC resolutions had declared that Iran "shall not undertake any activity related to ballistic missiles capable of delivering nuclear weapons, including launches using ballistic missile technology."

But those resolutions were superseded and replaced by 2231, which merely "called upon" Iran "not to undertake any activity related to ballistic missiles designed to be capable of delivering nuclear weapons, including launches using such ballistic missile technology." That dilution of language – from "shall not" to "called upon" – stoked controversy in Congress at the time, but was strenuously defended by then-Secretary of State John Kerry, a leading architect of the nuclear deal.

Referring back to that language, the Iranian regime has carried out numerous missile launches over the years since, arguing each time that it is not violating any binding U.N. requirement. Early Wednesday morning local time, the Islamic Revolutionary Guard Corps (IRGC) Aerospace Division launched Iran's first military satellite, reportedly using a two-stage carrier rocket to loft the satellite named Nour (Light)-1 into orbit.

Experts say the technology used to take a payload into space – the space launch vehicle or carrier rocket – is similar to the technology used to launch intercontinental ballistic missiles (ICBMs), and can help to advance a missile program. Hailing the achievement, IRGC commander Maj. Gen. Hossein Salami said, "By Allah's grace, the Corps turned into a Space Force today." U.S. Space Command tweeted Wednesday that it was watching Iran's pursuit of viable space launch technology and its overall ballistic missile program, "confident in our ability to deter [and] defend [against] all Iranian aggression."

Secretary of State Mike Pompeo told reporters that "every nation has an obligation to go to the United Nations and evaluate whether this missile launch was consistent with that Security Council resolution [2231]." "I don't think it remotely is," he said, adding that "Iran needs to be held accountable for what they've done." Russia's foreign ministry, however, quickly backed up its ally. Spokeswoman Maria Zakharova told a briefing on Thursday that neither resolution 2331 nor the Iran nuclear deal known as the Joint Comprehensive Plan of Action (JCPOA) "limit Tehran's right and ability to peacefully explore space and develop national space programs."

"Futile attempts by some Washington analysts to make it seem as if Iran's space rockets are capable of carrying nuclear warheads are a manipulation that will be broken by reality," she said. "Iran does not have and we hope will never have nuclear weapons. Iran complies with the resolution and refrains from developing and testing ballistic missiles capable of carrying nuclear weapons." Going further, Zakharova claimed it was the U.S. that was in violation of international norms.

"This would not be the first time that a nation that has flagrantly breached the norms of international law and violated UNSC resolution 2231 is trying to deflect international condemnation by baselessly accusing Iran of noncompliance with the requirements of the Security Council," she said. 50 Russia and other parties to the JCPOA say the Trump administration's unilateral withdrawal from the deal in 2018 amounted to a breach of resolution 2231.

Iran has had the capability of placing a satellite into orbit since 2009, but up to now has emphasized the civilian nature of the program. Those launched into space in the past – with some successes and some failures – include communications, research, and imaging satellites. Despite Zakharova's use of the word "peacefully" to describe Iran's space activities, the Noor-1 is described by the IRGC as Iran's first "military satellite." Military satellites are not space weaponry, but satellites used for military purposes, including intelligence-gathering, navigation, and military communications. Pompeo told conservative WMAL radio host Larry O'Connor Thursday that the Iranian regime has claimed all along that its satellite program "was all commercial, and then yesterday, of course, we found out what we knew, is that they had been lying to the world." On Fox News the previous night, he made a similar point, and noted that the person who oversaw the launch was IRGC Aerospace Division commander Brig. Gen. Ali Hajizadeh, "the same fellow whose forces shot down an aircraft, killing 176 innocent civilians" last January.

Russia slams US arguments for low-yield nukes

By: The Associated Press for Defense News

MOSCOW — The Russian Foreign Ministry on Wednesday rejected U.S. arguments for fielding low-yield nuclear warheads, warning that an attempt to use such weapons against Russia would trigger an all-out nuclear retaliation.

The U.S. State Department argued in a paper released last week that fitting the low-yield nuclear warheads to submarine-launched ballistic missiles would help counter potential new threats from Russia and China. It charged that Moscow in particular was pondering the use of non-strategic nuclear weapons as a way of coercion in a limited conflict — an assertion that Russia has repeatedly denied.

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Zakharova cast the U.S. deployment of low-yield warheads as a destabilizing move that would result in "lowering the nuclear threshold." U.S.-Russian differences on nuclear arms issues come as relations between Moscow and Washington are at post-Cold War lows over the Ukrainian crisis and the accusations of Russian meddling in the U.S. 2016 presidential election. Last year, both Moscow and Washington withdrew from the 1987 Intermediate-range Nuclear Forces Treaty. The only U.S.-Russian nuclear arms control agreement still standing is the New START treaty, which was signed in 2010 by U.S. President Barack Obama and then-Russian President Dmitry Medvedev. The pact limits each country to no more than 1,550 deployed nuclear warheads and 700 deployed missiles and bombers and envisages sweeping on-site inspections to verify the compliance.

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<u>CHINA</u>:

Chinese navy puts two new nuclear submarines into service

- The vessels are upgraded versions of a Jin-class sub and join the PLA fleet in time for the military wing's 71st anniversary
- The subs are the latest in a long list of hardware additions to the navy over the last year

By: Minnie Chan for the South China Morning Post // Published: 29 Apr, 2020

Two new upgraded nuclear-powered strategic submarines have gone into service in China in time for the 71st anniversary of the navy, according to Chinese military sources.

The vessels are revamped versions of the Type 094, or Jin-class, nuclear-powered ballistic missile submarines (SSBN) and will bolster the <u>People's</u> <u>Liberation Army</u> Navy's underwater combat strength, two military sources told the South China Morning Post. "The subs had upgrades to technology such as radar, sonar and torpedoes," one of the sources said. China planned to build six Type 094 subs, and four were on show in <u>a parade in</u> <u>Qingdao</u>, Shandong province, in April last year to mark the 70th anniversary of the PLA Navy

Another source close to the navy said two more Type 094s had probably been handed over to the navy since then. Unlike the Type 095 nuclear attack submarines, the SSBNs are armed with powerful submarine-launched ballistic missiles, allowing them to go into combat alone. The Type 094 is designed to carry 16 JL-2 ballistic missiles, which have a range of about 7,000km (4,350 miles).

But the Type 096 will be able to carry 24 JL-3s, which have an estimated range of more than 10,000km (6,200 miles), putting the United States, Europe, India and Russia within range, according to the most recent Pentagon report on China's military. In its "2019 China Military Power Report", the Pentagon said that construction of the Type 096 would probably begin in the early 2020s. The navy has taken delivery of a number of new weapons over the last year, including the Shandong, the first Chinese-built aircraft carrier; and the J-15, a mass-produced carrier-based fighter jet.

In addition there have been the Type 055 destroyer, a new strategic nuclear-powered submarine, and a new anti-submarine patrol aircraft, according to the Global Times, a daily tabloid newspaper under party mouthpiece People's Daily. The second source said the new anti-submarine patrol aircraft was the Gaoxin-9 maritime anti-submarine warfare plane, which debuted at last year's military parade on Tiananmen Square to mark the 70th anniversary of the People's Republic. The Gaoxin-9 anti-sub warfare planes were developed on the platform of the country's Y-8 and Y-9 cargo planes.

China Says PLA Scrambled Aircraft, Ships to 'Expel' U.S. Warship from South China Sea Island Chain

By: Sam LaGrone for USNI News // April 28, 2020

Chinese authorities said they sortied ships and aircraft to "track, monitor, verify, identify and expel" a U.S. warship from the Paracel Island chain in the South China Sea on Tuesday, People's Liberation Army (PLA) officials said on Chinese social media.

Navy officials confirmed to USNI News that guided-missile destroyer USS Barry (DDG-52) conducted a freedom of navigation operation in the vicinity of the island chain off Vietnam. "These provocative acts by the U.S. side ... have seriously violated China's sovereignty and security interests, deliberately increased regional security risks and could easily trigger an unexpected incident," reads a statement from PLA Southern Theatre Command spokesman Li Huamin, reported the South China Morning Post.

Barry's FONOP was "incompatible with the current atmosphere as the international community is fighting pandemic ... as well as the regional peace and stability." While the statement claimed that the PLA forced Barry out of the island chain, a Navy official told USNI News that the operation proceeded as planned without encountering any unsafe or unprofessional behavior from Chinese military aircraft or warships. The PLA did not detail the assets used.

While the official didn't provide details of the FONOP, previous operations in the vicinity of the Paracels have tested Beijing's claim to a territorial straight baseline around the island chain in conflict with international maritime law. China views the water between their island holdings not as open international water but as territorial Chinese sea – a view that the U.S. disputes. The chain is also claimed by Vietnam and Taiwan. Both Washington and Beijing have accused the other side of using the ongoing COVID-19 pandemic as a distraction to exercise more military control in the South China Sea. The FONOP from the Japan-based Barry closely follows the destroyer transiting the Taiwan Strait twice this month, drawing similar reactions from Beijing. A day after Barry's April 22 transit, the Chinese Liaoning Carrier Strike Group also transited the Taiwan Strait.

In addition to the presence operations, the destroyer has been active in the South China Sea operating with guided-missile cruiser USS Bunker Hill (CG-52) and amphibious assault ship USS America (LHA-6) off the coast of Malaysia near an ongoing dispute over mineral exploration between Malaysia and China.



NORTH KOREA:

Signs From North Korea Only Raise More Questions About Absent Kim Jong Un

By Paul D. Shinkman, Senior Writer, National Security April 29, 2020

The Swirling Stories Around Kim Jong Un

North Korea this week provided halting signs that leader Kim Jong Un remains in power and control as sensational reports circulated unabated across the world claiming he is grievously ill or perhaps even dead. Though their significance is disputed, a series of dispatches were reportedly issued in Kim's name to Syria, Cuba and South Africa as well as a letter of praise for local workers. But, as is historically the case when issues arise about its leader's fitness, signals from the Hermit Kingdom often raise more questions than they answer.

Some analysts are confident Kim is currently ensconced at his summer retreat in Wonsan, about 130 miles east of the capital of Pyongyang. Satellite images posted online in recent days show his personal train at the compound and more recent reports Tuesday indicate that yachts Kim has used have been in motion in the area, perhaps indicating his presence there.

But his condition is unknown.

Kim has not been seen for more than two weeks since publicly appearing at the Politburo on April 11. His absence gained widespread attention when he missed celebrations on April 15 marking the 108th anniversary of the birth of his grandfather and the country's founder, Kim II Sung. It's not the first time he has gone missing. In 2014, Kim disappeared from public view for three weeks for what was later revealed to be medical procedures, likely to address symptoms of gout.

Despite estimates that he's only about 36 years old, Kim has long wrestled with health problems related to obesity and complications from drinking and smoking habits. "The difference this time around is, one, the circumstantial evidence that seems to suggest that his health is in a worse situation," says Frank Aum, North Korea senior expert at the U.S. Institute of Peace. "And, two, the lack of clarity about Kim Jong Un's successor."

President Donald Trump, who last week said the emerging reports about Kim's failing health were "incorrect," has thus far this week declined to offer any insight into what Kim's condition might be. "I do have a very good idea, but I can't talk about it now," Trump said during a White House press briefing Monday. "I hope he's fine. I do know how he's doing, relatively speaking. We will see. You'll probably be hearing in the not-too-distant future."

Pressed again Tuesday, Trump said, "I just don't want to comment on it. I just wish him well." It remains possible that the North Korean leader has cloistered himself amid legitimate concerns about the spread of the coronavirus, a theory that one South Korean minister suggested was plausible on

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Tuesday. Officials acknowledge the disease could threaten North Korea's underdeveloped public health system, although Pyongyang has not publicly reported a single case of the disease.

Others fear for the worst: that Kim is gravely ill or has died.

Speculation about his health mounted following reports the Chinese government took the unusual step of dispatching a medical team to North Korea to advise on the young leader's condition. Additional published – but unverified – reports, some from foreign news outlets, have contained colorful accounts of Kim clutching his chest before collapsing and of a cardiovascular procedure complicated by a surgeon's shaking hands. Most recently, one post suggested that Kim was injured by shrapnel from an exploding cruise missile while monitoring a weapons test.

Those with major stakes in North Korea's future, namely China, South Korea and the U.S., have been opaque or publicly optimistic about the situation there, likely to avoid forcing North Korea from having to respond. Pentagon officials have declined to offer any information that would indicate a change in power in Pyongyang, with some telling news outlets privately that they are skeptical of the reports. And South Korea has said as recently as this week it assesses that Kim remains "alive and well."

Those in government who worked through the last time Kim went missing say little changed among U.S. diplomats and national security professionals during that period of uncertainty. "There was no scrambling to write a new plan for how to deal with North Korea that I recall," says Thomas Countryman, who served as undersecretary of state for arms control and international security from 2011 until 2017. "Looking at it from the outside, this seems similar – a little bit of mystery that may have benign implications. All of us should greet this with caution."

At that time, public speculation centered on Kim's likely illnesses – not that he had died in secret – due to his apparent increase in weight along with footage of his walking with a peculiar gait at a ceremony honoring his grandfather. In another public appearance around then, he was sweating visibly. A translation by South Korea's Chosun Ilbo of a state-run footage from Pyongyang revealed an unusual admission in a reference to "Our marshal, who lights the path of leadership for the people like a flame, although he was not feeling well."

When Kim's father, Kim Jong II, died of a heart attack in 2011, officials did not announce his death for two days. But the exact circumstances long remained in question. Signs of his failing health were at times only learned when they were intercepted by intelligence agencies in communications between North Korean officials and foreign interests from which they were seeking medical advice.

Seoul and Washington now have the critical responsibility not to begin public speculation about what may be going on inside North Korea, says Countryman, chairman of the Arms Control Association board of directors. And if news breaks that Kim is dead, they must avoid any sudden, radical moves. "It would be a time in which new North Korean leadership was consolidating and deciding where to go," he says. "For the U.S. and South Korea to either take action or make statements that force a response from Pyongyang is unnecessary."

Many analysts point to Kim's younger sister, Kim Yo Jong, as the clear favorite to assume power in the case of his death. Thought to be about 32 years old, she is highly educated and has strong connections to the principal sources of power among the North Korean elite. Analysts believe she has a keen sense of how to shape her image and that of her family, and she has experience in international finance.

She has frequently been photographed alongside her brother for propaganda purposes, including images of the pair riding horses together. And she has met multiple times with foreign leaders. "If Kim Jong Un were to drop dead right now – or already has – Kim Yo Jong would be the only person to take over the country," says Harry Kazianis, senior director for Korean Studies at the Center for the National Interest. "There is, to be frank, no one else who could do the job."

The younger Kim's charm offensive at the 2018 Olympic Games in Pyeongchang, South Korea, secured her position as what local news outlets described as "North Korea's Ivanka," referencing Trump's daughter and influential White House adviser. She was perceived as outflanking the American vice president, who maintained distance from the two Korean delegations, allowing them to appear more unified than ever.

If Kim did indeed become incapacitated in recent weeks, or if he had died, his sister or any other heir would likely try to hide that fact for as long as possible while attenpting to consolidate power among the North Korean elites and military leaders, as well as securing control of the country's nuclear, chemical and biological stockpiles. "If she can't do that, and there was a power struggle, the world should indeed worry," Kazianis says. "Nothing could be worse than a North Korean civil war fought with weapons of mass destruction. Nothing."

The main obstacle facing Kim Yo Jong and her claim to her family's bloodline is North Korea's historical tradition of looking to male heirs to lead the country. Kim Jong Un's succession was clear when his father died. He had emerged from relative obscurity a year before, assumed the rank of four-star general and vice chairman of the Central Military Commission of the Workers' Party, and benefited from a state media campaign designed to deliver to him a cult following.

Aum says the new likely successor would also have to overcome all the prerogatives of the North Korean party and military elites, who are nearly all male and grounded in a patriarchal system. "Her youth and more reserved nature do not help her in this battle," Aum says. Other potential contenders for leadership include Kim Pyong II, the current leader's uncle and former ambassador to a series of European countries; Choe Ryong Hae, who is considered the No. 2 official in the country by some; and Premier Kim Jae Ryong, head of the Cabinet of North Korea.

But perhaps the only known outcome from a sudden power shift in North Korea is that it would yield a great deal of uncertainty. "The current situation represents the least amount of clarity about who would succeed," says Aum, "and, therefore, the greatest amount of risk."

Corrected on April 29, 2020: An earlier version of this report incorrectly stated the relationship between Kim Pyong II and Kim Jong Un. Kim Pyong II is Kim Jong Un's uncle. Paul D. Shinkman, Senior Writer, National Security - Paul Shinkman is a national security correspondent. He joined U.S. News & World Report in 2012 ... Read more

<u>Agencies failing to gather intelligence on Kim's health</u> BY KIM TONG-HYUNG, ASSOCIATED PRESS // April 28 2020

SEOUL, SOUTH KOREA | Another day without answers. Another embarrassment for the world's intelligence community.

North Korean leader Kim Jong-un's prolonged public absence has led to rumors of ill health and worries about how it could influence the future of what one analyst calls Northeast Asia's "Achilles' heel," a reference to the North's belligerence and unpredictable nature. But there's a basic, unanswered question, debated by the media and government intelligence services alike: Are the rumors true?

The exact state of Mr. Kim's health matters because it could determine the stability of the dynastic government in Pyongyang and the security of nuclear weapons that the nation has repeatedly threatened to use on its neighbors and the United States. It's a problem that outside nations have faced for decades. Gathering intelligence on perhaps the world's most secretive, suspicious and difficult-toread country is incredibly difficult. And there's probably nothing North Korea guards more closely than information on its leaders' health, which is only likely shared among a small portion of the elite, including Mr. Kim's powerful sister, Kim Yo-jong.

At the heart of the intelligence shortcomings about North Korea is its extremely closed nature. But there is also plenty of blame leveled in South Korea at efforts there. Even President Trump, who says he has forged a personal relationship with the 33-year-old dictator, admits he's in the dark about what's going on. Supporters of South Korea's current liberal government, which remains eager for inter-Korean engagement, lament the previous decade of conservative rule there, when exchanges between diplomats, government and business leaders, aid groups and others stopped under hard-line polices toward North Korea's nuclear ambitions. This, they say, deprived spies of high-quality information sources. South Korean conservatives, on the other hand, blame liberals for supposedly downsizing espionage operations while pursuing inter-Korean rapprochement. They say such networks have been diffi cult to rebuild. The government of President Moon Jae-in has repeatedly played down unconfi rmed media reports that Mr. Kim is in fragile health following heart surgery, saying it has detected no unusual activity in North Korea or any emergency preparation by its ruling Workers' Party, military and Cabinet.

Without specifying its information sources, South Korea's presidential office said it believes Mr. Kim is handling state affairs normally at an unspecified site outside the capital, Pyongyang. However unfounded the fears may be, some experts say South Korea, as well as its regional neighbors and ally Washington, must begin preparing for high-level instability that could come if Mr. Kim is sidelined by health problems or even dies.

That could include North Korean refugees flooding South Korea or China, or military hard-liners unleashing the North's fearsome nuclear and conventional arsenals. While those are worst-case scenarios, planning for them is crucial because nobody knows for sure what's happening inside North Korea, said Nam Sungwook, a North Korea expert at Seoul's Korea University who termed the situation the "Achilles' heel of international politics in Northeast Asia."

"Instead of just saying he's fine, ... our government should prepare for various chaotic scenarios," said Mr. Nam, a former director of a think tank affiliated with South Korea's main spy agency. Mr. Kim is overweight, reportedly smokes heavily and has other health problems. Questions about Mr. Kim's health have been raised since he missed the birthday celebration of his late grandfather and state founder Kim Il-sung on April 15, the country's most important holiday.

Mr. Kim was last seen in public on April 11, when he presided over a meeting discussing coronavirus prevention and electing his sister as an alternate member of the political bureau of the ruling Workers' Party. On Monday, the official Rodong Sinmun newspaper said Mr. Kim sent a

message of gratitude to workers building tourist facilities in the coastal town of Wonsan, which is where some speculate he is staying. No photos of him were published.

South Korean intelligence combined with North Korean state media reports suggest that Kim could have suffered some sort of medical setback but likely not a life-threatening one, said Du Hyeogn Cha, a senior researcher at Seoul's Asan Institute for Policy Studies. But the root problem may be the shaky nature of South Korean intelligence. "Even after decades of work, South Korea has yet to build a reliable intelligence network to gather information on the North," said Mr. Cha, an exintelligence secretary to former South Korean President Lee Myung-bak. Gathering intelligence on perhaps the world's most secretive, suspicious and difficult-to-read country is incredibly difficult. North Korea guards information on Kim Jong-un's health closely. ASSOCIATED PRESS



SOUTH KOREA:

S.Korean officials call for caution amid reports that N.Korean leader Kim is ill

From Reuters News Wire

SEOUL, April 27 (Reuters) - South Korean officials are calling for caution amid reports that North Korean leader Kim Jong Un may be ill, emphasizing that they have detected no unusual movements in North Korea.

At a closed door forum on Sunday, South Korea's Unification Minister Kim Yeon-chul, who oversees engagement with the North, said the government has the intelligence capabilities to say with confidence that there was nothing unusual happening. Rumors and speculation over the North Korean leader's health began after he made no public appearance at a key state holiday on April 15, and has since remained out of sight.

South Korea media last week reported that Kim may have undergone cardiovascular surgery or was in isolation to avoid exposure to the new coronavirus. On Monday, North Korean state media once again showed no new photos of Kim nor reported on his whereabouts. However, they did carry reports that he had sent a message of gratitude to workers building a tourist resort in Wonsan, an area where some South Korean media reports have said Kim may be staying.

"Our government position is firm," Moon Chung-in, the top foreign policy adviser to South Korean President Moon Jae-in, said in comments to news outlets in the United States. "Kim Jong Un is alive and well. He has been staying in the Wonsan area since April 13. No suspicious movements have so far been detected." Satellite images from last week showed a special train possibly belonging to Kim at Wonsan, lending weight to those reports, according to 38 North, a Washington-based North Korea monitoring project.

Though the group said it was probably the North Korean leader's personal train, Reuters has not been able to confirm that independently, or whether he was in Wonsan. A spokeswoman for the Unification Ministry said on Monday she had nothing to confirm when asked about reports that Kim was in Wonsan. Last week China dispatched a team to North Korea including medical experts to advise on Kim Jong Un, according to three people familiar with the situation.

Reuters was unable to immediately determine what the trip by the Chinese team signaled in terms of Kim's health. On Friday a South Korean source told Reuters their intelligence was that Kim Jong Un was alive and would likely make an appearance soon. Experts have cautioned that Kim has disappeared from state media coverage before, and that gathering accurate information in North Korea is notoriously difficult.

North Korea's state media last reported on Kim's whereabouts when he presided over a meeting on April 11. Kim, believed to be 36, vanished from state media for more than a month in 2014 and North Korean state TV later showed him walking with a limp. (Reporting by Josh Smith, Sangmi Cha, and Hyonhee Shin, Writing by Josh Smith; Editing by Michael Perry)



IRAN: Iran Reveals Plan to Strike '400 American Targets'

Adam Kredo for the WFB // April 24, 2020

Iranian military leaders on Friday said the country had drafted plans to strike "400 American targets" in response to further military action by the United States.

After Iran launched missiles at Iraq's Ain al-Asad base in January, where more than 1,000 U.S. and coalition soldiers are stationed, it anticipated retaliatory attacks by the Trump administration, Brigadier General Amir Ali Hajizadeh, commander of the Islamic Revolutionary Guard Corps Aerospace Force, told the country's state-controlled press. "The day we attacked on Ain al-Asad, we thought the U.S. forces would respond after 20 minutes, so we were ready to attack 400 American targets," Hajizadeh disclosed, though he did not provide detailed information about the sites in question.

"Our plan was to attack 400 U.S. targets if they responded," he said. The revelation of Iran's plans to retaliate against U.S. military action comes as Iran continues to expand its military, this week launching a space satellite that U.S. officials say is a cover for nuclear weapons advancement. Iran's attack on U.S. forces in Iraq came in reaction to the killing of top general Qassem Soleimani. Iranian-backed terror forces in Iraq have continued their assaults on U.S. positions in the ensuing months.

While tensions have decreased since that time, President Donald Trump vowed this week to destroy any Iranian vessel that harasses American ships traveling in the Persian Gulf region. Iran's military expansion continues to pose great risk to the United States, according to Trump administration officials, who told the Washington Free Beacon earlier this week that Tehran's recent launch of a military satellite is likely a cover for expanded ballistic missile work, weapons that are typically used to carry nuclear payloads.

"Iran's space program is clearly a cover for its intercontinental ballistic missile aspirations," Brian Hook, the administration's special representative for Iran, told the Free Beacon this week. "Any claims that Iran's space program is peaceful are pure propaganda." Iran's ballistic missile work is a top concern for the Trump administration as it works to extend an international ban on such efforts. Later this year, Iran will be permitted to purchase missile technology if the United Nations does not renew a ban on its program. While the United States opposes the lifting of this ban—which is set to expire under the terms of the landmark nuclear deal—countries such as Russia and China could veto these efforts, setting up a showdown in the coming months.



UNITED KINGDOM:







ISRAEL:

NSTR How has coronavirus changed the Iranian threat to Israel?

Will the fact that Iran has been hit so hard in the coronavirus crisis, and the economic aftershocks that go with it, change the nature of its threat to Israel? By LAHAV HARKOV for the JPost // APRIL 26, 2020

Despite the coronavirus crisis nearly monopolizing the world's attention, Iran managed to draw some focus last week, successfully launching a satellite into orbit using ballistic missile technology.

This step towards developing missiles capable of delivering nuclear weapons took place as Iran crossed the threshold of 5,000 deaths from coronavirus. As of Sunday, over 90,000 citizens of the Islamic Republic had contracted COVID-19 and 5,710 died, according to official reports, which Mossad Chief Yossi Cohen and others have said are much lower than the true numbers. Iran has been the epicenter of the pandemic in the Middle East and its government has faced accusations that, like its patron China, it has covered up the extent of the disease's spread. Tehran is not immune from the economic distress that has hit much of the rest of the world due to lockdown measures to stem the coronavirus' spread. The Iranian economy was already in trouble due to the American "maximum pressure" sanctions campaign which, contrary to what many have said, does not preclude the shipment of humanitarian and medical aid. Coronavirus shelter-at-home instructions harmed sectors that had not felt the sanctions' impact.

Add to that the deep plunge of oil prices – a sector that was already suffering because of sanctions – and this adds up to a major blow to Iran's economy. Will the fact that Iran has been hit so hard in the coronavirus crisis, and the economic aftershocks that go with it, change the nature of its threat to Israel? Last week's successful missile launch, which made the Islamic Republic one of only about a dozen countries to carry out orbital launches, indicates what many experts have been saying: Not really.

Foreign Ministry Director of Policy, Planning and Assessment Uri Resnick said "it's clear that the Iranian economy is in great distress and the coronavirus crisis is making it worse. That makes it harder for them to try to develop nuclear weapons and missiles. From this aspect, it could weaken their malign influence." However, if Tehran feels "their backs are to the wall, it could promote negative behavior," he said.

Resnick concluded that "despite the humanitarian and health crisis, we do not see a sign that they have abandoned their behavior" when it comes to nuclear development and sponsoring terrorism. In addition, Resnick said "there is a danger and concern about the world being distracted." Another matter is pressure for the US to reduce sanctions because of the health crisis. "Humanitarian aid is an exception from the sanctions and the US even offered them aid, which the Iranians rejected," Resnick said. "Pressure on Iran should not be released.

They have enough resources to deal with the crisis if they wanted. For example, they could have put the good of their citizens before their nuclear project." Former Israeli ambassador to the US Michael Oren argued that "counterintuitively, chances of war [with Iran or its proxies] could be enhanced rather than diminished because of coronavirus." Iran is waiting until after the US presidential election in November before making major decisions about it and its proxies moves towards Israel, he said.

US President Donald Trump's reelection would mean "more of the same, which is an unsustainable situation for the Iranian regime. "I don't think four more years of these sanctions is survivable, especially when the regime is facing a severe economic crisis," he said. "If Trump wins, Tehran will have to make a choice. Either go into negotiations from a disadvantageous position and make major concessions, or try to trigger some kind of conflict, especially when the US is vulnerable" from the economic effects of the coronavirus crisis.

If Iran or its proxies launch a major attack, Israel may not be able to rely on the US as much as usual, in part because the Trump administration is reticent to get involved in any kind of war, even more so if the economy is suffering, Oren argued. According to Oren, Iran would prefer a proxy conflict rather than a direct one with Israel. If negotiations take place between the US and Israel, the worst scenario for Israel would be if they are "concluded without meeting our fundamental needs," Oren said.

"Trump could declare a victory and leave Iran with capabilities that threaten Israel's security." If negotiations take place, Israel should make its needs public, he argued. Those interests would include dismantling the nuclear program, "not mothballing parts of it," coming clean on past nuclear activities, unlimited inspections, ending the intercontinental ballistic missile program, ending its support for terrorism and ending attempts to murder Israelis and destroy the State of Israel.

Oren cited a list of conditions US Secretary of State Mike Pompeo delineated for lifting sanctions as very similar to what Israel would need. "The fact that we never said what a good deal would look like in the Obama years enabled them to say no deal would be good enough for the Israelis. We can't be in that situation again," Oren said. Democratic nominee Joe Biden would "lift the sanctions and restore the nuclear agreement," Oren also said, in light of statements Biden has made about Iran.

A Biden victory would probably mean that tens of millions of dollars will flow into Iran, allowing its economy to rebound, and Iran will be able to produce dozens of nuclear bombs within a short time, due to the sunset clauses in the world powers' nuclear agreement, the former ambassador said.

American experts were more optimistic than Israelis, with US Special Representative for Iran Brian Hook saying that Iran is far less capable of threatening Israel these days.

"The Iranian regime is desperate," he told The Jerusalem Post. "It was losing its influence in the region even before the COVID-19 outbreak. The effectiveness of the [American] maximum pressure campaign sharply cut Iran's ability to fund its proxies, like Hezbollah and Hamas which threaten Israel. The elimination of [Quds Force commander Qasem] Soleimani deprived the regime of its most influential operator."

Now, in light of the coronavirus's spread, Hook said Iran has become a "pariah" because it continued Mahan Air flights to China even after the outbreak began. "Extortion is the only thing the regime has left in its arsenal, but the international community is losing its appetite for the world's leading sponsor of terrorism," he stated. Another Trump administration source argued that since Soleimani's assassination, Iran is more hesitant to be as provocative with Israel as it had been.

At the same time, the source said that while "there's desperation...they have fewer and fewer resources to turn to" in Iran, they do not seem to want to reconsider their policies. The impact of their economic crisis has been mostly felt by Iran's proxies who are "receiving less money and fewer weapons, which makes it harder [for Tehran] to maintain a grip on the region. They have less influence because of the maximum pressure campaign." Trump's second national security adviser, HR McMaster, cited an ongoing legitimacy crisis for the Iranian regime, pointing to the regular demonstrations and strikes in







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