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ADMINISTRATION/PROGRAM SPECIFICS

Leading 20th Air Force – command team way forward

20th Air Force Public Affairs, 13 July 20 1st Lt Ieva Bytautaite

F. E. WARREN AIR FORCE BASE, Wyo. -- The Sentinel Warriors of 20th Air Force are now led by Maj. Gen. Mike Lutton, commander, and Chief Master Sgt. Charles Orf, command chief. Lutton has been in the commander's seat for almost a week, but he already has a clear mission, vision and priorities for the Sentinel Warriors.

The 20th Air Force team must provide combat-ready forces, given the global security environment. They are a part of the joint force prepared to win, and will continue to grow lethality and innovate to provide military options to ensure our nation always meets the global security environment from a position of strength.

The mission of 20th Air Force is to defend the United States with combat ready nuclear forces; on order, conduct global strike. Our priorities are building integrated lethality; developing and caring for Airmen and families; and leading nuclear surety and weapon system safety. Our vision statement is simple and powerful - we are the world's most respected and feared global strike team, always ready to strike.

Having a clear vision for the future from the commander helps Airmen achieve goals and responsibilities of ensuring a lethal, safe and secure force.

Q. The new mission statement says: defend the United States with combat ready nuclear forces; on order, conduct global strike. How can Airmen at all levels ensure they remain combat ready?

A. Combat ready is a function of experience and proficiency. Leadership at all levels must continually assess flight, squadron, group, and wing readiness as well as experience and proficiency. Then mentor, coach, teach, and prepare Airmen for the assigned missions. By forecasting opportunities to grow readiness, leaders at all levels continue to develop their Airmen by providing opportunities to not only develop but grow experience and proficiency.

Q. The new vision statement, the world's most respected and feared global strike team, always ready to strike, also focuses on readiness. Can you explain why it is important for 20th Air Force to work together as a cohesive team?

A. Teams are more lethal and effective than individuals. Being a part of the joint force is a team effort. Team cohesion starts with an understanding of what each individual teammate brings to the fight. Integration combines multiple disciplines across various teams to create lethal military units able to achieve our most challenging military objectives. Lastly, teamwork is predicated on respect for what each member brings to the fight. Each team member is valued and contributes to the mission.

Q. The command's priorities, build integrated lethality, develop and care for Airmen and families, and lead nuclear surety and weapon system safety focus on mission, the development of Airmen and their families, and nuclear surety. What does developing Airmen and families look like?

A. Developing Airmen and families remains fundamental to the success of our Air Force and military. Developing Airmen is about taking the time to understand the unique perspectives of each Airmen. It is important for leaders to understand their goals and take the time to ensure Airmen have a plan to meet their goals. Then, leaders need to mentor, coach, and support Airmen along the way. Developing Airmen isn't a task to accomplish. It is a fundamental responsibility of all leaders.

Families, as noted above, remain fundamental to the success of our Air Force and military. We must ensure world-class support for our families as well as a world-class community on and off-base. This all starts with how our families are welcomed to Air Force Global Strike Command and our bases. Our military-community partnership is also key to ensuring success in this area.

Q. As you look forward to leading the Sentinel Warriors, what are you most excited about?

A. I am most excited to be back in Air Force Global Strike Command and humbled to be able to serve our Airmen and families!

AFNWC gets new commander

Air Force Nuclear Weapons Center Public Affairs, July 17 | Leah Bryant

KIRTLAND AIR FORCE BASE, N.M. -- Brig. Gen. Anthony W. "Awgie" Genatempo took command of the Air Force Nuclear Weapons Center during a ceremony June 26 at the Phillips Conference Center here.

He succeeds Maj. Gen. Shaun Q. Morris, who took command of AFNWC in October 2017.

The center is responsible for synchronizing all aspects of nuclear materiel management on behalf of Air Force Materiel Command in direct support of Air Force Global Strike Command. With its headquarters here at Kirtland AFB, the center has about 1,400 personnel assigned to 18 locations worldwide.

In a first for AFNWC, some members of the official party attended the ceremony via video due to COVID-19 mitigation measures, including Gen. Arnold W. Bunch, Jr., AFMC commander, who presided over the change-of-command ceremony, and Dr. Will Roper, Air Force assistant secretary for acquisition, technology and logistics, who presided over the Air Force program executive officer change in leadership.

During the live-streamed event, Bunch expressed his appreciation for Morris' leadership during his past three years as the center's commander and the work done by the AFNWC team.

"This is a one or zero business that you are in, it's either right or wrong when we do these acquisitions. The Air Force nuclear enterprise has got to be at 100 percent," Bunch said, noting the level of rigor and precision expected from individuals who are developing and fielding nuclear weapons. "The mission is vital to our national defense and to our nuclear deterrent. With the air and the land leg, we have two-thirds of the triad, and when you add in nuclear command, control and communications, we have much, much more than that. That's why the role of this unit is so critical and why it has to

perform at such a high level. Today we bid a fond farewell to Shaun and [his wife] Jean after three years of carrying the torch for the nuclear enterprise and doing a fantastic job as a leadership team.”

Bunch said Morris “set a new standard” in the programs he led at AFNWC, including the Long Range Stand-Off Weapon, Minuteman III, Ground Based Strategic Deterrent, ICBM fuze, programmed depot maintenance, and weapon generation facilities, bringing them “to a whole new level” and kept nuclear modernization efforts on track.”

In terms of manpower, Bunch said when Morris arrived at AFNWC, it didn’t have enough manning to execute many of its programs, but now, under Morris’ leadership, “we are hiring the right people, we got the right skill sets, we’re getting them to the right places, and we are buying down the risk on these key programs.”

Bunch also praised the relationships and collaborations Morris built across the Defense Department, including with the Navy and Air Force Global Strike Command, which is the center’s primary customer.

“A key success was the level of credibility that the Nuclear Weapons Center brings now when they come into conversations,” Bunch said. “[They are] true professionals who when we say will deliver something at a certain time, especially milestones, everyone expects it and they know it’s going to happen. The level of credibility, the level of trust, is higher than I’ve ever seen in any enterprise and a lot of that, Shaun, has to do with your leadership. You have done a tremendous job as the commander for the last three years and as the [program executive officer], and you should feel very good walking out the door that you’ve set the team on a path to make sure our nuclear modernization, which is so key, continues.”

“It has been a tremendous honor to be part of AFNWC for the past almost three years,” Morris said.

To the AFNWC team, he said, “General Bunch was incredibly kind to talk about [my] accomplishments and you all have to recognize that those are your accomplishments. What I appreciate and thank you for is the ability to be alongside you as you were doing it, and maybe in some cases...helping to facilitate that success for you by maybe getting some obstacles out of your way. I have been tremendously blessed to be here and have the opportunity to work with such an incredible, fantastic group of professionals, who as General Bunch said, do a wartime mission every single day.”

“Ninety-nine percent of the people in this country have no idea what you do every single day, and how thankful they should be for it, but 100 percent of the people in this country benefit from what you do every day to keep them safe, because you keep our nuclear deterrent viable and active, and never doubted and always feared. The nation owes you a debit of gratitude and on their behalf I will say, ‘thank you.’”

Morris was confirmed for promotion to lieutenant general and next month is taking command of the Air Force Life Cycle Management Center, which is headquartered at Wright-Patterson AFB, Ohio.

“When you have a good leader and they leave...you have to pick the right officer to come in behind and pick up the mantle and run with it,” Bunch said. “Awgie Genatempo is the right guy right now to bring into the organization and take it to the next level.”

After assuming command, Genatempo said this is the second time he has followed Morris in an assignment—the first time was just prior to a Category-5 hurricane bearing down on Eglin AFB, Florida. He pointed out this time Morris has given him the leadership challenge of bringing an organization out of a global pandemic, yet another “calamity.”

“This is truly ‘déjà vu all over again,’” Genatempo added. “I started my Air Force career as a second lieutenant here at Kirtland Air Force Base. I’m very excited to be coming back.”

To the AFNWC team, he said, “If there is one thing that has impressed me in the very short day and a half that I’ve spent with you, it’s your dedication and drive for what can arguably be said is our nation’s most important mission. And the fact that you get after it with such enthusiasm and vigor, it’s someplace that I know I’m going to feel right at home and I’m proud already to be a part of this organization.”

He also thanked General Bunch for his mentorship over the past 11 years, “which has shaped me into the person that I am” as a leader.

In addition to assuming command of AFNWC, Genatempo became dual-hatted as the Air Force program executive officer for strategic systems, a position Morris also held.

During the change-in-leadership ceremony, Roper offered his thanks for the “quiet peace that comes from our nuclear deterrent that is maintained every day” by the AFNWC team, adding “there is a big challenge ahead as we modernize the triad that has been sitting, doing its job quietly, but is in some need of...care.”

“Shaun, coming into [my] job it only took one meeting with you to realize what a consummate acquisition professional you are. It made coming into the position of a service acquisition executive so much easier...having [your] steady hand with an encyclopedic knowledge of your programs,” Roper said. “It also doesn’t take more than a meeting with Awgie to realize that this is a leader who makes people comfortable and inspired to do things differently and, as someone who loves innovation, that’s just a wonderful resource to have in the acquisition enterprise.”

Previously, Genatempo was the Air Force’s program executive officer for weapons and dual-hatted as the Air Force Life Cycle Management Center’s armament director at Eglin AFB, Florida.

Presidential Message on the 75th Anniversary of the Trinity Nuclear Test

White House, July 16 | Presidential Statement

Seventy-five years ago today, on a rainy morning in the Jornada del Muerto desert of New Mexico, the United States ushered in the nuclear age with the detonation of the world’s first nuclear explosive device—an event code-named “Trinity.” This remarkable feat of engineering and scientific ingenuity was the culmination of the Manhattan Project, which helped end World War II and launch an unprecedented era of global stability, scientific innovation, and economic prosperity.

After Trinity, nuclear testing conducted by the United States laid the groundwork to maintain our stockpile and further our ability to understand and prevent nuclear threats around the world. Since 1992, we have observed a moratorium on such testing and have relied on the scientific and technological expertise of our weapons complex to ensure our deterrent is safe, secure, and effective. True to our word, we maintain our moratorium, although Russia has conducted nuclear weapons experiments that produce nuclear yield, and despite concerns that China has done the same.

Our nuclear deterrent has also greatly benefitted our Nation and our allies around the world, even as they have adhered to their nonproliferation commitments. Nuclear deterrence and nonproliferation work together to further global security. Our nuclear weapons continue to underwrite American national security and are the backstop of our national defense. Having robust and diverse capabilities constrains global nuclear proliferation, deters adversaries, and assures allies and partners that rely upon American nuclear deterrence as a key component of their security.

In order to continue protecting America's vital security interests, I have directed my Administration to revitalize and modernize America's nuclear security complex to preserve a credible deterrent. We are investing in the capability to produce plutonium pits to support our stockpile needs and to improve the infrastructure of the weapons ecosystem. We continue to advance the Ground Based Strategic Deterrent, the B-21 Bomber, the Long Range Standoff Weapon, and the Columbia-class submarine, all of which help ensure that we can deter aggression and preserve peace for future generations.

At the start of my Administration, I also resolved to begin a new era of arms control that moves beyond the bilateral treaties of the Cold War. The arms control of the future must include measures that advance the security of America and our allies, are verifiable and enforceable, and involve partners that comply responsibly with their obligations. I call, once again, on Russia and China to join us in these efforts, working together to make the world safer and to stave off a new arms race.

Today, on the 75th anniversary of the Trinity test, we reflect on the incredible tradition of ingenuity and innovation that has defined our Nation for generations. We also recognize the dedication and skill of the men and women of the current American nuclear enterprise, and we thank them for their contributions to our national security and the strength of our deterrent capabilities.

Pompeo Draws a Line Against Beijing in the South China Sea

The United States has aligned itself on the side of international law, but backing up a tough statement will be hard.

BY BILL HAYTON for Foreign Policy Magazine // | JULY 15, 2020, 12:46 PM

In a surprise move, the Trump administration has issued a statement on the South China Sea that is consistent with international law, grounded in historical evidence, and completely in line with the expectations of the United States' allies and partners.

It places the United States squarely behind the interests of Vietnam, Malaysia, Indonesia, Brunei, and the Philippines, all of which have serious disputes with Beijing. It's a strong move—but the big question is how Washington will follow up on it. In his statement on Monday, U.S. Secretary of State Mike Pompeo said he was aligning the U.S. position on China's maritime claims in the South China Sea with the 2016 ruling of an international arbitral tribunal in The Hague.

That ruling, in a case brought by the Philippines, comprehensively demolished China's decades-old claims to maritime resources that go beyond those allowed by the United Nations Convention on the Law of the Sea (UNCLOS). China refused to even attend the tribunal, despite being a UNCLOS signatory, and fiercely denies the result. In an alternate universe, one in which Rodrigo Duterte lost the Philippine presidential election in 2016 and Hillary Clinton won the White House, this statement would have been issued long ago.

Duterte's taking power, just 12 days before the arbitration ruling was announced, killed the chances of such an approach at the time even under then-U.S. President Barack Obama. It is easy to imagine it lying buried in a file for four years until some patient State Department officials felt able to revive the practice of diplomacy and working partnerships in the twilight months of Trump. But with the statement now nailed to the mast of U.S. policymaking in Asia, what should happen next?

China's claims in the South China Sea fall into two types: "territorial claims" to the disputed rocks and reefs and "maritime claims" to the resources in the sea around those rocks and reefs. The United States, quite sensibly, has never taken a position on which country is the rightful owner of these territories. However, Pompeo's statement breaks new ground by asserting that China has "no lawful territorial or maritime claim to (or derived from) James Shoal."

This will be music to the ears of Malaysia because James Shoal (Beting Serupai in Malay, Zengmu Ansha in Chinese) is an entirely submerged piece of seabed about 50 miles from the coast of Borneo and more than 600 miles from China. China claims James Shoal as its "southernmost territory" because of a translation error by a Republic of China government committee in 1934. The committee used the Chinese word "tan" as a translation of "shoal." Tan means "sandbank," and this bureaucratic mistake led to a piece of seabed becoming defined as land.

In 1947, the translation was changed to ansha, which means "hidden sand," but the territorial claim remained. The other key parts of Pompeo's statement followed the 2016 arbitration ruling in asserting that neither Scarborough Shoal (off the Philippine coast) nor any of the so-called Spratly Islands are actually islands in the full sense. That is, they are not large enough to justify an exclusive economic zone (EEZ) around them.

An EEZ can stretch for up to 200 nautical miles around an island, incorporating a far larger area than the 12-nautical-mile territorial sea that a mere "rock" can generate. This is exactly what the Philippines would want Washington to say and backs up the findings of the arbitral tribunal. But Pompeo went even further by rejecting any Chinese "maritime claim in the waters surrounding Vanguard Bank (off Vietnam), Luconia Shoals (off Malaysia), waters in Brunei's EEZ, and Natuna Besar (off Indonesia)."

Vanguard Bank is another underwater feature, like James Shoal. Luconia Shoals are a series of reefs where sandbanks occasionally form, and Natuna Besar, where the statement deliberately used the Indonesian name, is a reference to problems that Indonesia has been suffering from incursions of Chinese fishing vessels into its EEZ around the Natuna Islands. This statement thus positions the United States not as an outside interloper in the South China Sea only interested in questions of freedom of navigation or great-power competition with China but as a supporter of the legitimate rights of Southeast Asian countries, backed up by well-established international law under UNCLOS.

It is exactly what the governments of those countries want to hear. It is their fishers whose boats get sunk by Chinese vessels and their offshore energy industries that are blocked from developing new resources. It is their people's livelihoods and national economies that suffer as a result of

China's efforts to undermine the UNCLOS treaty that it negotiated, signed, and ratified. Southeast Asian governments knew this statement was coming. American diplomats circulated a nonpaper version to them last week.

They broadly welcome its fine words, but that rhetoric means little by itself. What Southeast Asian governments seek is protection in their EEZs, far out at sea. They want to know that they can go fishing and prospect for hydrocarbons in line with UNCLOS without triggering intimidation from China's growing navy, coast guard fleet, and maritime militia. At the same time, they are apprehensive. As Shahrman Lockman, a veteran South China Sea watcher at the Institute of Strategic and International Studies in Malaysia, said:

"The U.S. presence is seen as a double-edged sword. It has the effect of both deterring but also potentially escalating matters with China. ... The worst-case scenario is for things to escalate, and then the U.S. gets distracted by something in the Middle East, and we get saddled with more Chinese ships in our waters." The Chinese embassy in Washington responded to Pompeo's statement with boilerplate text about how the US "deliberately distorts the facts and international law."

There has already been a noticeable increase in military activity in the South China Sea this year, with two U.S. aircraft carrier groups exercising there just this month, at the same time as the Chinese navy conducted maneuvers. Even before Monday's statement, the two militaries seemed to be steering a course that was taking them closer to actual confrontation. China has dozens of paramilitary vessels—coast guard and militia—that are intended to loiter and seek an opportunity to seize the advantage.

The U.S. Navy is built for the opposite—quick in-and-out operations. In a dispute over resource rights, the advantage lies with the force with staying power. What then could Washington actually do? The United States, along with its allies and friends, could provide a picket line in the South China Sea, observing, publicizing, and protesting infringements of UNCLOS. It could also position its ships behind Southeast Asian government vessels attempting to enforce UNCLOS. It would be a tough balance to maintain.

This is primarily the Southeast Asian governments' fight: There would be little domestic support for the United States shedding blood to protect someone else's oil nor much Southeast Asian support for the country using the region to fight a kinetic battle with China. And these moves would come at a time when the Chinese leadership has elevated questions of national territory to a near-sacred level.

Whether in Hong Kong, the Himalayas, or over Taiwan, Xi Jinping's government appears to regard the protection of China's territorial claims (however poorly founded they may be) as a matter of national life and death. Given everything else that is going on in the U.S.-China relationship, the risk of escalation is real. In his 1924 speech on pan-Asianism, Sun Yat-sen, one of the founding fathers of modern China, drew a distinction between a "European civilization [that] is nothing but the rule of might" and a superior civilization in the East based on "the rule of right."

These days, Vietnamese fishermen are discovering that in the South China Sea, the "right" agreed in UNCLOS is somewhat flimsy compared with the "might" of the China Coast Guard ship ramming and sinking their wooden boats. On Monday, Pompeo positioned the United States behind "right," quoting Sun as he did so. But, as Sun knew well, right is useless without the power of might behind it. It would also be politically useful for the United States to demonstrate its own commitment to "right" by mustering the 66 senators required to formally ratify UNCLOS. Using power to

protect legitimate rights without crossing the line into war will be a tough challenge for the United States and its friends, partners, and allies in Southeast Asia.

White House Chief Tech Officer to Backfill Griffin at Pentagon

July 13, 2020 | By [John A. Tirpak](#)

Michael J. K. Kratsios, the White House's 33-year-old chief technology officer, is the new acting undersecretary of defense for research and engineering, effective July 10, the Pentagon announced July 13. He fills in behind Michael D. Griffin, whose last day was also July 10. Griffin and his deputy, Lisa Porter, left to pursue unidentified opportunities in the private sector.

As Chief Technology Officer of the U.S., a Senate-confirmed position Kratsios has held since August 2019, he has developed national plans for "artificial intelligence, quantum computing, autonomous vehicles, commercial drones, STEM education, and advanced manufacturing," the Pentagon said through a spokesman. "He has been integral in the President's efforts to expand 5G and broadband communications nationwide." Many of these are technologies that Kratsios will now oversee at the Pentagon. Unlike Griffin, who holds a doctorate in physics and five Master's degrees, including in engineering and business administration, Kratsios has no formal scientific or technology training, holding a bachelor's in politics from Princeton University.

"We wanted someone with experience in identifying and developing new technologies and working closely with a wider range of industry partners," said Defense Secretary Mark T. Esper.

Porter's role as deputy undersecretary will be filled by Mark J. Lewis, director of defense research and engineering for modernization, also in an "acting" capacity. Lewis will retain his modernization leadership duties as well.

Kratsios was "responsible for architecting the American AI Initiative, standing up the National Quantum Coordination Office, and most recently, launching of the COVID-19 High Performance Computing Consortium," the Pentagon spokesman said.

Kratsios was Senate-confirmed for the CTO position, but does not need confirmation to serve as "acting" undersecretary of defense, unless he is officially nominated to the post. The Trump Administration has been selective and slow about what replacement officials it offers up for Senate confirmation. Former Acting Defense Secretary Patrick M. Shanahan, for example, served in that capacity for six months before being formally nominated for the post. He resigned before being confirmed.

Before becoming CTO, Kratsios was a deputy assistant/technology advisor to President Donald J. Trump. He came to the White House from Thiel Capital, serving as chief of staff to its CEO, venture capitalist Peter Thiel, a Trump campaign contributor who co-founded PayPal and Palantir Technologies, which is a software and data analytics company. At the White House, Kratsios headed an initiative to integrate drones into the national airspace system, which led to an FAA pilot program on UAS integration.

Kratsios' White House biography says he's responsible for "aligning the development of new technologies with the Administration's priorities."

Lewis to Perform Duties of Undersecretary for Research and Engineering

July 10, 2020 | By [John A. Tirpak](#)

The Pentagon is expected to name the acting undersecretary of defense for research and engineering as early as July 13, with the department's current director of defense, research, and engineering for modernization to perform the duties in the interim.

Michael D. Griffin, who held the position since December 2017, stepped down, with his last day in the Pentagon on July 10. For now, Mark J. Lewis will be "performing the duties of" the undersecretary, but will not be "acting," a Pentagon spokesman said.

According to the organizational chart, Lewis is "next in line," Pentagon spokesman Lt. Col. Robert Carver said July 10.

Griffin and deputy Lisa Porter announced June 23 they'd be leaving for an "opportunity" in the private sector, which they did not disclose. Lewis came into the Directorate of Defense Research and Evaluation's Modernization job last fall, heading up efforts to insert 11 areas of new technology into Pentagon weapon systems. These range from directed energy and hypersonics to quantum computing and bio technology.

Early in his tenure, Griffin established hypersonics as his top priority for research and engineering, but Lewis, [in a recent appearance](#) in a Mitchell Institute for Aerospace Studies "Aerospace Nation" streaming event, said microelectronics has displaced hypersonics as the top priority. He explained this shift is due to the strides made in hypersonics over the past three years and because microelectronics is part of all weapon systems, and secure chip manufacture is an area of concern.

White House fills troubled Russia job

Starting on Monday, the new top Europe and Russian official on the National Security Council will be Ryan Tully.

By [DANIEL LIPPMAN](#) for Politico // 07/10/2020 02:25 PM EDT

The White House has tapped Ryan Tully to be the top Europe and Russian official on the National Security Council, the fifth person to hold the job in three and a half years, according to two people familiar with his hiring.

Tully, who assumes his new role on Monday, is currently the senior adviser for arms control and deputy senior director for the council's directorate on weapons of mass destruction, where he helped lead policy on counterproliferation and biosecurity. The job of senior director for European and Russian affairs at the White House has seen rapid turnover in the last year. Tully replaces Tom Williams, who returned to the Defense Department on Friday after a two-year detail at the NSC.

Other people who have held the role in the Trump administration include Fiona Hill and Tim Morrison, both of whom testified in the impeachment inquiry, and, briefly, Andrew Peek. In his time at the NSC, policies Tully has worked to ban exports of component parts for Chinese telecom giant Huawei, the Trump administration's withdrawal from the Open Skies Treaty with Russia and efforts to punish Iran at the International Atomic Energy Agency for not properly disclosing nuclear material.

He accompanied Marshall Billingslea last month to Vienna to assist the new special envoy for arms control's push for a trilateral arms control agreement between the U.S., Russia and China. Tully "brings a wealth of experience and his selection reflects the administration's prioritization of trilateral arms control with Russia and China, 5G security cooperation with European partners, seeking equitable burden-sharing among NATO allies, and revitalizing our nuclear deterrent," NSC spokesman John Ullyot said.

Before joining the NSC in December 2018, Tully worked at the State Department, where he was senior adviser to the undersecretary of State for arms control and international security. He also spent seven years working as a professional staff member on the Senate Select Committee on Intelligence, where he worked on a number of issues, including Russia and Europe, counterproliferation, arms control and energy security.

From 2008 to 2018, Tully also served as a Navy reserve intelligence officer, where he has done work for the Defense Intelligence Agency, the Naval Criminal Investigative Service and at NATO. In other staffing news at the NSC, Kash Patel recently returned to the NSC as senior director for counterterrorism, according to two administration officials. Patel came back after a short stint at the Office of the Director of National Intelligence, where he was principal deputy to acting DNI Richard Grenell until former Rep. John Ratcliffe (R-Texas) got confirmed in late May.

Patel is the former top staffer for Rep. Devin Nunes (R-Calif.) on the House Intelligence Committee and was the lead author of a report questioning the conduct of FBI and DOJ officials investigating Russia's election interference.

NNSA Administrator kicks off tour of the Nuclear Security Enterprise

First Stop: The Savannah River Site in Aiken, South Carolina
National Nuclear Security Administration, July 13 | Press Release

WASHINGTON -- Last week, the U.S. Department of Energy's Under Secretary for Nuclear Security and Administrator of the National Nuclear Security Administration (NNSA) Lisa E. Gordon-Hagerty kicked off a tour of the Nuclear Security Enterprise. Coinciding with the 20th anniversary of NNSA's creation, the Administrator plans to make her way across the Nation to visit the agency's eight labs, plants and sites by year's end. She began with a visit July 10 to the Savannah River Site (SRS) in Aiken, South Carolina.

The Administrator will be visiting NNSA's facilities to observe the status of ongoing projects and show her appreciation to the Nuclear Security Enterprise's 50,000 strong workforce – who made it possible for the agency to fulfill its missions despite the pandemic. Thanks to their efforts, NNSA has not missed any major milestones or deliverables since the start of the pandemic response.

"I am excited to return to the field and see our talented workforce in action," Administrator Gordon-Hagerty said. "I look forward to personally thanking them for what they have accomplished through – and despite – the pandemic, and the contributions many have made at our three national security labs in response to the COVID-19 pandemic."

The Administrator began her tour and NNSA's 20th anniversary celebrations at SRS, which is also celebrating its own 70th birthday. During her visit, she focused on major mission areas including surplus plutonium disposition, tritium activities, and the proposed Savannah River Plutonium

Processing Facility to support the Nation's nuclear warheads. She also recognized the Site's workforce in a ceremony; met with local and state leaders to discuss their shared interests in NNSA's work at SRS; and toured the SRS Museum in honor of the site's seven decades of service to the Nation.

595th C2G under new leadership

55th Wing Public Affairs Staff, July 10 | Sgt. Jessica Montañó

OFFUTT AIR FORCE BASE, Neb. -- The 595th Command and Control Group and the National Airborne Operations Center held a change of command ceremony here July 9, 2020.

Col. Brian Golden assumed command from Col. Jeremiah Baldwin in a ceremony officiated by Maj. Gen. Mark Weatherington, Eighth Air Force and Joint-Global Strike Operations Center commander.

“(Golden) is a perfect match for this challenging position,” said Weatherington. “When the chips are down, he’s calm, he’s articulate, he’s decisive and he’s fearless, which are all attributes that will pay off in this job.

“I’m also going to add one more and that’s persistence in the face of adversity and I’m grateful that his persistence is being rewarded with command of these two fine organizations”

The 595th C2G falls under the direction of Eighth Air Force and is comprised of four squadrons with various nuclear command, control and communications missions. The NAOC operations teams, made up of joint personnel from a variety of specialties serving on board the E-4B aircraft, provide a highly-survivable, command, control and communications center to direct U.S. forces, execute emergency war orders and coordinate actions by civil authorities in case of national emergency.

“This is a great honor,” said Golden. “I want to thank (Baldwin) for everything he has done for the organization. He has left this place better than he found it.”

Golden previously served as the director of the Joint Global Strike Operations Center, which oversees all peacetime and wartime actions for U.S. Strategic Command's Joint Force Air Component commander and the commander, Air Force forces.

“Force should be the last resort for us as a nation. Ironically, the military's number one job is to prepare for war and therefore, being properly prepared for war is the ultimately deterrence,” said Golden. “The mission of the members of the 595th and NAOC team perform every day is just one of the many examples of that deterrence. And I promise I will do everything I can to make sure you are ready to perform that mission.”

In 2018, Baldwin became the first to command of both units and retires after more than 25 of years in service to the U.S. Air Force.

“For the last two years this team of team’s has accomplished their mission under the incredible and exceptional leadership of the first-ever dual hatted NAOC and 595th commander,” said Weatherington. “This team will benefit from Baldwin’s engaged leadership and relentless pursuit of excellence for years to come.”

“I cannot tell you how proud I am of this team and our families today,” Baldwin said. “I’m very humbled to have been a part of it.”

The 595th C2G is a geographically separated unit of Eighth Air Force, established in 2016.

Pompeo Draws a Line Against Beijing in the South China Sea

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BY [BILL HAYTON](#) for Foreign Policy Magazine // | JULY 15, 2020, 12:46 PM

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It places the United States squarely behind the interests of Vietnam, Malaysia, Indonesia, Brunei, and the Philippines, all of which have serious disputes with Beijing. It’s a strong move—but the big question is how Washington will follow up on it. In his [statement](#) on Monday, U.S. Secretary of State Mike Pompeo said he was aligning the U.S. position on China’s maritime claims in the South China Sea with the 2016 ruling of an international arbitral tribunal in The Hague.

That ruling, in a case brought by the Philippines, comprehensively demolished China’s decades-old claims to maritime resources that go beyond those allowed by the United Nations Convention on the Law of the Sea (UNCLOS). China refused to even attend the tribunal, despite being a UNCLOS signatory, and fiercely denies the result. In an alternate universe, one in which Rodrigo Duterte lost the Philippine presidential election in 2016 and Hillary Clinton won the White House, this statement would have been issued long ago.

Duterte’s taking power, just 12 days before the arbitration ruling was announced, killed the chances of such an approach at the time even under then-U.S. President Barack Obama. It is easy to imagine it lying buried in a file for four years until some patient State Department officials felt able to revive the practice of diplomacy and working partnerships in the twilight months of Trump. But with the statement now nailed to the mast of U.S. policymaking in Asia, what should happen next?

China’s claims in the South China Sea fall into two types: “territorial claims” to the disputed rocks and reefs and “maritime claims” to the resources in the sea around those rocks and reefs. The United States, quite sensibly, has never taken a position on which country is the rightful owner of these territories. However, Pompeo’s statement breaks new ground by asserting that China has “no lawful territorial or maritime claim to (or derived from) James Shoal.”

This will be music to the ears of Malaysia because James Shoal (Beting Serupai in Malay, Zengmu Ansha in Chinese) is an entirely submerged piece of seabed about 50 miles from the coast of Borneo and more than 600 miles from China. China claims James Shoal as its “southernmost territory”

because of a translation error by a Republic of China government committee in 1934. The committee used the Chinese word “tan” as a translation of “shoal.” Tan means “sandbank,” and this bureaucratic mistake led to a piece of seabed becoming defined as land.

In 1947, the translation was [changed](#) to ansha, which means “hidden sand,” but the territorial claim remained. The other key parts of Pompeo’s statement followed the 2016 arbitration ruling in asserting that neither Scarborough Shoal (off the Philippine coast) nor any of the so-called Spratly Islands are actually islands in the full sense. That is, they are not large enough to justify an exclusive economic zone (EEZ) around them.

An EEZ can stretch for up to 200 nautical miles around an island, incorporating a far larger area than the 12-nautical-mile territorial sea that a mere “rock” can generate. This is exactly what the Philippines would want Washington to say and backs up the findings of the arbitral tribunal. But Pompeo went even further by rejecting any Chinese “maritime claim in the waters surrounding Vanguard Bank (off Vietnam), Luconia Shoals (off Malaysia), waters in Brunei’s EEZ, and Natuna Besar (off Indonesia).”

Vanguard Bank is another underwater feature, like James Shoal. Luconia Shoals are a series of reefs where sandbanks occasionally form, and Natuna Besar, where the statement deliberately used the Indonesian name, is a [reference](#) to problems that Indonesia has been suffering from incursions of Chinese fishing vessels into its EEZ around the Natuna Islands. This statement thus positions the United States not as an outside interloper in the South China Sea only interested in questions of freedom of navigation or great-power competition with China but as a supporter of the legitimate rights of Southeast Asian countries, backed up by well-established international law under UNCLOS.

It is exactly what the governments of those countries want to hear. It is their fishers whose boats get sunk by Chinese vessels and their offshore energy industries that are blocked from developing new resources. It is their people’s livelihoods and national economies that suffer as a result of China’s efforts to undermine the UNCLOS treaty that it negotiated, signed, and ratified. Southeast Asian governments knew this statement was coming. American diplomats circulated a nonpaper version to them last week.

They broadly welcome its fine words, but that rhetoric means little by itself. What Southeast Asian governments seek is protection in their EEZs, far out at sea. They want to know that they can go fishing and prospect for hydrocarbons in line with UNCLOS without triggering intimidation from China’s growing navy, coast guard fleet, and maritime militia. At the same time, they are apprehensive. As Shahrman Lockman, a veteran South China Sea watcher at the Institute of Strategic and International Studies in Malaysia, said:

“The U.S. presence is seen as a double-edged sword. It has the effect of both deterring but also potentially escalating matters with China. ... The worst-case scenario is for things to escalate, and then the U.S. gets distracted by something in the Middle East, and we get saddled with more Chinese ships in our waters.” The Chinese embassy in Washington responded to Pompeo’s statement with [boilerplate](#) text about how the US “deliberately distorts the facts and international law.”

There has already been a noticeable increase in military activity in the South China Sea this year, with two U.S. aircraft carrier groups exercising there just this month, at the same time as the Chinese navy conducted maneuvers. Even before Monday’s statement, the two militaries seemed to be steering a course that was taking them closer to actual confrontation. China has dozens of paramilitary vessels—coast guard and militia—that are intended to loiter and seek an opportunity to seize the advantage.

The U.S. Navy is built for the opposite—quick in-and-out operations. In a dispute over resource rights, the advantage lies with the force with staying power. What then could Washington actually do? The United States, along with its allies and friends, could provide a picket line in the South China Sea, observing, publicizing, and protesting infringements of UNCLOS. It could also position its ships behind Southeast Asian government vessels attempting to enforce UNCLOS. It would be a tough balance to maintain.

This is primarily the Southeast Asian governments' fight: There would be little domestic support for the United States shedding blood to protect someone else's oil nor much Southeast Asian support for the country using the region to fight a kinetic battle with China. And these moves would come at a time when the Chinese leadership has elevated questions of national territory to a near-sacred level.

Whether in Hong Kong, the Himalayas, or over Taiwan, Xi Jinping's government appears to regard the protection of China's territorial claims (however poorly founded they may be) as a matter of national life and death. Given everything else that is going on in the U.S.-China relationship, the risk of escalation is real. In his 1924 speech on pan-Asianism, Sun Yat-sen, one of the founding fathers of modern China, drew a distinction between a "European civilization [that] is nothing but the rule of might" and a superior civilization in the East based on "the rule of right."

These days, Vietnamese fishermen are discovering that in the South China Sea, the "right" agreed in UNCLOS is somewhat flimsy [compared](#) with the "might" of the China Coast Guard ship ramming and sinking their wooden boats. On Monday, Pompeo positioned the United States behind "right," quoting Sun as he did so. But, as Sun knew well, right is useless without the power of might behind it. It would also be politically useful for the United States to demonstrate its own commitment to "right" by mustering the 66 senators required to formally ratify UNCLOS. Using power to protect legitimate rights without crossing the line into war will be a tough challenge for the United States and its friends, partners, and allies in Southeast Asia.

News & Opinion

Minot AFB anniversary means much to community

Happy 65th anniversary to Minot Air Force Base.

Minot Daily News Online (North Dakota), July 13 | Editorial

Yesterday marked 65 years since a groundbreaking ceremony in 1955 on farmland north of Minot where construction began.

The Minot community welcomed the base then, and it continues to welcome the base today. That support was recognized last fall when Minot received the Air Force Global Strike Command's Barksdale Trophy, given to the community with the most outstanding support for its local base, including hospitality toward airmen, officers and their families.

Minot AFB has reciprocated. Whether it is opening its gates to host Northern Neighbors Day or inviting the area's seniors to a Thanksgiving feast, air base personnel have embraced the community. When there's been a need for help or to aid an organization, charity or cause, members of Minot AFB frequently are there as well. Their contributions have been enormous over the years.

As flooding became imminent in 1969, more than 1,000 base volunteers joined others in the community to evacuate residents. They rallied again to help Minot rebuild after an even more devastating flood in 2011. As just one example, airmen responded to help a Vietnam veteran renovate his flood-damaged house in Velva. Earlier this year, they were part of a Minot group that traveled to Fargo to "pay it forward" and sandbag against potential spring flooding there.

That is in addition to the economic impact the base has had on the region – calculated at \$559 million in 2019 alone. The base has been a source of civil service jobs, construction jobs and other positive economic measures. Home of the 5th Bomb Wing and 91st Missile Wing, Minot AFB is unique in the Air Force Global Strike Command because it does it all, from nuclear to conventional missions.

Minot AFB also is credited with adding to the community's diversity and talent pool. Many personnel who retired have stayed and continued to contribute in a multitude of ways.

It is hard to imagine what Minot would have looked like today had that groundbreaking not occurred 65 years ago. The base has truly changed the face of Minot, with the weight of that change coming down significantly on the plus side of the scale.

So congratulations to Minot AFB on 65 years, and best wishes for many more years to come.

To Deter War with China, Defend Guam

The National Interest, 11 July 20

Rebecca Heinrichs

The Chinese Communist Party (CCP) seeks to supplant the United States as the global preeminent power. In doing so, the communist regime would use various forms of coercion to force other nations to conform to its likeness rather than respect the national borders of other nations in the region and in many cases their forms of democratic expression. If the CCP successfully transforms the Indo-Pacific into a Beijing-centric and Beijing-controlled region, then it will establish that the United States is no longer able or willing to defend its primary interests or make good on its security commitments to allies. This poses an unacceptable risk to U.S. critical allies in the region and threatens American sovereignty and our ability to engage freely and safely with sovereign democratic nations in a massively important region of the world.

Undergirding China's increasingly bold malfeasance, which has become more prominent during the coronavirus pandemic, is its military strength. The priority for the U.S. military is to deter Chinese aggression in the Indo-Pacific region and to have the right weapon systems and strategies in place to win the war if deterrence fails.

The U.S. military seeks to prevent a military confrontation by bolstering a credible deterrent. An effective deterrence strategy seeks to prevent China from acting aggressively by causing Beijing to calculate that an act of aggression against the United States and our core interests would not be worth the cost. The United States can establish deterrence by punishment, which threatens offensive retaliation. And it can establish deterrence by denial, which requires creating as many dilemmas for the People's Liberation Army (PLA) as possible so that they constantly conclude that they have an insufficient degree of certainty that whatever act of aggression they are considering would be ultimately successful.

Key to the U.S. efforts to deter Chinese aggression is the safety of Guam. Commander of U.S. Pacific Command, Admiral Davidson, testified before the Senate Armed Services Committee on February 12, 2020, and said, "Hawaii, Guam and our Pacific territories are part of our homeland and must be defended."

Americans may need the occasional reminder about the importance of this U.S. island, but U.S. adversaries do not. In 2017, North Korea threatened to attack Guam. In response, then-Secretary of Defense Jim Mattis said the United States would "take out" any missile headed towards Guam and that it would then be "game on." North Korea demurred, bolstering confidence in some military and policymakers that have a credible missile defense capability and demonstrating a will to employ it, can have a deterrent effect.

This tiny but mighty western Pacific island U.S. territory—part of our homeland—is six thousand miles from the coast of California, is indispensable to the United States. Guam has been a major strategic base for a variety of U.S. weapon systems and critical for maintaining the air-delivered leg of the nuclear triad in the Pacific region.

In April 2020, Air Force Global Strike Command announced it is transitioning to embrace a new concept, ending the continuous bomber presence in Guam. It will replace the mission to with a concept that will enable rapid, unpredictable deployments by forward-deploying bombers to various places in the Indo-Pacific region. The new concept is called Dynamic Force Employment (DFE).

A Pentagon statement explained:

“The United States has transitioned to an approach that enables strategic bombers to operate forward in the Indo-Pacific region from a broader array of overseas locations, when required, and with greater operational resilience, while these bombers are permanently based in the United States. U.S. strategic bombers will continue to operate in the Indo-Pacific, to include Guam, at the timing and tempo of our choosing.”

The strategic mission of the bombers, whose role in a crisis with a nuclear-armed state is to de-escalate, remains a commitment and priority for the United States. The DFE concept also increases the importance of Guam, as it will find itself as a kind of hub, an outpost of American territory, necessary for reinforcing and supporting the dynamic missions taking place so far from the United States mainland. Simply put, defense of Guam remains essential for the Pentagon’s shift to deterring China including efforts to boost the credibility of strategic deterrence.

Creating a more robust deterrent architecture for the Indo-Pacific region versus China, beyond the limited one versus North Korea, will require a mix of distributed offensive and defensive weapons—and a lot of them. The United States plans to deploy long-range precision fires from across all platforms, services, and domains, to hold at risk a variety of PLA target sets (remember, multiple dilemmas) from various distances, as well as deploy an integrated air and missile defense (IAMD).

The IAMD mission, as the Pentagon bolsters deterrence by denial, cannot be overstated. It is noteworthy that the missile defense architecture does not have to have the ability to intercept every single missile. Having a sufficiently robust active defense from the many diverse and increasingly sophisticated Chinese missiles will further complicate Beijing’s calculations, and any time the United States can do that, it will strengthen deterrence.

In the IAMD mission, integration warrants emphasis because its aim is to leverage sensors, command and control nodes, and interceptors across sea, land, air, and the space domains.

As my Hudson colleague Seth Cropsey explains:

“China’s saturation strikes will flood American and allied radars with thousands of distinct targets, ranging from standard cruise and ballistic missiles and strike aircraft to unmanned aerial vehicles, strategic bombers, and hypersonic weapons.”

Cropsey goes on to explain that the U.S. military’s individual programs are stove-piped and “therefore developed independently of their technologically equivalent counterparts with little thought to organic integration.”

The Army has a solution for this, perfectly suited for a necessary for the Indo-Pacific theater. It’s called the Integrated Battle Command System (IBCS), and it, again, to quote Cropsey, “strips away these additional layers of transmission and processing, fusing all the data from the systems in which it is installed into a single data picture.”

Wargaming exercises show how badly we need this capability when it comes to the architecture of air and missile defense systems. This is especially meaningful considering that critical to the IAMD mission is the establishment of a fixed and persistent 360-degree defense against the sophisticated Chinese air and missile threats, from the Second Island Chain—that is, Guam.

The Terminal High-Altitude Area Defense (THAAD) system has been deployed on Guam since 2013 and intercepts incoming missiles in their terminal phase of flight. Regionally, it also offers protection in South Korea. The other is a sea-based platform, an Aegis ship equipped with SM-3 IA interceptors. Aegis ships patrol the Pacific region and can be maneuvered to defend areas where war-planners anticipate a missile attack. Both of those systems were designed to intercept exactly the kind of rogue state missile threats rogue states possessed by North Korea.

But with the Trump Pentagon now focused on competing with and deterring major power, China, missile defense systems and strategies must adapt. The Aegis missile defense and THAAD systems should play a role in an architecture for the defense of Guam from threats beyond North Korea. But with a far more sophisticated threat than North Korea, that means deployment changes and upgrades and even greater need for our forward bases to ensure the health of strategic deterrence. The Aegis combat system is flexible, adaptable, and modular, and has great inherent ability to serve in this capacity. For THAAD, currently in planning and development are a larger booster for the THAAD interceptor and use of a two-color seeker allowing for the intercept of a wider range of advanced threats. Additionally, integration of the PAC-3 MSE interceptor into the THAAD system, provides a second layer of defense and engagement opportunities at a lower altitude.

Japan had plans to deploy Aegis Ashore for its own homeland defense against the North Korean threat, and Tokyo's cooperation with Washington on the SM-3IIA missile defense system has been an example of great alliance collaboration, especially in the face of Chinese opposition to its deployment. Causing some concern, Japan suddenly announced a pause in its Aegis Ashore deployment, citing cost and local population concerns. Those are matters for Japan to work out domestically, but it would be a mistake to eschew the initiative to build out a robust missile defense architecture, and so the faster they can resolve the issues, the better. As the threats from China grow, U.S.-Japan close cooperation on the missile defense mission will be foundational to preserving peace. And it is because of the China threat that this suspension in the Aegis Ashore deployment provides an optimal time for Japan to consider how to integrate and supercharge its missile defense architecture to handle not just the missile threats from North Korea, but explicitly from China's growing and increasingly sophisticated arsenal as well.

As for the United States, another necessary venture for defense for the most sophisticated threats is the Space Development Agency's Hypersonic and Ballistic Tracking Sensor (HBTSS). Current land and sea-based interceptor systems even when integrated are inadequate for detecting and tracking certain types of sophisticated Chinese missile threats. We need HBTSS, a proliferated constellation of space sensors in low earth orbit meant to detect and track the hypersonic threats. There is precious little money for HBTSS in the Pentagon's request to Congress. Until the country has it, we remain unable to detect and track Chinese hypersonic threats throughout the course of their flight, an unacceptable risk.

The Senate Armed Services Committee recently passed the National Defense Authorization Act, which included a bipartisan project to build a Pacific Defense Initiative (PDI), spearheaded by Sen. Jim Inhofe (R-Okla.) the committee's chairman, and the ranking Democrat, Sen. Jack Reed (D-R.I.). This initiative would seek to establish a framework for prioritizing and funding to do the necessary shift to the Indo-Pacific Theater and is modeled after the European Deterrence Initiative, meant to bolster offense and defense, and U.S. and ally cooperation, in order to deter Russia's revanchist aspirations.

We have yet to see what the Appropriators will include for the PDI, but the Senate's recent action is an encouraging development.

The sooner the United States can establish more robust, better defenses of our critical bases and assets—none more than the U.S. island of Guam—while demonstrating through testing our ability to strike Chinese valuable targets, the better and more effective the U.S. deterrent. And that means protecting Americans and providing a bulwark against the CCP’s threats to a free and open Indo-Pacific region, and therefore, the American way of life.

-- *Rebecca L. Heinrichs is a senior fellow at Hudson Institute where she specializes in nuclear deterrence and missile defense.*

India and China: Sticks, stones, and words: “Ugly stability”

By [Karthika Sasikumar](#), for The Bulletin // July 13, 2020

Albert Einstein famously quipped that World War IV would be fought with sticks and stones. He reasoned that any World War III would involve the use of nuclear weapons, after which human society would return to an era of primitive technology. But some countries, it seems, are already living this prediction. The [recent border clashes](#) between India and China show that conflict under the nuclear shadow can feature both brutish hand-to-hand combat and verbal signaling. The encounter is also a vivid demonstration of the ugliness of the so-called “stability” that nuclear weapons have brought to Southern Asia.

The context.

India and China have disagreed on the delineation of their mutual boundaries ever since their creation. In 1962, India adopted a “forward policy” on the border, which involved aggressive patrols and the establishment of military outposts in areas claimed by China, but this was met with fierce Chinese resistance. The result was a month-long war in which China captured territory, and then withdrew to positions that became known as the “line of actual control.” The line of actual control has been the de facto border between the two countries ever since.

Sino-Indian relations improved by the start of the 1990s. In 1993, the two sides made an [agreement](#) that placed the border issue on the back burner. Today, China and India are aligned on certain global issues—climate change, Islamist terrorism, and even wariness about the US presence in Asia. China is also India’s [largest](#) trading partner, though the economic relationship is heavily imbalanced; China’s [exports](#) to India stood at \$74 billion in 2019, while India’s exports to China totaled only \$17.8 billion.

But there have been tensions too. India’s formal declaration of nuclear weapon state status [in May 1998](#), and its slow but steady nuclear buildup since, were justified to the world as a response to a rising China. Since 2017, there have been several border incidents that have heightened Indian decision makers’ [concerns](#) about limited military operations and the loss of Indian territory. In the worst-case scenario, Indian officials feared, China could take over some Indian-held territory in conventional border skirmishes, and then leverage its larger nuclear arsenal to prevent Indian troops from retaking it.

The spike in tensions.

The first half of 2020 has been nightmarish for China’s leaders. The spread of [coronavirus](#) from Wuhan, its impact on the economy and China’s reputation overseas, as well as unrest in Hong Kong and greater assertiveness from Taiwan, made Chinese officials nervous about any type of threat. China’s Navy has been conducting [aggressive](#) operations in the South China Sea, while its legislature recently [passed](#) a law suppressing opposition in Hong Kong.

India has had its own traumas, not least due to the coronavirus, which is [estimated](#) to have infected half a million people by late June. A slowdown in economic growth, which began in 2018, has been worsened by the pandemic. Beijing and New Delhi went into the summer on edge, distrustful of each other, and no longer heedful of an increasingly preoccupied United States. As India proceeded with the construction of border roads, which would allow New Delhi to speedily transport troops, China began to apply [pressure](#) on the ground, where the snows had begun to melt.

Recent decisions by the Indian government on its troubled Kashmir province also affected the region of Ladakh, which borders the line of actual control. India's Parliament [abrogated a controversial article of the constitution](#), ending the autonomous political status of Jammu and Kashmir, and constituting Ladakh as a Union Territory to be administered directly by the central government. China was upset about Ladakh's status, as it seemed to [reiterate](#) Indian claims to disputed territory. This spring saw reports of multiple [skirmishes](#) between soldiers stationed in these inhospitable border posts.

The most serious clash took place in the Galwan Valley in eastern Ladakh, a normally quiet part of the border. On the night of June 15, a brawl broke out between Indian and Chinese military personnel in almost the same spot where the countries had fought their war in 1962, leaving 20 Indians and an unconfirmed number of Chinese dead. The belligerents [reportedly](#) used clubs studded with nails, stones, iron rods, and even fists, but not firearms. Per a 1996 bilateral agreement, troops deployed in this sensitive border area are prohibited from carrying guns or explosives. Both sides apparently recognized the danger of escalation to the nuclear level and had sought to prevent it by removing weapons from the lowest level of interaction.

The fallout.

The horrific images of soldiers beaten to death with these primitive weapons infuriated the Indian public. Notwithstanding public anger, New Delhi's response to the Galwan Valley incident was [described](#) in a New York Times op-ed as "mild, almost careful not to offend China." At an all-party conference, Prime Minister Modi [denied](#) that there had been an incursion and insisted that no Indian territory had been compromised. It was clear that Modi's government had chosen to de-escalate and put the ball into Beijing's court. In the weeks that followed, talks were held at senior military levels to work out the details of mutual withdrawal.

The Indian government's choice of de-escalation was disappointing to Indian military hawks, and to its ever-growing array of high-pitched media figures and security experts. On Twitter, there were [calls](#) for "Churchillian defiance," encouraging India to carry on the fight, [perhaps](#) in concert with the United States, Australia, and Japan. For some, the government had "[underplayed](#)" the situation. New Delhi's decision is a capitulation to a [realist](#) calculation that [China outstrips India](#) in both conventional and nuclear strength. Modi's advisors may also be [realizing](#) the limits and the immense potential for blowback from using the media to rouse nationalist passions—as the opposition mocked them, and their past [tweets](#) calling for assertive action against Pakistan and China went viral.

They may be relying on the power of words to extract themselves from the unintended, yet perilous, consequences of blunders and misunderstandings by weary troops in inhospitable conditions. In September 2016, after a terrorist attack on an Indian Army camp in Kashmir, the Modi government carried out a so-called "[surgical strike](#)" against Pakistan. It would later reap electoral rewards from this operation. Even this overt demonstration of Indian resolve and military prowess was carefully [calibrated](#), though.

Statements from New Delhi framed the strikes as a response to provocation, highly precise, and limited in scope. Similar rhetorical moves can be seen in Modi's recent statement, as well as in official [denials](#) that Indian personnel were missing in action. Verbal signaling seems to be working in 2020 as well. Chinese leaders were eager to de-escalate for two reasons. **First**, although a barefaced defeat on the Himalayan border would have been a devastating loss of face, India overall is not a salient threat for the average Chinese person on the street. **Second**, given the other foreign and domestic issues it was engaged in, the Chinese leadership wanted to [avoid](#) being forced into escalation by inflamed public opinion. Accordingly, state-controlled media were ordered to downplay the clashes, and no information was [released](#) on Chinese military casualties.

But the war of words continues in the economic sphere. Techno-nationalism is on the rise in India, as evidenced by Modi's [Make in India](#) and post-COVID [aatmanirbharta](#) (self-reliance) campaigns. There is also a social media [campaign](#) urging Indians to boycott Chinese goods and technology services, along with reports that the government will ban the Chinese telecom giant Huawei from operating in India.

The outlook.

In the late 1990s, strategist and national security expert [Ashley Tellis](#) coined the term “ugly stability” to describe the India–Pakistan strategic relationship in the shadow of nuclear weapons. As full-scale war becomes increasingly unlikely, there are incentives for the countries (and non-state actors) to mount low-level operations, such as incursions or assaults on military installations. It appears that the ugliness has begun to surface in the India–China relationship as well.

Neither China nor India wants a full-fledged war, but leaders in both countries are aware of the space for combat that remains open well below the strategic level. On the one hand, this awareness pushes them to take precautions against escalation—for instance, by limiting the armaments available to troops stationed on the border. On the other hand, neither country is above exploiting this so-called “sub-strategic space” to give the other a bloody nose, if it would help with domestic approval ratings.

In short, these two nuclear-armed powers are likely to use both sticks and stones as well as words as weapons in their future encounters.

Russia's Basic Principles and the Cyber-Nuclear Nexus

Dmitry Stefanovich |Research Fellow at the Center for International Security, Primakov Institute of World Economy and International Relations (IMEMO RAS) 14 July 2020

Russian doctrine

June 2020 saw the public release of the Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence – for the first time ever, as previous versions of this document were classified. This has implications for how adversaries should interpret Russian concerns over potential threat. The Basic Principles is not a war-fighting manual (those generally do not deal with such conceptual areas), nor a declaration. Its main importance is in the broadening of nuclear-related sections of the ‘general’ Military Doctrine of the Russian Federation (1). It is a specific type of strategic planning document, regularly prepared and updated for different areas, including civilian, and is used as a basis for development and acquisitions planning, the legislative process and other bureaucratic work.

Without diving deep into questions of nuclear deterrence, and the roles of nuclear and non-nuclear capabilities, it is important to take note of the conditions set out in the Basic Principles document that might lead to nuclear use by Russia.

In general, the list of conditions follow the traditional Russian approach: nuclear weapons prevent the use of Weapons of Mass Destruction and/or large-scale aggression against Russia and/or her allies. However, there is an important update. Now threats to the nuclear weapons themselves are considered a condition for nuclear retaliation. This is a new as compared to the formulas that exist in the Military Doctrine.

Paragraph 19c of the Basic Principles states: “attack by an adversary against critical governmental or military sites of the Russian Federation, disruption of which would undermine nuclear forces response actions”. This effectively means any interference of any kind against civilian or military infrastructure, which would undermine nuclear retaliation capability. There is a wide consensus within the Russian expert community that this also includes possible cyber threats as well as other non-nuclear dangers. It is commonly understood that “critical sites” include military and civilian government command posts, nuclear forces battle management system, nuclear forces infrastructure and early warning systems. Malicious interference with these sites could lead to catastrophic consequences.

Perception of cyber threats

In general, the threat of cyberattack against Nuclear Command, Control and Communications (NC3) have been discussed at length over last several years with all of the five nuclear weapon states seemingly factoring this threat into their deterrence policies.

In the United States, a formulation similar to that of Russia’s is included in the 2018 US Nuclear Posture Review: “Significant non-nuclear strategic attacks include, but are not limited to, attacks on the U.S., allied, or partner civilian population or infrastructure, and attacks on U.S. or allied nuclear forces, their command and control, or warning and attack assessment capabilities.”

It is challenging to find links between cyber threats and nuclear use in public Chinese documents, especially given the No First Use policy declared and maintained by Beijing. Nevertheless, there are statements comparing consequences of cyber attacks to those of nuclear bombs. Research of the entanglement between non-nuclear and nuclear weapons related systems suggests that there is a serious cyber ‘flavour’ in such risks, and China must be looking for ways to address those.

French “vital interests” that are protected by nuclear weapons are intentionally ambiguous, but Paris pays great attention to the cyber domain. The link between cyber and nuclear threats is mentioned among the principles of the Paris Call for Trust and Security in Cyberspace.

While in the UK the possible cyber threat to NC3 and nuclear weapons systems themselves is acknowledged by officials, nothing suggests that such attacks might be considered among “the most extreme threats” to be deterred by nuclear weapons. However, London, without any doubt, will be interested in reducing the risks of nuclear use as a result of cyber interference.

Decision-makers and military must now account for the use of cyber weapons, hostilities in cyberspace, and the desire of state and non-state actors to gain an advantage by damaging nuclear weapons and the delivery systems of their adversaries. The vulnerability of nuclear weapons control systems is ‘enhanced’ by the high readiness of the nuclear forces. Theoretically, a crushing ‘decapitating’ and even ‘disarming’ strike could be delivered using cyber weapons. At the same time, awareness of the risk of a cyberattack incentivizes the need to increase the protection of nuclear forces-related networks from acts of unlawful interference, regardless of their source, which contributes to maintaining security.

Understanding the threats, relative symmetry between the US and Russian ‘declarations’ and understanding of the challenge by China, France and the UK provides an opening for potential joint actions, including within the P5 format: a forum of these five countries, recognized as nuclear-weapon states within the Nuclear Nonproliferation Treaty. One such action could be a statement of mutual understanding of the consequences of the interference with NC3 and aspiration to avoid actions that might be perceived as such interference by adversaries and partners.

There is no need to focus explicitly and exclusively on the cyber domain of non-nuclear attacks. P5 countries should attempt to define the crucial elements of their nuclear and other strategic weapons enterprise, any impact on which might lead to nuclear retaliation. For example, some states, or even all of them, may make it clear that they consider a serious threat posed by the use of electronic warfare capabilities for the purpose of “deceiving” the early warning and missile defense systems. This also will show that the line between cyber- and electronic warfare is blurry, to say the least.

Challenges and opportunities

There is a significant challenge with dealing with risks in the cyber domain, namely the attribution of the ‘perpetrator’. This is complicated by the fact that near-identical cyber tools can be used for espionage (collecting information) as well as for attacking the systems they have penetrated. A discussion on procedures for attack attribution and cyber weapon ‘dissection’ within the P5 might offer a platform for practical cooperation. Still, the main challenge is traditional: political will, or rather absence of such to participate in such discussions. ‘Cyber’ has become a toxic subject in relations between Russia, China and ‘the West’ due to mutual accusations and counter-accusations over election meddling, espionage and other ‘grey area’ actions. It will be naïve to expect a swift breakthrough. Nevertheless, cyberspace is officially becoming an operational domain for the military. Counterintuitively, it paves a way towards confidence building and risk reduction measures akin to ‘classic’ military domains. The nuclear domain is where such measures are of existential importance, so P5 countries should be ready for selective engagement.

The P5 format provides the best possible forum for inclusive discussions on nuclear doctrines and threat perceptions. Given the growing common understanding of the nexus between cyber and nuclear risks, the P5 countries can come up with a set of basic principles that deter nuclear use. The major principle should be to avoid making statements and building or acquiring weapons that might be seen as a push towards obtaining the very capability their P5 partners and adversaries are concerned with: to undermine nuclear retaliation capacity. Such principle could be augmented with another one: a requirement to explain intended missions for the capabilities that are perceived as threatening, should any P5 country express such concerns. Addressing the cyber-nuclear nexus therefore offers an unexpected opening for P5 collaboration and preserving the stability of deterrence between the nuclear weapon states.

(1) An updated version of the Military Doctrine is expected in 2020, or early 2021.

The opinions articulated above represent the views of the author(s) and do not necessarily reflect the position of the European Leadership Network or any of its members. The ELN’s aim is to encourage debates that will help develop Europe’s capacity to address the pressing foreign, defence, and security policy challenges of our time

Rundown of China's spy agencies will make uncomfortable reading for some

Peter Hartcher Political and international editor for The Sydney Morning Herald

July 14, 2020

You know about the CIA. And the FBI. The whole world knows that James Bond worked for MI6.

Everyone knows the name of the Soviet Union's notorious foreign espionage service, the KGB, the training ground for today's Russian President, Vladimir Putin. Most people have heard of the ruthlessly efficient Israeli Mossad. Most Australians have heard of the domestic spy agency ASIO. And a few will know of Australia's overseas spy agency, ASIS. But can you name one of China's intelligence services? Just one?

We've heard in recent years that Chinese spying and hacking in Australia is so rife that it's overwhelming our own intelligence agencies. The federal government in 2018 even introduced new laws to try to limit Chinese spying and interference. But we can't name the agencies doing it. Is it because they are so small and insignificant? Today, China has more people engaged in its spying effort than any other country, according to the 2019 book *Chinese Communist Espionage: An Intelligence Primer* by Americans Peter Mattis and Matthew Brazil.

So how can we be so blind to such a big enterprise? A New Zealand sinologist, Anne-Marie Brady, in a new essay on China's spying, suggests a couple of reasons. One is what she calls "decades of post-Cold War complacency, of arrogance about the superiority of liberal democracies over communist systems". Another is a post-September 11 preoccupation with terrorism among Western intelligence systems including Australia's. A third is public sector cutbacks.

But there are other reasons, too. Penetrating the veil of the Chinese language is hard. The West has lacked the interest to make the effort. Another reason – popular culture hasn't created a Chinese James Bond. Yet. Finally, a deep-seated reason is that we haven't wanted to know. Brady recalls that a Chinese diplomat defected to Australia in 2005, the former first secretary for political affairs in China's consulate in Sydney, Chen Yonglin, and issued a clear warning. "When Chen said there were all these Chinese spies in Australia, everyone in Australia said, 'Yeah, right'," Brady recalls. "It turns out he was right." Yet even now, 15 years later, even as Australia has started to wake to the risks, "Australia doesn't yet have the critical mass in the police and other agencies to deal with the problem," she tells me.

Australia was enjoying the economic benefits of a relationship it didn't want to scrutinise too carefully. Brady's essay will make uncomfortable reading for some Australian politicians, academics business people and officials who've been warmly hosted by Chinese organisations they've not understood or failed to probe.

Brady, a professor of political science at NZ's University of Canterbury, offers a basic rundown of China's main intelligence agencies in her piece, titled "Party Faithful" and published in the latest issue of *Australian Foreign Affairs*. First is the Ministry of State Security, modelled along the lines of the KGB. Brady describes it as a "full-spectrum intelligence agency" spying on the world. Its public face is styled a think tank, the China Institute of Contemporary International Relations. Some Western academics and other foreign visitors will recognise its name – it has served as a valued host for their trips to China. One of the jobs of the MSS is to spy on foreigners in China.

Next is the Ministry of Public Security. It's the one that monitors dissent in China, including in Hong Kong as Beijing imposes its new "national security" law. The MPS also operates the hundreds of millions of surveillance cameras throughout China. Ever checked into a Chinese hotel and wondered why your passport and visa status are being checked so carefully? Because the MPS collects the information as part of its job of monitoring your location and that of all foreigners in China.

The military – the People's Liberation Army or PLA – is another essential player. It has two key sections dedicated to intelligence. First, its overseas spy agency, the Joint Staff Department Intelligence Bureau. Its job is to support decisions on warfare. The JSD Intelligence Bureau also sends its people abroad as undercover operatives in companies, universities and other outfits. It has its own front organisation for welcoming foreign military officials, the China Institute for International Strategic Studies. It also operates the Institute of International Relations.

The second key PLA agency is the one that does global cyberwar. The Strategic Support Force also operates political interference abroad, siphons off military and commercial secrets, and conducts psychological and political war abroad. Apparently it's quite good at it. The Washington Post summarised the consensus of US agencies last year as "China's eating our lunch in cyberspace".

Politicians in Australia and elsewhere will recognise the name of the Chinese Communist Party's International Liaison Department. Because it has hosted just about any who've visited China.

Brady writes that the ILD is "tasked with gathering intelligence on foreign politicians and political parties, and developing asset relations with them". Finally, there's the United Front Work Department. This is a division of the Chinese Communist Party. Brady calls it the party's "core subversion organ". Chinese President Xi Jinping calls it one of China's "magic weapons". It has no Western equivalent. The United Front has representatives in China's embassies and consulates abroad. Its job is to try to use the Chinese diaspora abroad to do Beijing's bidding. It has organised hundreds of faux community or friendship or patriotic associations in Australia alone. Some offer support and funding for Australian politicians at all levels. It's also tasked with promoting Xi's Belt and Road plan to extend influence by building infrastructure abroad.

Very interesting, you might think, but do China's agencies conduct assassinations abroad and stage coups in foreign lands? According to reports in Western media, they are suspected of conducting assassinations in the US in recent years. And coups? "You don't really have to when you have undermined countries from within," says Brady. "The whole point of the United Front is to erode any resistance so you get docile politicians who won't say 'boo' to China." She likens it to water dripping on limestone. A slow, relentless, reshaping of a nation's political landscape. And if we don't know what Brady calls the "ABCs" of the Chinese Communist Party spy agencies, we lack the basic literacy to understand the party. Peter Hartcher is international editor.

Our nation needs a wake-up call to the nuclear threat

The Washington Post, 7 July 20 Katrina vanden Heuvel

In 1982, the nuclear arms race between the United States and the Soviet Union had reached a fever pitch. That June, as many as 1 million people braved the New York City summer, flooding Central Park and the streets outside the United Nations as it hosted a special session on disarmament. I was there. The energy was palpable and urgent as protesters called for a nuclear freeze. And the event, the largest political demonstration in U.S. history to that point, commanded the world's attention.

Today, the threat posed by nuclear weapons is just as great as it was nearly 40 years ago. But the sense of urgency has since waned. We need a wake-up call, and former defense secretary William J. Perry, together with leading nuclear policymaker Tom Collina, has given us just that. Their new

book, “The Button: The New Nuclear Arms Race and Presidential Power from Truman to Trump,” is the alarm our nation needs — especially now.

Over the past four years, President Trump systematically undermined international arms treaties. He has pulled out from the Iran nuclear agreement and the Intermediate-Range Nuclear Forces Treaty, signed in 1987 by Ronald Reagan and Mikhail Gorbachev. Over the strident objection of our allies, his administration announced the United States’ withdrawal from the Open Skies treaty, which helps ensure that signatories comply with arms-control measures.

In this case, as Perry and Collina detail, Trump’s moves are hardly unprecedented. In 2001, President George W. Bush pulled the United States from the 1972 Anti-Ballistic Missile Treaty with Russia. At the time, he labeled the agreement a relic of the Cold War as he sought to build a massive missile defense system that tightened the nuclear hair trigger.

Of course, the threat of nuclear destruction did not disappear with the Soviet Union. Despite every precaution in place, the dangers of setting off a conflagration are still very real. That’s especially true of accidents or miscalculations. The book includes a list of harrowing incidents that have brought our world closer to nuclear annihilation — from faulty switches and failed computer chips to unanticipated weather patterns and human error. In 1995, for instance, Russia’s nuclear forces reached full alert after a Norwegian scientific rocket launched to study the Northern Lights was mistaken for an American missile.

Former California governor Jerry Brown has described our present situation in sobering terms: “We’re almost like passengers on the Titanic. Not seeing the iceberg up ahead but enjoying the elegant dining and the music. ... And the danger and the probability [are] mounting that there will be some nuclear incident that will kill millions.”

So, how do we make sure we don’t hit the iceberg?

Perry and Collina offer 10 solutions that would place our nation on a more secure path. First, they would eliminate the president’s sole discretion to initiate nuclear attack. Instead, that decision would be shared with a select group from Congress. This move would deny any individual — particularly a reckless reactionary such as Trump — with the immediate and unchecked ability to start nuclear war.

Perry and Collina’s other ideas include diplomatically engaging with North Korea and Iran, saving the New START accord, retiring our stockpile of intercontinental ballistic missiles (ICBMs) and scaling back a \$2 trillion plan to rebuild our nuclear arsenal. ICBMs are expensive to maintain — and as land-based nuclear weapons, they’re more likely to invite a strategic attack than to deter one. As Collina said to me: “Efforts to rebuild the economy, fight off the coronavirus, stop global warming and address racial injustice will all cost money. And we have a \$2 trillion nuclear piggy bank we can use as a down payment.”

The authors’ final recommendation is simple: Elect a committed president. Trump’s record is one of armament. Presumptive Democratic nominee Joe Biden, on the other hand, has a long track record of leading on nuclear disarmament. As senator, he spoke out against Bush’s attempts to establish a national missile defense system. During the Obama administration, he played an important part in realizing the Iran nuclear deal and the New START. Now he has pledged to pursue a renewed commitment to arms control and to reduce the role of nuclear weapons.

To be clear, the ultimate goal should be the abolition of all nuclear weapons — an objective that has been endorsed, at least rhetorically, by presidents ranging from Reagan to Barack Obama. Electing a committed leader this November is just one step toward that long-term goal. As Perry told me, “As we learned with President Obama, there is still a need for outside pressure to remind the president of promises made and that there will be political costs if progress is not achieved. Even if Biden wins, voters must remain engaged and active.”

Americans know how to engage. In the past four years alone, we’ve seen a groundswell of grass-roots activism on threats from climate change and gun violence to racial injustice and gender inequity. Today, we must add one more to the list: the threat of nuclear weapons. As Collina said, “Nuclear disarmament must be part of the new mass movement.”

What aerospace technologies will survive looming US defense cuts?

FlightGlobal.com, 14 July 20 Garrett Reim

The US Department of Defense’s (DoD’s) budget looks vulnerable to cuts as the federal government budget deficit is projected to surge to \$3.7 trillion in 2020, a result of economic fallout from the coronavirus. The pain is likely to be delayed, however. That is because planning for fiscal year 2021 and FY2022 is already under way.

It is also because the US Congress would hate to cut defense programs and the people they employ in the midst of a deep economic recession, say defense industry researchers.

Instead, expect a shrinking Pentagon budget in the mid-2020s. Though the USA might have tamed coronavirus and started to see its economy grow again by the middle of the decade, Washington will have to face up to the hard fiscal and economic realities of years of lost revenue.

Even if the defense budget stayed at a constant 3.2% of US GDP, a coronavirus-shrunk economy, which could be \$10-19 trillion smaller over the decade, would give the government less tax revenue, says Ted Harshberger, vice-president and director of the RAND Corporation’s Project Air Force campaign.

“You end up with about \$350 billion to \$600 billion less to allocate to defense over that 10-year time frame than would have been the case if we didn’t have the pandemic,” he says.

Even before the coronavirus pandemic hit the US treasury, the DoD was expecting a flat or slightly smaller budget and was adjusting its plans. For example, the US Air Force (USAF) laid out plans in its FY2021 budget proposal to retire dozens of older aircraft to save money on operational costs. Aircraft on the chopping block included 13 Boeing KC-135 and 16 Boeing KC-10 tankers, 24 Lockheed Martin C-130H tactical transports, 17 Boeing B-1B bombers and 24 Northrop Grumman RQ-4 Global Hawk Block 20/30 unmanned air vehicles.

With the money saved, the service wants to develop its Joint All Domain Command and Control network, Next Generation Air Dominance fighter, Northrop B-21 Raider stealth bomber and hypersonic missiles, among other modernization priorities. Still, cutting the USAF’s fleet to reinvest the

savings in future technologies is not a proven strategy.

“Can we shrink our way to new technology? The answer is: it’s not easy. There are jobs there,” says Richard Aboulafia, vice-president of analysis at Teal Group, noting the work tied to production and MRO work on military aircraft. Plus, a smaller air force does not sit well with some. “Some people just really like force structure,” says Aboulafia. “They might not be prepared to spend what’s necessary to sustain it, but they like the idea of big forces in place. Bragging rights, diplomacy, whatever it is, they like it.”

Facing political pressures from the US Congress, the Pentagon may have to spread cuts across many programs in a haphazard way.

“What you always see in downturns is some squeezing across the board,” says Mark Cancian, senior adviser with the Center for Strategic and International Studies (CSIS) International Security Program. “You know, forces get a little smaller, retire some legacy platforms, maybe an acquisition program would be reduced, but not necessarily terminated. [For example] instead of building 80-ish [Lockheed] F-35s a year, we would buy 50.”

Sometimes budget cuts are not well thought out, says Todd Harrison, director of defense budget analysis and the director of the Aerospace Security Project at CSIS. “Historically, we tend to go into these things fairly unprepared,” he says. “When you need to make last-minute cuts in defense spending, those cuts tend to be focused on things like military construction funding, and operation and maintenance funding, particularly things like training and readiness.”

VULNERABLE PROGRAMS

The whims of Washington may ultimately target programs that get bad headlines.

“It’s going to depend upon what’s performing well and poorly when the knives come out,” says Harshberger. He points out that hypersonic missiles, directed energy weapons and missile defense systems typically have been difficult to turn into operational weapons and might stumble.

“You’re definitely going to see an emphasis on shovel-ready platforms,” says Aboulafia. “That might disadvantage [the US Army’s] Future Vertical Lift.”

Instead, the service might be forced by Congress to continue to buy Sikorsky UH-60 Black Hawks, Boeing CH-47 Chinooks and Boeing AH-64 Apache attack helicopters, rather than spending cash on futuristic rotorcraft that would not produce substantial manufacturing jobs until 2030.

Several defense industry researchers point out that the Future Vertical Lift program, which includes the army’s Future Long Range Assault Aircraft and Future Attack Reconnaissance Aircraft, could be vulnerable to cuts, especially when compared against China and Russia’s sophisticated anti-aircraft defenses. “It’s hard to imagine a lot of utility coming from rotary-wing aircraft that have a large radar signature,” says Harrison.

Budget priorities might also depend on who wins the White House. “A [Joe] Biden administration would cut nuclear modernization. You don’t get a

whole lot of money out of that, but that is one very clear difference between the Republicans and the Democrats,” says Cancian. “The Democrats tend to take more of a foreign policy with a human rights perspective, so they would be much less enthusiastic about selling weapons to the Saudis, for example, or the Gulf states, whereas the Trump administration has been quite happy to do that.”

Other cuts are likely to target redundancies between the five US military services. “The army wants to invest in low-Earth orbit satellites to support its concept of providing future multi-domain operations. Well, why shouldn’t that be the responsibility of the Space Force?” says Mark Gunzinger, the Mitchell Institute’s director of future aerospace concepts and capabilities assessments. “I think that’s where the real savings are: across-service trade-offs.”

If so, the Pentagon may start to ask tough questions about the equipment that each military service wants. “You do start to have to wonder, what is unique? What’s different about Marine Corps aviation? Why does the navy’s army need an air force?” says Harrison. “That kind of roles and missions review could lead to some significant structure savings, as we look to combine and eliminate redundancies across the services.”

That may mean moving aircraft from one service to another. For example, the US Navy’s Boeing P-8A Poseidon maritime patrol aircraft could be transferred to the USAF, where it might also play a role in the service’s Joint All Domain Command and Control network. “We have four different air forces and they do overlap quite a bit,” says Harrison.

FASTER AND FURTHER

In some cases, aircraft might be able to replace ground- or sea-based weapons. In particular, aerospace technologies with speed, range and the ability to penetrate enemy defenses are likely to be winners in future defense budgets. With likely conflict zones such as the Baltic states and Taiwan located thousands of miles away, the USA needs a way to quickly respond.

“Air forces are optimized versus ground forces, which are going to take many weeks to deploy to the theatre, marry up with your equipment and move to the battlespace – and by that time the war is over,” says Gunzinger.

That bodes well for the B-21 stealth bomber, which will fly long distances and penetrate enemy air defenses. The USAF has said it wants to buy at least 100 examples of the aircraft. Moreover, while the service’s Ground Based Strategic Deterrent ballistic missile is only intended to deliver nuclear weapons, the B-21 can carry nuclear and conventional weapons, making it more versatile, says Aboulafia.

Long-range cruise missiles also appear to be likely future winners. Last September, the DoD increased potential long-term production quantities of the Lockheed AGM-158 Joint Air-to-Surface Standoff Missile from a possible maximum of 4,900 to a potential 10,000 units.

“All of the visions about great power conflict include long-range precision munitions,” says Cancian. “And long range [is important] because you don’t want to try to fight your way inside their defensive bubble.”

A need to peer into an adversary’s territory could also be good news for space-based intelligence, surveillance and reconnaissance (ISR)

technologies. “Large constellations of synthetic aperture radar satellites in low-Earth orbit, they could cover any place 24/7, regardless of weather, and see deep into an adversary’s territory, see moving targets on the ground, on the sea,” says Harrison.

But, notes, Aboulafia: “Space isn’t a panacea. Whether it’s ease of re-targeting and reprioritization or all-weather applicability, inner-atmospheric platforms have their advantages.”

Ultimately, while the US defense budget is likely to shrink, the number of regions around the world where the USA might be drawn into conflict continues to grow. That is also likely to fuel demand for ISR technology. “Whether you believe in a hard line or a more diplomatic line, you can’t get enough information,” says Aboulafia. “Distance and range, all those other things also argue for information. It is a very big potential battlespace.”

Russian, Chinese military actions are ‘new normal’

U.S. prepares for emerging great power competition

BY BENJAMIN WOLFGANG for THE WASHINGTON TIMES // 15 July 2020

Two recent standoffs with China and Russia have offered a sobering view of the coming great power competition between the U.S. and its two biggest rivals and just how dangerous it may become.

On June 27, U.S. fighter planes intercepted Russian jets that had pierced American air defense zones near Alaska for the 10th time in less than a year. A week later, the U.S. and Chinese navies held dueling exercises in the South China Sea and traded blame for the region’s growing militarization. Taken together, the incidents highlight what national security sources describe as a “new normal” of a 21st-century global conflict — a pattern of regular brinkmanship and posturing that is likely to shape the next several decades of U.S. foreign policy and military strategy.

Analysts say U.S. adversaries will increasingly challenge American resolve in strategic hot spots such as the Arctic, the Pacific and portions of the Middle East. U.S. military officials have spent years bracing for such a dynamic, and the Trump administration’s landmark 2018 National Defense Strategy laid out in detail the Pentagon’s plans for dealing with aggressive adversaries that don’t necessarily adhere to geopolitical norms or respect international boundaries of the past.

The strategy document announced the return of competition among global superpowers as the U.S. moves away from what had been a laser-like focus on the Middle East and counterterrorism for the past 20 years. Physical encounters among the world’s most powerful militaries will bring a host of new dangers, analysts say. The biggest threats to American security, they say, will be simple miscalculation on the ground, in the air or on the seas.

Much like the razor’s edge of the Cold War, one action by a pilot or sailor could inadvertently spark a war, analysts say, placing a massive burden on U.S. military and diplomatic officials around the world to keep Moscow and Beijing in check while avoiding bloodshed. “They make me nervous. When someone gets killed accidentally — but of course, the close encounter that caused it won’t have been an accident — the aggrieved party will have a tough choice to make,” said Michael O’Hanlon, senior fellow and director of research in foreign policy at the Brookings Institution. “I don’t like playing with fire when nuclear-armed countries are involved.

“It’s important to figure out a compromise on the South China Sea so we don’t just keep doing this forever,” Mr. O’Hanlon said. “At some point, something will go wrong and cooler heads may or may not prevail.” A compromise on the 1.3 million-mile South China Sea, however, appears far off. The Trump administration on Monday publicly rejected many of China’s territorial claims in the region and accused Beijing of seeking to establish a “maritime empire.” Chinese leaders responded by accusing the U.S. of trying to incite violence.

Highly calculated Chinese and Russian attempts to challenge America aren’t new. Interference in U.S. elections, opposition of American policy in Syria, Venezuela and elsewhere, and tests of NATO in Eastern Europe are seen as parts of Moscow’s goal of undermining U.S. leadership and influence. Analysts generally agree that China’s approach has been far more nuanced. Beijing, they say, is looking to supplant the U.S. as the world’s leading economic power by forging financial partnerships and making huge investments in infrastructure projects all over the world.

But Moscow and Beijing now seem far more willing to engage in bold confrontations with the U.S. military, and some analysts say the reason is clear. “I think this is the new normal where both Russia and China are probing U.S. defense capabilities and examining our military and political responses,” said Heather Conley, director of the Europe Program at the Center for Strategic and International Studies.

“They don’t want a confrontation with the U.S., but they want to apply increasing pressure on the U.S. to reinforce their control over their regional spheres of influence. They know we are distracted by the pandemic response and the upcoming election, which is an opportunity to see if there is tactical advantage to be gained.” Russia’s probing of U.S. air defenses near Alaska has increased dramatically while much of the nation has been heavily focused on the COVID-19 pandemic, racial unrest after the death of George Floyd, and a divisive contest between President Trump and Democrat Joseph R. Biden.

So far this year, Russian planes have entered the Alaskan Air Defense Identification Zone 10 times. The pace of the incidents increased dramatically in June and culminated in a three-day span in which Russian The U.S. military said South China Sea drills this month demonstrated “unmatched sea power.” China said they only ratcheted up tensions. ASSOCIATED PRESS
planes twice flew into the zone and were escorted by American fighter jets.

During the June 27 incident, the Russian aircraft stayed within the zone for eight hours and came just 65 miles from Alaskan shores. On June 16, Russian jets were coming within 32 miles of Alaska. Military officials are keenly aware that Moscow suspects the U.S. is distracted and is publicly pushing back against that narrative. “Despite COVID-19, we remain fully ready and capable of conducting our no-fail mission of homeland defense,” **Gen. Terrence J. O’Shaughnessy**, commander of the North American Aerospace Defense Command, said in a statement.

The airspace off Alaska’s coast is just one theater of renewed military confrontations between the U.S. and Russia. The two sides have repeatedly squared off in Syria and elsewhere in the Middle East. Disputed intelligence assessments that Russia offered bounties to Taliban fighters to target U.S. personnel in Afghanistan also have raised questions about how far Moscow will go in its anti-American campaigns.

The U.S. has pushed back. In May, the U.S. and Britain sailed warships through the strategically crucial Barents Sea for the first time since the Cold War. In response, Moscow dispatched its own ships to shadow the U.S.-led flotilla as it made its way through the icy Arctic waters. Close encounters with Russia have frustrated U.S. officials, but specialists say a potential clash with China is even more disconcerting.

Analysts say the risk is growing daily as Beijing gains confidence in its military capability and becomes more brazen in its willingness to challenge the U.S. and the concept of freedom of navigation in key areas such as the South China Sea. Some argue that Beijing is unlikely to back down in the face of Washington's increasingly hardened posture. "While Beijing's territorial claims are not new by any means — they've been around for decades — what have changed are China's military capabilities, which have improved significantly," said Patricia M. Kim, a senior policy analyst with the China Program at the U.S. Institute of Peace.

"China has become more confident and assertive in its maritime periphery. I think its risk tolerance in asserting its sovereignty claims has grown." As Chinese ships, missile defense systems, fighter drones and other equipment become more dangerous and sophisticated, the nation's communist leaders appear increasingly willing to confront the U.S. military. Early this month, the U.S. and Chinese navies held dueling exercises in the strategically vital South China Sea.

Washington views the waterway as the key Pacific battleground in a growing dispute over sovereignty and respect for international waters, but Beijing appears to view it as vital to China's economic growth and military security. On July 4, the Navy's Nimitz Carrier Strike Group openly admonished China by declaring that the U.S. drills were a demonstration of "unmatched sea power" and of the American commitment to protect freedom of navigation.

Days later, Chinese naval forces held their own exercises in the same area. The Pentagon publicly criticized those drills, while Chinese leaders blamed the U.S. for ratcheting up tensions. "It is completely out of ulterior motives that the U.S. flexes its muscles by purposely sending powerful military force to the relevant waters for large-scale exercises," Chinese Foreign Ministry spokesman Zhao Lijian said last week.

"The U.S. intends to drive a wedge between regional countries, promote militarization of the South China Sea and undermine peace and stability in the region." Analysts say such confrontations will continue and that it is essential for both countries to establish and maintain proper channels to defuse any potential conflict. "While the United States and China have established hotlines and mechanisms to deal with accidental clashes, they haven't always functioned properly in times of actual crises," said Ms. Kim, at the U.S. Institute of Peace. "This tells us that mechanisms alone are not always sufficient in preventing escalation, which is quite concerning.

The four China strategies Trump or Biden will need to consider

BY JOSEPH BOSCO, CONTRIBUTOR to THE HILL // 07/14/20 08:30 AM EDT

Whether the next president is Donald Trump or [Joe Biden](#), he will confront the greatest existential challenge Communist China has ever presented to the United States. There are four possible strategic responses:

- **Strategy A:** Return to the comprehensive engagement and passive containment policy of previous Republican and Democratic administrations.
- **Strategy B:** Directly challenge China militarily by destroying its illegal bases in the South China Sea, helping the Philippines recover seized land features in the Spratly Islands, and repelling with force, if necessary, China's violations of the territorial seas, airspace and sovereignty of Japan and Taiwan.
- **Strategy C:** Continue the Trump administration's active containment strategy by reacting non-kinetically but more vigorously than prior administrations to China's transgressions on trade, human rights, maritime freedoms and Taiwan.
- **Strategy D:** Conduct an informational and financial plan of regime delegitimization that could lead to peaceful regime change and democratization, and self-determination for Hong Kong, Tibet, Mongolia and East Turkestan/Xinjiang.

All of these options contain the risk of military conflict with China. But, Strategy A is the most likely also to lead to moral and ideological defeat of the West through peaceful means. It would represent the ultimate success of the Sun Tzu strategy of “winning without fighting” as applied and honed by the communist techniques of political warfare, deception and disinformation. Yet, most critics of the Trump administration's disruptive approach recommend reverting to the engagement policy, albeit tempered with a chastened sense of realism.

That view appears in [an article](#) authored by Michael Green and Evan Medeiros, who held senior Asia policy positions in the administrations of George W. Bush and [Barack Obama](#), respectively. In it, the authors lament Hong Kong's fate but despair at the lack of Western recourse: *“China's new law is a profound tragedy for the people of Hong Kong, but unfortunately, there is little the international community can do to halt its implementation. The Trump administration has suggested that it will dial up pressure on Hong Kong's government. But doing so risks hurting Hong Kong's economy more than Beijing's and accelerating the territory's absorption into southern China.”*

The argument reflects the same sense of impotence that paralyzed U.S. administrations for four decades. When even unacceptable behavior is ultimately accepted, China is encouraged to continue pressing the limits. Yet, Green and Medeiros recognize the precedential danger for Taiwan of inaction on Hong Kong: *“Unless the United States demonstrates the resolve and ability to resist Chinese coercion and aggression, China's leaders may conclude that the risks and costs of future military action against Taiwan are low — or at least tolerable.”*

But even when acknowledging the need to deter “creeping irredentism,” the authors temporize on the appropriate response: *“Targeted sanctions won't be cost-free for U.S.-Chinese relations or for the people of Hong Kong, but the United States can limit the collateral damage by implementing them incrementally, proportionately, and in concert with other powers.”*

The state of U.S.-China relations, however, is not “collateral damage” — it is the secondary target of the sanctions. The China dynamic that has prevailed for decades is truly unacceptable for the Trump administration and a near-unanimous Congress. Moreover, limiting the collateral damage in Hong Kong also limits the direct damage to the primary targets: Chinese and Hong Kong officials who oppress the citizens crying for American support.

Deferring full sanctions allows time for Beijing to adjust and work around them. Doing it proportionately — a time-worn [just war](#) principle — leaves the initiative with Beijing to decide how much pain it is prepared to endure in pursuit of its objective. A disproportionate response has greater impact and shock value — the technique the Trump administration used to good effect in the China trade war and its “maximum pressure” campaign against North Korea.

Working collaboratively with friends and allies is laudable, if lowest common denominator consensus does not induce political paralysis, as often happens with the Association of Southeast Asian Nations and the United Nations. No, sanctions are not cost-free. But the cost is exponentially lower than the military conflict that looms under two of the other potential approaches. Strategy B can be characterized as a limited rollback and was actually advocated by Trump’s first secretary of state, [Rex Tillerson](#), during his [confirmation hearing](#).

Asked about U.S. policy in the South and East China Seas, he stated: “China's activity in this area is extremely worrisome and ... a failure of a response has allowed them just to keep pushing the envelope on this.” Asked by Sen. [Cory Gardner](#) (R, Colo.) if he would “support a more aggressive posture in the South China Sea,” Tillerson responded: “We're going to have to send China a clear signal that first, the island-building stops, and second, your access to those islands also [is] not going to be allowed.”

The next day, a New York Times [headline](#) read: “Rex Tillerson’s South China Sea Remarks Foreshadow Possible Foreign Policy Crisis.” The article noted, *“Mr. Tillerson’s comments, with the possible implication that the United States might use its armed forces to deny the Chinese access to the islands, garnered reactions including confusion, disbelief and warlike threats from analysts in China.”*

Neither Tillerson nor any other administration official again mentioned the rollback possibility with China. Yet, it is the entire basis of U.S. policy toward North Korea’s nuclear and missile programs. It should be revived as a credible possibility to offset Beijing’s constant threats over maritime issues and Taiwan. Instead, [President Trump](#) and his national security team appear to have settled on a strategy that can be described as active containment to prevent further Chinese expansion or encroachment.

It applies to Hong Kong, Taiwan, and the maritime domain, and to the nationalities and groups within China over which the regime is tightening its totalitarian grip. (Secretary of State [Mike Pompeo](#)'s unprecedented statement yesterday that Washington [rejects China’s illegal claims](#) in the South China Sea does not necessarily indicate a shift to a rollback strategy, but it is a step in the right direction.)

Yet, since the approach angers Beijing as much as if Washington were conducting either the kinetic limited rollback strategy or non-kinetic regime change, the administration should seriously pursue Strategy D to achieve peacefully the changed China that [Richard Nixon contemplated](#). It would be an open campaign to undermine the communist regime, just as it both covertly and blatantly attacks and subverts the world’s democracies.

Its components would be economic and financial: additional tariffs for Beijing’s [failure to implement Phase 1](#) of the trade deal; all the available sanctions for China’s [human rights violations](#) in Hong Kong, East Turkestan/Xinjiang and Tibet; secondary sanctions for undermining primary sanctions on North Korea and Iran; and exclusion of Chinese companies from U.S. securities markets.

Those measures would reduce Beijing's capacity for domestic oppression and international aggression. It also would pave the way for a vigorous information campaign by the revitalized U.S. broadcast agencies to bring liberating truth about their communist rulers to the Chinese people. It would be the West, then, that would win "Cold War II" without fighting. Joseph Bosco served as China country director for the secretary of Defense from 2005 to 2006 and as Asia-Pacific director of humanitarian assistance and disaster relief from 2009 to 2010. He is a nonresident fellow at the Institute for Corean-American Studies and a member of the advisory board of the Global Taiwan Institute.

Verification After the New START Treaty: Back to the Future

National Institute for Public Policy, July 16 | Bryan Smith

The New START Treaty verification regime is far less effective than that agreed to in the original START Treaty. As the Trump administration pursues a new approach to arms control, which seeks to limit China's rapidly growing nuclear arsenal and the currently unconstrained shorter-range nuclear weapons, U.S. negotiators should insist upon a much stronger verification regime. Any future agreement must shut the door to rapid Treaty breakout—a key New START verification flaw. The new verification regime should also reinstate key elements of the original START Treaty that were excluded from the New START Treaty and must address difficult new challenges that stand to benefit from one New START verification innovation.

New START, Verification, and the Future of Arms Control

The New START Treaty was signed by Presidents Obama and Medvedev on April 8, 2010, and approved by the Senate, with conditions, on December 22, 2010 by a vote of 71-26—only 7 votes over the two-thirds minimum required for approval. The Treaty went into force on February 5, 2011. It sets limits on deployed strategic warheads, deployed strategic missiles and bombers, and deployed and non-deployed strategic launchers. The New START Treaty expires February 2021, unless the United States and Russia mutually extend it for up to five years, as it allows.

The President has appointed Ambassador Marshall Billingslea to serve as Special Envoy for Arms Control to engage with the Russians on both New START and the future of nuclear arms control. The President has stated that China's nuclear forces should be included in future arms control agreements, and Russian Deputy Prime Minister Ryabkov has made an earlier statement to the same effect. [1] President Trump has also directed that nuclear weapons that are now unconstrained by New START, the so-called tactical nuclear weapons, also be included in a future agreement.

This only makes sense. We have a multi-polar nuclear world, in which President Xi has announced that China will be a "first tier" military by 2050. Also, the idea of "strategic" nuclear weapons (determined by range) is arguably obsolete. Any use of a nuclear weapon would have strategic consequences. Russia's nuclear doctrine, which would use "tactical" nuclear weapons to "de-escalate" a nuclear conflict makes this painfully clear. Russia also has an overwhelming numerical advantage in these unconstrained nuclear weapons over the United States and NATO. Recognizing this, the Senate's Resolution of Ratification for the New START Treaty called for future negotiations to "secure and reduce tactical nuclear weapons in a verifiable manner." [2]

If we are to add China as a party, and include smaller, highly mobile and concealable nuclear weapons, there needs to be a special premium placed on verification and strict compliance. In essence, the standards for what constitutes “effective verification” need to be higher than for New START. Thus, highly effective verification and strict compliance constitute the third pillar for the future of nuclear arms control.

But what does this mean in practice? To what extent should future nuclear arms control resemble New START or its predecessors, the START and INF treaties? To answer this question, we need to take a close look at these treaties’ verifiability. In this regard, it is instructive to review the critique of New START verification offered by Senate Republicans at the time of ratification.

I am very familiar with that critique. As a staff member of the Senate Select Committee on Intelligence (SSCI), I was tasked to analyze the effectiveness of the New START Treaty’s verification, and draft a classified report for Members’ consideration. This assignment was based in part on my previous experience working for President Reagan’s top verification expert, Dr. Manfred Eimer, on INF, START, and Soviet arms control compliance determinations.

START and INF Treaty Verification Precedents

In 2010, I fully expected President Obama’s New START Treaty to be effectively verifiable—for three reasons. First and foremost, INF and START had been built from the ground-up for effective verification. Those Treaties’ central limits were well-matched to our verification capabilities. The Treaties also contained groundbreaking verification procedures that New START could logically build upon, most notably:

- Warhead counting rules that captured the warhead-carrying capability of a missile, taking into consideration its throw-weight and flight-test history;
- Banning encryption of telemetry on these flight-tests and full exchange of the unencrypted telemetry recordings;
- Continuous “Portal Perimeter Monitoring” (PPM) of the critical mobile ballistic missile production facility at Votkinsk, Russia, and at Magna, Utah to help verify critical limits on deployed and non-deployed mobile missiles; and
- On-site inspection of the entire missile and launcher destruction process.

Second, Russia was a serial violator of arms control agreements, so we knew the standards for verification had to be high. Third, the Obama national security and treaty negotiating team was highly seasoned and respected.

Assessing the New START Treaty’s Verification

On the surface, New START’s verification looked good to many or most, and still does. It features plenty of verification bells and whistles, including exhibits and displays, serial number tracking, and a potentially useful new radiation sensor for on-site counting of nuclear warheads.

But when you carefully analyzed it, there was much less to New START verification than met the eye. The Obama team deliberately chose to abandon all the key START and INF verification measures listed above—no missile warhead counting rules, no encryption ban, no throw-weight limits, no PPM, and no limits on non-deployed mobile missiles. But why?

In engineering parlance, the Obama Administration's choices constituted a conscious "design trade." They chose (minor) cost savings, administrative convenience to the military, and warhead deployment flexibility over binding limits on Russian military capability. A recent article on the New START Treaty's supposed verification virtues by former Under Secretary of State and New START Treaty chief negotiator, Rose Gottemoeller, admits as much. It touts the Treaty's achievements of cost savings, administrative convenience, and warhead deployment flexibility. [3]

These are not bad things, of course. But the rub, as I will explain, is that this design trade, forfeiting key limits on capability contained in the original START Treaty, proved highly unfavorable for verification and led directly to the New START Treaty's major verification shortcomings.

New START's poor verifiability was not only deeply disappointing, it was highly disturbing to many Republican Senators. The Vice Chairman of the SSCI, Senator Kit Bond, was philosophically disposed to support a follow-on treaty to START to regulate strategic competition. (So was I.) However, Senator Bond and 25 other of his GOP Senate colleagues decided to oppose the treaty, in no small part due to its verification shortcomings, especially as compared to START.

On November 18, 2010, Senator Bond presented his reasons for opposing the New START Treaty in a Senate floor statement. [4] He made four main points on verification, elaborated below:

1. Russia is a serial arms control violator, requiring extra stringent verification, but the Administration failed to acknowledge this in its New START Treaty verification regime. According to official State Department reports on compliance published at the time, Russia had violated, or was still violating, important provisions of virtually all key arms control agreements to which it was a party. This included the original START, the Chemical Weapons Convention, the Biological Weapons Convention, the Conventional Forces in Europe Treaty, and Open Skies.

Ironically, the major exception was the INF Treaty! Little did the Senate know that, as it deliberated on whether to ratify the New START Treaty, Putin was actively laying the extensive groundwork for Russia's material breach of the INF Treaty with a new prohibited, ground-launched cruise missile. Indeed, had the Senate known, the New START Treaty surely would have fallen short of the required two-thirds votes needed for approval.

2. New START Treaty's central warhead limit could not be effectively verified because it abandoned START's warhead counting rules and featured only limited on-site inspection.

The START Treaty, like all sound arms control treaties, limited capability—not intent. Accordingly, it established "counting rules" for limiting existing missile warheads based on their flight-tested capability—each missile of a type was attributed the same number of agreed warheads.

Similarly, it established a formula for attributing warhead numbers for new missile types based on their throw-weight and flight-tested warheads (i.e., their warhead carrying capability). These counting rules allowed warhead verification to become a matter of simply multiplying the counting rule for a missile type times our count of the deployed missiles of that type. The United States can do this confidently with NTM, except for mobile ICBMs. (More on mobiles later.)

By contrast, the New START Treaty set limits on the “actual” number of warheads loaded on deployed missiles, regardless of a missile’s capability. It used a small sample of on-site inspections with radiation sensors to attempt to verify these limits. Ambassador Gottemoeller in her article lauds this change as “the most important innovation in New START...permitting a more accurate accounting of warheads.” [5]

Unfortunately, it is also arguably the worst innovation in the New START Treaty. Establishing legal limits on “actual” warheads is not the same as “accurate accounting” of them. So what exactly is the problem with “actual” deployed warhead limits on missiles?

To begin with, the New START Treaty permitted only ten warhead inspections per year, a sample of only 2-3 percent of the force. And unlike START, the New START Treaty allowed any missile to be loaded with any number of warheads.

So even if a U.S. inspection revealed that a particular missile was loaded with a number larger than Russia had declared, there is no logical way to infer from this—or any such discrepancy—that the entire force had exceeded the 1,550 warhead limit. Conversely, neither could we logically conclude that the entire force complied with the 1,550 limit, even if the 20-30 percent life-time sample inspections all confirmed that the observed warhead loadings matched their declarations. Hardly a model for effective verification for future, more ambitious arms control.

True, the Administration has certified Russian compliance with the New START Treaty, including its deployed warhead limit. However, such compliance conclusions are necessarily based on samples and some significant assumptions and extrapolations. We can really never know the actual force-wide warhead loadings under the Treaty.

But what if we are willing (as the Administration is) to infer from a 20-30 percent sample that the Russians are complying with the deployed warhead limit? Aren’t we ok then? No. As we shall see, the Treaty’s breakout potential for warheads and missiles is even more problematic than its unverifiable warhead limits.

3. The New START Treaty allows for massive breakout potential via missile warhead “uploading”—a legal route open to undermine the treaty. In her New START Treaty verification article, Ambassador Gottemoeller correctly points out that “...[effective] verification regimes must not tempt either side to try an illicit treaty break-out.” [6] However, this is exactly what the New START Treaty does. In fact, Treaty breakout was probably the top monitoring concern for U.S. Intelligence. Consequently, the Senate required, as a condition of Treaty ratification, that the President certify prior to entry into force and annually thereafter, that “National Technical Means [NTM]...are sufficient to ensure...timely warning of any Russian preparation to break out of the limits in Article II of the New START Treaty.” [7] The Obama and Trump Administrations have made this certification, which readers of the 2010 National Intelligence Estimate on the Treaty monitoring may find surprising.

Again the root of the problem is in trying to count “actual” warheads without regard to a missile’s warhead carrying capability. Unlike the original START Treaty, the New START Treaty legally allows a side to flight-test missiles with an unlimited number of warheads but declare only one “actual” warhead towards the treaty’s 1,550 deployed warhead limit—an obvious and potentially destabilizing flaw.

As a result, both sides in the New START Treaty are legally permitted to have thousands of spare warheads that can be easily and quickly “uploaded” to deployed missiles in a crisis. This upload potential for Russia is estimated to be a third of its current missile warhead level and even more for the United States, according to one respected U.S. think tank. [8] Consequently, the New START Treaty actually incentivizes competitive warhead uploading in a crisis. This incentive is the exact opposite of a key goal for nuclear arms control—promoting strategic stability.

Given this breakout potential, the Intelligence Community discounted likely Russian cheating on the Treaty’s unverifiable warhead limit. It would probably be more attractive for Russia to legally prepare to quickly and easily break out of New START Treaty constraints through warhead uploading. Again, hardly a model for effective verification for future, more ambitious arms control.

4. The New START Treaty failed to limit non-deployed mobile missiles (as START had), permitting further potential for massive breakout. This failure was almost certainly driven by the decision to abandon PPM to save a few million dollars a year of operating costs. Ambassador Gottemoeller terms the Votkinsk PPM “an expensive program for the United States to implement,” and credits the New START Treaty for avoiding these costs.[9] The annual cost for the United States to operate PPM at Votkinsk and at Magna UT for INF was \$12.4 million, according to DoD testimony in 1991. [10] To put this “expensive” program into perspective, PPM at Votkinsk cost the U.S. Government half what Sam Houston State and Prairie View A&M colleges each spend yearly on their football teams. [11] This “penny wise, pound foolish” New START logic resulted in major verification and breakout problems that far exceeded its very modest cost avoidance benefit.

Ambassador Gottemoeller’s article offers an additional (and somewhat odd) defense of the New START Treaty’s abandonment of PPM—i.e., that it would not have detected Russia’s illegal INF cruise missile system. [12] This is like faulting a Covid therapeutic drug for not being a vaccine. PPM’s verification purpose was simply to count treaty-limited missiles at declared facilities; we use National Technical Means (NTM) to detect and deter covert behavior. That division of labor was the whole foundation of the successful mobile missile verification regime embodied in both the INF Treaty and the START Treaty.

Without PPM, the United States cannot verify mobile missile production at declared facilities. Under the New START Treaty the Russians can have an unlimited number of non-deployed mobile missiles. This means they could legally build and store any number of these missiles. While non-deployed launchers are capped, we cannot effectively verify mobile launchers either. We have no way to reliably count (verify) mobile launcher production at declared facilities. Moreover, it would be relatively easy for Russia to covertly produce and hide these mobile launchers in mundane-looking tractor trailer factories, without detection. Such illegal non-deployed mobile launchers could be mated with legal, unconstrained mobile missiles in a crisis. The Treaty allowed this security risk in order to save a few million dollars a year of PPM operating costs.

Again, the New START Treaty presents a massive, ready-made breakout potential that is hardly a model for future arms control.

In 2010, Senator Bond sent a Top Secret SSCI minority report, detailing these four and other verification issues, to the Senate Foreign Relations and Armed Services Committees. This SSCI minority report was consistent with the facts contained in the National Intelligence Estimate on the IC's ability to monitor the Treaty. Additional issues discussed in the SSCI's classified report included:

- Classified details on Russian treaty non-compliance;
- Concerns regarding Russia's potential to evade and frustrate the New START Treaty's on-site inspections;
- Then-Top Secret information on Russian strategic threats that were not covered under the New START Treaty, including some that President Putin subsequently touted in public; and
- Lax missile and elimination procedures in the new Treaty, relative to the START Treaty's continuous on-site inspections, giving rise to worrisome scenarios for falsifying missile and launcher destruction.

The Obama State Department, on November 24, 2010, attempted to rebut Senator Bond's verification critique with a written article, but it fell short. [13] It hardly tried to dispute the logic of Senator Bond's verification critique. It is but a small exaggeration to say that the State Department's "rebuttal" boiled down to this: "We have loads of verification stuff in our treaty, and important people say it is better than no treaty; therefore, it is effectively verifiable. Trust us."

Ultimately, however, the New START Treaty's verification problems proved far too technical and arcane for most U.S. Senators. The understandable urge to regulate strategic nuclear competition in the hope of avoiding a costly and dangerous superpower arms race led to the Treaty's approval. Still Senate ratification was a "near-run thing", in contrast to the nearly unanimous votes enjoyed by all previous nuclear arms control treaties with the Soviet Union.

Considerations for the Trump Administration

I believe New START Treaty's verification problems are too systemic to remedy in a New START Treaty extension process. Even relatively minor improvements would require extensive negotiation and Senate ratification. Time is too short, the issues too big.

I can only offer one verification band aid if the New START Treaty is extended: the United States should inform Russia that henceforth any discrepancy between warhead declarations and on-site inspection results, or any unavoidable procedural delay or interference, would be considered a de facto violation of the Treaty's limit on deployed warheads. This does nothing about the breakout problem, however.

The good news is that despite the New START Treaty's verification inadequacies—or perhaps because of them—the Russians appear to have complied with the treaty. (I say "appear" because we can't really know, given the Treaty's serious verification deficiencies, and after all, we've never found anything successfully hidden.) Further, since Russia can gain major advantage through legal and/or partially legal breakout options, they

may be content with this benefit. (It would be unimaginable that Russia's General Staff has not drawn up serious contingency plans for warhead uploading during a crisis.) One might even wonder whether Russia's strongly expressed desire to extend the New START Treaty is motivated, in part, by a desire to also extend the Treaty's breakout options. Therefore, the good news on Russian compliance warrants skepticism, especially in light of its history of arms control violations.

Even so, Russia's apparent compliance with the New START Treaty is one argument that can be made in favor of the Treaty's extension. At the same time, the Administration has a golden opportunity to strengthen future verification as one of its conditions for any possible extension of the New START Treaty. It ought to.

Specifically, the United States should seek Russia's commitment that future nuclear arms control must meet a verification standard significantly higher than that embodied in the New START Treaty. (This would be in addition to adding China as a party and including unconstrained nuclear weapons.) If China is party to the next nuclear arms control treaty, Russia might finally be motivated to be as serious about verification as the United States, so this condition might not be a heavy negotiating lift.

Under no circumstances should the United States use New START Treaty as the verification "model" for a future arms control agreement—especially one that seeks to limit the many thousands of currently unconstrained "tactical" nuclear warheads possessed by Russia and China. The Administration should make this clear to the Russians and the Chinese.

The Administration should consider some specific "back to the future" START and INF approaches as it contemplates the future of nuclear arms control, most notably:

- Scrap the New START Treaty's unverifiable "actual" deployed warhead limits in favor of the START Treaty's counting rules based on demonstrated warhead carrying capability.
- Re-impose the START Treaty's ban on telemetry encryption, and return to complete telemetry exchanges, which will be useful in verifying missile throw-weight and warhead flight-test limits.
- Ban mobile ICBMs to eliminate a class of major verification risk; of course, we still need to apply NTM to detect and deter covert violations.
- If mobile ICBMs are nonetheless permitted, re-impose the START Treaty's limits on non-deployed mobile missiles, and re-establish continuous PPM at key mobile missile production facilities to verify declared production. Use NTM to detect and deter any covert production. Also, confine mobile ICBM deployment to declared and limited geographical areas—and make them much smaller than those in the START Treaty.
- Reinstate the rigorous, high confidence procedures for eliminating Treaty-accountable items contained in the START and INF Treaties.

- Ensure that “novel” strategic nuclear systems are brought into Treaty limits, if not banned.

Above all, *verification must be woven into the very fabric of the Treaty*. This was the key to achieving effective verification in START and INF. The Treaty’s central limits, obligations, and definitions must be well-matched to our projected verification capabilities and methods (especially NTM, but also inspections, cooperative sensors, and declarations). Verification measures cannot be an afterthought—“bolted on” via an annex late in the game to try to accommodate whatever text the Treaty’s negotiators produced. This is a formula for unverifiable arms control, which is to say no arms control.

In that regard, the inclusion of unconstrained, so-called “tactical” nuclear systems pose a whole other category of severe verification challenges. Never will it be more critical for a treaty to be designed from the start for effective verification.

A marriage of continuous PPM and sophisticated radiation sensors at warhead production facilities may form the core of a future Treaty’s cooperative verification capabilities. Here Ambassador Gottemoeller’s article is on the mark. She observes that the New START Treaty sensor innovation “*opens up new opportunities for future arms control agreements....it opens up new opportunities for limiting non-strategic nuclear warheads.*” [14] At the same time, there will also be greatly increased demands on NTM to detect and deter low-observable covert activity. We ought to begin to program and budget for these now.

The Russians—and no doubt the Chinese—will fight many of the changes offered here. Our own military establishment may fight some of them as well, such as the warhead counting rules. And the Washington arms control lobby and its allied foreign policy establishment will surely oppose almost anything that makes it harder to negotiate any new arms control agreement. These critics will invariably claim that any condition for extending New START represents an attempt to “kill” arms control.

That’s exactly what the same establishment said about Ronald Reagan when he proposed the “zero option” for banning an entire class of missiles, and when he insisted on continuous PPM as part of the INF Treaty. They were wrong then and will be now, too.

--Bryan Smith is a Senior Fellow at the George Mason University’s National Security Institute. He served in national security senior civil service positions and as a professional staff member of the House and Senate Intelligence Committees

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Nuclear Tests Have Changed, but They Never Really Stopped

75 years after the first explosive nuclear tests, now outlawed, sophisticated virtual testing allows American physicists to understand these weapons better than ever

Wired Magazine Online, July 16 | Daniel Oberhaus

Just before sunrise on July 16, 1945—75 years ago today—a patch of New Mexican desert was incinerated during the first trial of the most destructive weapon ever created. The plutonium bomb used for the Trinity test left a 5-foot crater in the ground and turned the surrounding desert floor into a radioactive green glass. The blast bathed the peaks of the nearby Oscura Mountains in a blinding white light, and dozens of scientific observers watching from 20 miles away reported feeling an immense heat wash over them. As the light from the explosion faded, one of the architects of the bomb, Kenneth Bainbridge, gave a pithy appraisal of the event to J. Robert Oppenheimer, the project's lead scientist: "Now we are all sons of bitches."

And he was right. Less than a month later, the United States dropped the same type of bomb on Nagasaki, Japan, just three days after detonating a smaller nuclear warhead over Hiroshima. It effectively ended World War II, but it came at the price of well over 100,000 civilian lives and the enduring suffering of those who survived.

The bombing of Nagasaki was the second and final time a country has deployed a nuclear weapon in combat. But it wasn't the last nuclear explosion. Despite a lifetime of activism by Bainbridge and many of his colleagues, nuclear tests didn't end with the war. By the time the US signed the United Nations Comprehensive Nuclear Test Ban Treaty in 1996 and agreed to stop blowing up nukes, American physicists and engineers had conducted more than 1,000 tests. They blew up nuclear weapons in the ocean. They blew them up on land. They blew them up in space. They dropped them from planes. They launched them on rockets. They buried them underground. A small army of US weapons scientists blew up a nuclear weapon every chance they got, and at the height of the nation's testing program they were averaging one detonation per week.

The test-ban treaty was meant to end all that. Atmospheric nuclear tests have been internationally banned since the early 1960s due to health concerns about radioactive fallout and other hazards. These weren't baseless fears. In the 1950s, US physicists drastically miscalculated the explosive yield of a thermonuclear bomb during a test in the Pacific Ocean, and the ashy radioactive fallout was detected as far away as India. Exposure to the fallout caused radiation sickness in the inhabitants of the islands around the test site, and a group of Japanese fishers suffered severe radiation burns when the fallout landed on their boat. Miscalculations of this sort were distressingly common at the time. Only a few years later, a bomber accidentally dropped a nuclear weapon on Kirtland Air Force Base on the outskirts of Albuquerque, New Mexico. (Fortunately, no one had yet loaded into the bomb the plutonium pits needed to kick off a nuclear chain reaction.)

The US signed the Partial Nuclear Test Ban Treaty—a bilateral agreement with the Soviet Union to cease above ground tests—in 1963. But nuclear testing only accelerated when it was pushed underground. The US nuclear arsenal peaked in 1967 with 31,255 warheads, and it detonated as many nukes in the 7 years after the partial test ban as it had in the previous 18 years. "With nuclear testing you were under constant pressure to design a new weapon, engineer it, put it down a hole, blow it up, and then move on to the next one," says Hugh Gusterson, an anthropologist at the University of British Columbia and an expert on the human factors in nuclear weapons research. "The scientists didn't have a chance to pause and catch a breath."

This was, obviously, counter to the spirit of disarmament and reducing the world's nuclear arsenal, which has been the purported goal of the world's nuclear states since the 1960s. The tests weren't about ensuring that America's nukes still worked or learning about the fundamental physics of the weapon. They were about building bigger and better bombs. "Very few of the tests were reliability tests, where you blow it up to see if it still works," says Gusterson. "They were almost all tests to develop new designs."

The US ended all underground nuclear tests in the early 1990s in the lead-up to the Comprehensive Nuclear Test Ban Treaty, despite protests from the heads of the nation's three national weapons labs—Lawrence Livermore, Sandia, and Los Alamos—who fought "tooth and nail" to prevent the ban, says Gusterson. They were concerned, he says, that a ban would reduce the reliability of America's nukes and prevent the next generation of nuclear weapons designers and engineers from learning the tools of the trade. But perhaps most importantly, they saw the ban as a threat to the labs' very existence. All three had been founded to further the development of America's nuclear arsenal. What was the point of keeping them around if not to blow up their creations?

Mark Chadwick, the chief scientist in the Los Alamos Weapons Physics Directorate, arrived at the national lab in 1990 fresh out of a physics doctoral program at Oxford. At the time, he says, there was a lot of debate among the Los Alamos scientists about the future of the lab, or whether it would have a future at all. "Some thought the labs would really end up struggling to find business and that the nuclear deterrence mission would sort of fade away," Chadwick recalls. "Overall, the pessimism that the national security mission wouldn't remain important proved wrong. And fairly quickly, in fact."

The US conducted its last explosive nuclear test in September, 1992. Today, the nation's nuclear weapons research is focused on reliability testing and maintenance of the roughly 4,000 active warheads in its arsenal, a program broadly referred to as "stockpile stewardship." After the test ban, the US government lavished funding on the new stewardship program to keep the nation's weapons up to snuff. The so-called virtualization of US nuclear tests meant that weapons scientists would employ the most powerful lasers and supercomputers in the world to understand these weapons instead of blowing them up. Physicists at the labs work on the best experimental equipment that money can buy, and their funding has ballooned under the Trump administration. "Business is booming, even without nuclear testing," says Gusterson.

At the heart of the US stockpile stewardship program is Lawrence Livermore National Laboratory, a sprawling complex across the bay from San Francisco. It's home to the National Ignition Facility, which uses the most powerful laser in the world to re-create the conditions found in the heart of an exploding nuclear bomb. "It's not so much that it replaces nuclear testing, but it's a very different, richer perspective on what's happening in an operating weapon," says Kim Budil, principal associate director for the Weapons and Complex Integration directorate at Livermore.

Nuclear tests have always served a variety of purposes. Their primary one, of course, has been deterrence—an ever-increasing show of strength meant to discourage America's allies from ever hitting the big red button. But even back when the military detonated live nukes, its architects were doing everything they could to figure out exactly what was happening inside. Each bomb was outfitted with tens of millions of dollars worth of sensors designed to capture data in the fraction of a fraction of a second before they were destroyed. Virtualization now allows scientists to dig deeper into the physics of the bomb.

“Over this 25-year stockpile stewardship, we have dramatically increased our knowledge of the fundamental science that's required to do this work,” says Budil “We have types of data and quality of data that were unimaginable during the test era just from the advances in experimental technology.”

Say, for example, physicists at Livermore are interested in how tiny imperfections in materials used in a bomb affect its performance. They can load small samples of the material into target vessels that may just be a few millimeters across. NIF channels an enormous amount of energy into 192 laser beams that are aimed at a target; when they strike, the vessel heats up to more than 5.4 million degrees Fahrenheit. If the vessel is in a type of gold target called a hohlraum, the lasers will cause it to act like an x-ray oven and shock the material inside with a high dose of radiation. Scientists can use an imager to study how the x-rays interact with the material, which is relevant to protect the nukes from certain kinds of missile defense systems.

But the real promise of NIF, says Budil, is that it could set us on the path to fusion energy by way of modeling an exploding nuclear bomb. In this case, the laser's target is loaded with a diamond capsule filled with a gaseous mixture of two hydrogen isotopes called deuterium and tritium. When the lasers hit the target, the x-rays burn off the capsule's shell. As that material blows off, it causes the capsule to collapse incredibly fast. For a brief moment, pressures inside the capsule are more than 1 million times greater than the atmospheric pressure on the surface of the Earth. This causes the hydrogen isotopes to fuse together and release a tremendous amount of energy.

The conditions in the target at the moment of fusion—extreme as they are—still pale in comparison to the environment in a thermonuclear bomb at the moment of detonation. To re-create those conditions, Budil says, would take an even stronger laser system. “That was something unique—doing a nuclear test that you could generate these incredibly intense environments,” she says. “We don't have experimental facilities where we have easy access to those conditions.” But by extrapolating from the experimental results in NIF, physicists can still get an unprecedented view of the core of an exploding bomb.

If physicists can sustain that fusion reaction—if they can use lasers to squeeze the hydrogen without letting go—they can get it to release more energy than it took to make the reaction happen. This is called ignition. For the physicists at NIF, achieving ignition would give them a chance to study the conditions of an exploding nuke in detail, and it would also put the world on the path to a virtually unlimited form of clean energy. NIF hasn't achieved ignition yet, but Budil is optimistic that it's only a matter of time. “We're close,” she says.

When they're not smashing atoms with lasers, scientists at Livermore also conduct what are known as “subcritical tests” at a National Nuclear Security Agency site in the Nevada desert. At BEEF—the Big Explosives Experimental Facility—researchers subject (nonnuclear) materials found in nuclear weapons to extremely powerful conventional explosions to study how they'd respond to an actual nuclear blast. Down the road from BEEF, physicists use a 60-foot, gas-powered gun called Jasper to shoot projectiles at plutonium. These projectiles reach speeds of around 17,000 miles per hour—about 10 times faster than a bullet—and create shock waves as they pass through the barrel. By studying how the plutonium reacts to these pressures and temperatures, physicists can get a better idea of how it will behave inside an exploding nuclear weapon.

The data from these experiments is used to verify the predictions of nuclear weapons simulations cooked up by Livermore's Sierra supercomputer and to refine the models of the weapon systems that are fed to it. Sierra is the third fastest supercomputer in the world, and Budil says its models are used to understand how changes in the stockpile over time may affect a weapon's safety or effectiveness. But she cautions that the computer's models are only as good as its data, which drives physicists at the labs to conduct ever more sophisticated and sensitive experiments.

“The computing machines we’re using today are extraordinary,” says Budil. “But, roughly speaking, they only know what we know. So where there are gaps in our models they won’t give the right answer. We fill that gap with experimental data.”

Although the primary directive of the US weapons labs is to conduct experiments to ensure the reliable operation of the nation’s nukes, the same facilities can be used to study the scientific problems that have nothing to do with war. Michael Cuneo is the senior manager for the Z machine at Sandia National Laboratory, a singular experimental facility that create conditions found nowhere else on Earth. No more than once per day, massive capacitor banks near the Z facility are charged with a tremendous amount of electricity that is released all at once in a pulse so powerful it causes the ground around the facility to shake. Each shot has 1,000 times the electrical energy of a lightning bolt, and all of it is focused on a target the size of a quarter.

Like NIF, one of the primary goals at Z is to study the fusion reactions that occur when the target implodes at over 3,000 miles per second. But the extreme pressures and temperatures that occur around the target—sometimes in excess of 3 billion degrees Fahrenheit—also make it a great way to study the conditions during a nuclear detonation. Cuneo oversees about 140 shots of the Z machine each year, many of which are used for classified national security experiments. But Cuneo says the Z machine is also regularly used by researchers working on questions about how planets evolve or the processes that power the sun.

“There may be a few shots a year that are really just basic science, and many of the experiments serve a dual use,” says Cuneo, who estimates that approximately 10 percent of the Z machine’s shots are for fundamental science experiments. “But that same experimental platform and the same techniques are also used to investigate the performance of materials that are relevant to nuclear weapons.”

Today, weapons maintenance has superseded weapons development, and the show of strength implicit via nuclear testing has been replaced with a soft power, says Gusterson. He recounts how John Immele, the deputy director of national security at Los Alamos National Lab, made the case in the '90s that the US could flex its nuclear superiority by sending scientists out to give cutting-edge presentations at conferences. This would, presumably, impress upon the world just how well America’s weapons scientists knew their stuff. The implication was that if you messed with America, they’d apply that knowledge to you.

“Nuclear testing not only proof-tested new designs during the Cold War, it also had this sort of signaling function where every time the Earth shook you were signaling what you could do to the other side’s cities,” says Gusterson. “Now you have to find another way of signaling, so you do it with PowerPoint presentations instead.”

But despite nearly global recognition that ending nuclear tests was a good idea, earlier this year the Trump administration floated the idea of resuming explosive nuclear tests. “It’s not something that came out of nowhere,” says Zia Mian, the codirector of Princeton University’s Program on Science and Global Security. Mian points to the influence of Marshall Billingslea, who President Trump recently appointed as the special presidential envoy for arms control, as a key factor. In the 1990s, Billingslea worked for the Republican senator Jesse Helms, who was a vocal opponent of the US signing the Comprehensive Nuclear Test Ban Treaty. “This has been an ongoing recurring effort in Republican administrations by groups of people and institutional interests who are opposed to the very idea of restraint on the US military’s nuclear weapon capabilities,” Mian says.

Mian characterizes the Trump administration's interest in nuclear testing as a strongman negotiating tactic at a time when economic and political tensions between the US, China, and Russia are at a boiling point. "It's a purely political demonstration of American resolve," he says. "If the US moves toward testing nuclear weapons as proof of alpha-ness in the international community to satisfy Donald Trump's ego and to force other people into submission, one can imagine that other countries will find their own ways of demonstrating their own determination not to be bullied through detonating nuclear weapons. That leads to a very dark place in international politics very quickly."

The irony is that resuming nuclear tests would almost certainly serve the interests of other countries more than it would help the US. Only three countries—India, Pakistan, and North Korea—have conducted explosive nuclear tests since the Comprehensive Nuclear Test Ban Treaty was signed 25 years ago. But if the US were to resume nuclear tests, Mian says, it would effectively be an open invitation for other countries to do the same. The US has conducted hundreds more tests than any other nuclear-armed country, and a couple more won't drastically improve the way American weapons designers understand these systems. But newer entrants to the nuclear arena, like India and Pakistan, have completed only a few explosive tests, and more testing could help them significantly improve their weapons systems. This, in turn, could kick off a new regional or global nuclear arms race.

"The relative benefit to other countries of resuming testing might be greater than for the US in terms of reliability, confidence, weapon design," says Mian. "That is a strategic calculation to try and maintain US advantage in comparison to other countries, rather than abandoning nuclear testing as a common good for everybody."

So until the day comes that the world's leaders go beyond mere test bans and decide to dismantle their nuclear arsenals, physicists and engineers will continue to toil away out of view of the public eye, creating ever more faithful models of the bombs they are compelled to study, but hope will never be used.

--Daniel Oberhaus is a staff writer at WIRED, where he covers space exploration and the future of energy. He is the author of Extraterrestrial Languages (MIT Press, 2019) and was previously the news editor at Motherboard

Hensel Phelps Wins \$92M to Build Air Force's GBSD Mission Integration Hub

GovConWire.com, 16 July 20 Nichols Martin

Hensel Phelps has won a \$91.8M contract from the U.S. Army Corps of Engineers to help establish a facility at Hill Air Force Base in Utah for integrating the future intercontinental ballistic missile system.

The project to build the integration hub for the Ground Based Strategic Deterrent mission drew nine bids, the Department of Defense said Wednesday.

USACE obligated \$35.7M at the time of award using fiscal 2020 military construction, defense-wide funds.

The U.S. Air Force reviewed a preliminary GBSD system design from Northrop Grumman (NYSE: NOC) earlier this year as part of the program's technology and maturation risk reduction phase.

Northrop partnered with multiple defense suppliers to build the military branch's next ICBM.

US allies once seemed cowed by China. Now they're responding with rare coordination

Analysis by Angela Dewan, CNN // Updated 7:20 AM ET, Wed July 15, 2020

(CNN)Chinese President Xi Jinping surprised the world with a speech at Davos in 2017, defending free trade and joint action on climate change as then US president-elect Donald Trump argued for precisely the opposite.

It might have been an overambitious pitch by Xi to position China as the world's next leader, but it also seemed a genuine sign that Beijing was committing to the international rules-based order.

Today, the warmth in the room at Davos has all but gone. The coronavirus pandemic has transformed the world and now some of those leaders who were so impressed by Xi's vision for China are complaining of Beijing's state secrecy, misinformation and the muzzling of whistleblowers during the initial stages of the coronavirus outbreak, allegations the Chinese government firmly denies.

Beijing is used to such diplomatic skirmishes, but something has shifted: Countries that once condemned China softly have become louder and their actions bolder. They are clearly coordinating their China responses, looking for strength in numbers. Looking to purchase your first bed-in-a-box mattress? Here's exactly what to know before buying and a list of our top five mattress online delivery brands to try out now.

This coordination has been most obvious in their strong reactions to China's imposition of a controversial National Security Law, which undermines Hong Kong's autonomy, a status that was supposed to be guaranteed until 2047 by a legal agreement with the United Kingdom. The language used and actions taken by Western powers to condemn this law has, in many cases, been the same.

Take the **Five Eyes**, an intelligence-based partnership between the United States, UK, Australia, Canada and New Zealand. Four of its members issued a swift joint statement condemning China for passing the law, and defending Hong Kong as a "bastion of freedom," in a rare open show of unity. Only New Zealand opted out of the statement. The UK has confirmed it will open a pathway for citizenship for Hong Kong residents with the right to a British National Overseas passport, which includes potentially around 3 million Hong Kongers.

UK Foreign Secretary Dominic Raab said he had raised the issue of "burden sharing" with the Five Eyes, if there is a mass exodus from the city. Australia has already extended visas for Hong Kongers in the country, also opening a route for citizenship, while Canada is looking at ways to "boost" migration from the city. Australia has suspended its extradition treaty with Hong Kong, as has Canada, while the US, UK and New Zealand are all reviewing their treaties.

And the European Union's top diplomat Josep Borrell also warned Monday the bloc was coordinating its response, though he said nothing concrete had been decided yet. The safe havens and extradition suspensions have irked officials in Beijing, who have promised to hit back with

countermeasures. Already they've warned Chinese students not to travel to Australia because of discriminatory attacks against Asian people, while Chinese Foreign Ministry spokesman Zhao Lijian told the UK "to step back from the brink" and "recognize the reality that Hong Kong has returned to China."

Of course, allied countries have most likely been discussing their China strategies for years, but such concerted action is rarely so blatant. Earlier this month, a new alliance of lawmakers was established from 16 countries and the European Union, called the Inter-Parliamentary Alliance on China (IPAC). It organizes actions on China for its members to promote in their countries. Its members include the US senators Marco Rubio and Bob Menendez, as well as lawmakers from the UK, Australia, Canada, Switzerland, Japan, the Czech Republic and Uganda, among others.

One of its current campaigns urges member countries to drop extradition treaties with Hong Kong to shield people from Chinese authorities. Another urges member nations to offer Hong Kongers safe havens through visas. "If you see that countries are going beyond the United Nations with parliamentarians now going beyond the borders to create a united front against China -- I've never seen anything like that. That's quite remarkable," said Yuka Kobayashi, an assistant professor in China and international politics at SOAS, University of London, who advises governments and organizations on China.

"A lot of countries were previously accommodating to China but are not so accommodating anymore," she said. She pointed out to the way several countries have banned Chinese tech company Huawei from their high-speed internet infrastructure as another example of this international unity on China. "If these are now coordinated, it is going to pose serious challenges to China."

On Tuesday, the UK barred Chinese tech giant Huawei from its 5G network, in a major victory for the Trump administration, which has been pressuring key US allies to do so for months. The US, Australia and Japan had already effectively banned, or planned to phase out, Huawei's products from their high-speed wireless infrastructure, concerned that allowing the company into their grids could make sensitive personal data vulnerable to the Chinese government.

These decisions may not have been made together, necessarily, but these states are closely watching one another's decisions and, in some cases, following suit. Huawei has gone to great lengths to show it is not an arm of the Chinese government, claiming it would never hand over personal data to the Chinese authorities, but some experts say it could be legally obliged to in certain circumstances.

India also cited security concerns when it recently banned social media video platform TikTok and dozens of other Chinese-owned apps, even though the decision was broadly seen as an act of retaliation following deadly clashes between Indian and Chinese troops at a contested border last month. The US is mulling a TikTok ban for security reasons.

China and the world order

With China's extraordinary rise has come a willingness from Beijing to take a leading role in some of the institutions at the foundations of the current world order. The country's rapid economic expansion is inextricably linked to globalization, so gaining access to the World Trade Organization and taking part in the G20 are important platforms for Beijing. Signing the Paris accord on climate change has also furthered China's global credentials, particularly as the US has pulled out.

But some of its key decisions this year show the limitations of China's commitment to global norms. Beijing has taken its more assertive foreign policy to a new level in recent months, as the world remains focused on getting a grip on the pandemic. Its recent clashes in the Himalayas killed more than 20 Indian soldiers, in the first deadly outbreak at the contested border in more than 40 years. India reported that dozens of Chinese soldiers were also killed, but officials in Beijing never confirmed a number.

Chinese navy ships have also confronted vessels from other Asian nations in the seas to its south and east, while alleged Beijing-backed cyberattacks on the US and Australia have only worsened relations. Beijing has routinely denied the state is behind such cyber attacks. Accusations of recent attacks on US pharmaceutical and research institutions making progress on the coronavirus was for some a textbook example of how difficult it can be to censure China.

China is so important to the global economy that whenever criticism is thrown at the country, it's almost always coupled with a recognition of how important China ties are. FBI Director Christopher Wray, who blamed China for the recent cyber attacks, said the country was the "greatest long-term threat to our nation's information and intellectual property and to our economic vitality." But in the same breath he made clear relations with China were incredibly important.

"Confronting this threat effectively does not mean we shouldn't do business with the Chinese, does not mean we shouldn't host Chinese visitors, it does not mean we shouldn't welcome Chinese students or coexist with China on the world stage," he said. "It does mean that when China violates our criminal laws and international norms, we are not going to tolerate, much less enable." Zhao, the Chinese Foreign Ministry spokesman, told CNN that Wray's remarks amounted to "political lies." "Wray's remarks show a disregard for facts and is full of political rumors that expose his deep-rooted Cold War mentality and ideological bias," Zhao said.

Australia shifts its China stance

It's a balance the world is still struggling to work out. China is so integrated in the global economy, it has enviable leverage during disputes, whether it be over trade, contested territories, sovereignty or ideology. Never has this been so obvious. The coronavirus pandemic highlighted just how profoundly the world relies on China's supply chains for everything, from the cars we drive, the medications we take and the phones we use. It also brought to the fore individual countries' dependence on China to consume exports.

The disruption has forced much of the world to consider diversifying its supply chains and export markets. Australia is a good example of this. China is Australia's largest trade partner. In 2018-19, two-way trade was worth US\$235 billion, more than 2.5 times that of Japan, Australia's next biggest partner. China spent \$153.2 billion on Australian exports, a 32.5% share. But China after Australia led calls for investigations into the origins of the coronavirus, Beijing slapped an eye-watering 80.5% tariff on barley imports from the country.

That's painful: China usually buys up around half Australia's barley exports. Beijing has also put tariffs on some Australian beef and its ambassador to Australia, Cheng Jingye, suggested Chinese people could boycott Australian wine, tourism and universities, in an interview with the Australian Financial Review. Australian Prime Minister Scott Morrison's call for a coronavirus probe into the virus' origins is a rare show of leadership on

global affairs from his country. It's also surprising, because Australia's geographical proximity to China makes the threat of a military conflict very real.

Tellingly, Morrison recently announced a boost in defense spending. "We want an open, sovereign Indo-Pacific free from coercion and hegemony. We want a region where all countries, large and small, can engage freely with each other and be guided by international rules and norms," he said. China's Ministry of Foreign Affairs has repeatedly said the country has been open and transparent in its dealing with its coronavirus outbreak.

Not all countries have been so bold. The EU may be coordinating a response to the National Security Law, but it has been slow to act. On China, Germany's Angela Merkel can't seem to find the right words -- she has been praised by some business leaders for her pragmatic approach to the country and for encouraging a growing trade relationship. But she has also drawn criticism in Germany for being too soft on China, and for being too close to Beijing.

While she backed the EU's pledge for a united response Monday, she also said there was "no reason not to remain in dialogue with China," Reuters reported. Her quandary is understandable. Trade aside, there are other strong arguments against alienating China. The world needs China's cooperation on the environment -- it's the world's biggest carbon emitter, and has been willing to take part in a global effort to fight climate change.

Only China can provide the answers to some questions on the coronavirus' origins, answers that health experts say could help prevent another pandemic. And if China does develop the first coronavirus vaccine, the rest of the world will undoubtedly want access to it. Sidelining China simply isn't a realistic option. But much of the world is showing it is determined to reshape relations with Beijing, by standing together

CONGRESSIONAL

By Susan Cornwell

House panel votes to end 2001, 2002 war authorizations

By: Joe Gould for Defense News

WASHINGTON — The House Appropriations Committee approved separate measures to end the 2001 and 2002 war authorizations, which underpin U.S. counterterror operations — the latest attempt by lawmakers to curb President Donald Trump’s war-making powers.

At the panel’s deliberations on the fiscal 2021 defense spending bill on Tuesday, members voted on two amendments to the panel’s proposed 2021 defense spending bill from Rep. Barbara Lee, D-Calif. The panel first voted along party lines, 30-22, to pass an amendment to sunset the 2001 authorization for use of military force within eight months, and then by voice vote, to repeal the 2002 AUMF. A third Lee amendment, also approved 30-22, would bar the use of military force in or against Iran, with certain exceptions.

The committee subsequently took a party line vote to send the bill, which would appropriate \$694.6 billion for the Pentagon, to the House floor. The amendments are aimed at reclaiming congressional war powers by revoking measures three successive presidents have used to justify an array of operations in foreign countries without securing prior approval from the legislative branch. They likely set up a fight with the White House and the Senate’s Republican leaders.

Lee, an antiwar advocate, has pressed the issue for years and said Tuesday that under the 2001 authorization, “any administration, Democratic or Republican administration, can continue to rely on this blank check to wage endless wars. ... It’s far past time to bring almost two decades of nonstop war to an end.” Lee said that eight months was “plenty of time” for Congress to draft and pass a replacement for the 2001 AUMF.

The 2002 AUMF, enacted to go to war against Iraqi leader Saddam Hussein, became obsolete when U.S. troops withdrew from the country in 2011, Lee said. The Trump administration, she said, has mulled inappropriately stretching the authorizations to fight Iran. In January, the House voted to repeal the 2002 AUMF and to bar Trump from using federal funds to mount an unauthorized strike against Tehran — which Trump threatened to veto.

Trump has called for an end to U.S. entanglements abroad, drawn down thousands of U.S. troops, and struck a deal with the Taliban intended to pave the way for a complete exit and an end to the 19-year conflict. For that, he’s weathered criticism from lawmakers of both parties that the Afghanistan withdrawal appears hasty. At Tuesday’s markup, several of the panel’s Republican leaders vocally opposed Lee’s two amendments, including House Appropriations Committee ranking member Rep. Kay Granger, R-Texas.

They said U.S. troops risk losing legal authority for ongoing counterterror operations against valid threats to the country. “There are few things more irresponsible than removing a critical legal authority for U.S. military operations without having an agreement on what would replace it,” Granger

said. She called the 2001 AUMF measure a “poison pill” for the larger defense spending bill, and Republicans in committee later voted against the bill.

Republican panel leaders have said more broadly that partisan policy provisions in the bill will have to be dropped in negotiations with the White House and Republican Senate leaders.

One senior Republican on the House Appropriations Committee, Rep. Tom Cole of Oklahoma, said he was working with a bipartisan group of lawmakers to draft a replacement for the 2001 AUMF and could not support Lee on Tuesday.

“To say we ought to be able to get it done in 240 days is a nice point to make, but the problem is we haven’t been able to get it done in 18 years,” Cole said. “To believe that we will magically find the solution in 240 days I think flies in the face of our own hard experience.”

MODERNIZE AMERICA’S NUCLEAR TRIAD AND MISSILE DEFENSE SYSTEMS

House Republican Policy Committee // 14 July 2020

- Ensuring a safe, effective, and reliable nuclear deterrent is the military’s top priority and the cornerstone of America’s national security. However, Russia and China are making significant investments in developing and deploying new nuclear weapons, even as America’s nuclear arsenal ages.¹
- **Quick Take:** Nuclear deterrence is the cornerstone of our national security, but the nuclear triad and missile defense systems require significant modernization. The President’s budget request makes important investments to ensure a robust nuclear deterrent. weapons because, according to **Dr. Mark Schneider**, “it plugs a major hole in our current deterrent capability at virtually no cost.”¹¹

BACKGROUND

America’s land-based intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles, and bombers form America’s nuclear deterrent also known as the “Nuclear Triad.”² The Nuclear Triad ensures America’s ability to deliver a “decisive response, anywhere, anytime” in the event of a catastrophic first strike by an adversary.³ The United States built most of these weapon systems in the 1980s. As such, many have been extended well beyond their service lives.

Even with extensions, these systems will reach the end of their service lives between 2025 to 2035. This leaves little time to get modern replacement systems online and no margin for error. The United States must make significant investments over the next 20 years to modernize the deterrent, but at no point is the cost expected to be greater than seven percent of the Department of Defense (DOD) budget.⁴ As Ash Carter, President Obama’s Secretary of Defense said, “It’s not an enormous part of our budget, but it is a critical part of our budget.”⁵ Former Secretary Mattis put it more succinctly, “America can afford survival.”⁶

China and Russia

China and Russia are rapidly modernizing their own nuclear arsenals. China is investing in long-range bombers that could make it one of three countries in the world with a nuclear triad. China is also building out a robust arsenal of missiles designed to deny the United States and our allies

access in the Indo-Pacific. Russia spent more than ten percent of its military budget on nuclear modernization every year since 2011.⁷ In 2018, President Vladimir Putin announced six new strategic weapons systems. Five of them are nuclear capable.⁸

Low-Yield Weapons

The U.S. recently deployed new low-yield nuclear weapons to reinforce America's nuclear deterrent. Opponents of these weapons, including many House Democrats, argue that they are destabilizing and increase the potential for nuclear war.⁹ In reality, they are a deterrent to Russia's dangerous "escalate to deescalate" theory that calls for the use of Russian low-yield weapons in a limited attack, betting that the

United States would not respond disproportionately with one of our high-yield weapons. These new low-yield weapons deter the threat of limited first use because the United States would be able to respond proportionally.¹⁰ President Obama's Defense Science Board recommended deploying new low-yield

Missile Defense

Republicans have championed strong missile defenses to protect the American homeland as well as to protect our partners and allies. While rogue nations like North Korea and Iran develop missiles capable of delivering nuclear weapons to the United States, robust layered missile defense capabilities are critical to our national security. For regional missile threats in Asia, Europe, and the Middle East, the United States has pursued capabilities that will protect our deployed troops, partners, and allies from near peer and rogue nations alike.

The U.S. continues to work with Israel in the cooperative development of missile defense capabilities which are essential to their safety and security. In addition, a robust missile defense research and development effort must address emerging threats from hypersonic weapons, cruise missiles, and other novel systems under development. Missile defense is a critical part of America's deterrence calculus.

Withdrawing From the INF Treaty

The United States completed withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty in August of 2019. The INF Treaty was established in 1987 and led to the elimination of U.S. and Soviet ground-launched cruise missiles with ranges between 500 and 5,500 kilometers.¹² Beginning in 2008, the Obama Administration raised concerns that Russia was testing missiles that could fly to ranges banned by the treaty.

By 2014, the Obama Administration concluded that Russia had violated the treaty, "the most serious allegation of an arms control treaty violation that the Obama administration...leveled against Russia."¹³ Congress took action repeatedly to hold Russia accountable, but Russia refused to return to compliance.¹⁴ While Russia was testing banned missiles, China was developing their own arsenal of missiles unconstrained by the INF treaty. According to the US-China Commission,

"Over the last two decades Beijing has built up a formidable missile arsenal outside the limits of the [INF Treaty]."¹⁵ Prior to INF Treaty withdrawal, the United States had no comparable capability due to INF restrictions, which put "the United States at a disadvantage and place[d] our forces at risk because China is not a signatory."¹⁶

CONSTITUTIONAL AUTHORITY AND REPUBLICAN PRINCIPLES

Under Article I Section 8, the Constitution requires Congress, “To raise and support Armies; To provide and maintain a Navy,” and to, “make Rules for the Government and Regulation of the land and naval Forces.” As President Reagan noted, peace comes through strength. American troops and their families deserve the best deterrent to war our country can provide.

POLICY SOLUTIONS

Congress must authorize sufficient funding to create effective deterrents to a catastrophic attack. In the 1960s, DOD spent approximately 17.1 percent of its budget on the Nuclear Triad. In 1984, during the peak of the last modernization effort, DOD spent 10.6 percent of its budget on the project. President Trump’s Fiscal Year 2021 Budget Proposal calls for needed investments in America’s nuclear deterrent. The President proposes to spend \$28.9 billion, or 3.9 percent of the total national defense budget request, on nuclear modernization. The President’s nuclear modernization plan would spend seven percent of the DOD budget at peak spending levels.

New nuclear warhead funding would be blocked by House appropriators

By: [Aaron Mehta](#) for Defense News // 4 hours ago

WASHINGTON — Energy and water appropriators voted Monday to block funding sought by the Trump administration to develop a new submarine-launched nuclear warhead design, [known as the W93](#).

The members of the House Energy and Water Development, and Related Agencies Subcommittee voted in favor of language saying that “no funding” may be used on the new warhead design, which the Pentagon hopes to have fielded by 2040. The language was adopted as part of the overall bill that passed by a 30-21 vote Monday. The [National Nuclear Security Administration](#), a semiautonomous agency inside the Department of Energy that tests and produces American nuclear warheads, is seeking \$53 million for early development of the W93.

Defense appropriators in the House have already approved the \$32 million sought by the Pentagon to start early design work on the aeroshell of the W93. While NNSA has oversight on warheads, the delivery mechanisms [come out of Department of Defense funding](#). The appropriators raised concerns that the NNSA “has provided limited details on why starting Phase 1 Concept Assessment is needed in fiscal year 2021, the drivers for this decision, or how such a decision is likely to impact retirement of any of the Navy’s existing strategic systems.”

“The NNSA proposed to manage the W93 modernization activity using the joint Department of Energy-Department of Defense nuclear weapons lifecycle process, but the Committee is concerned that this process is out of date and does not include current best practices,” the appropriators added. “Until such questions and concerns are adequately addressed, the Committee will not consider funding for this activity.”

While the \$53 million in NNSA funds is not a major figure, any delay in the development of the W93 could push the expected deployment not just for America, but for the United Kingdom, which plans to buy a [version of the warhead](#). And there is speculation in the nuclear community that former **Vice President Joe Biden**, should he win the presidency in November’s election, would look to cancel the nascent program.

In February, a senior defense official told Defense News that the W93 would be based on existing designs, and likely be somewhere between the W88 and W76 in size — the two other submarine-launched warheads. The official said the W93 is to come online around the same time the other two systems are hitting dangerous ages, but opponents say despite this, the new system is another step in a nuclear arms race.

The House Appropriations Committee's bill is not the last word, and Republicans, who control the Senate and the White House, will negotiate over the final numbers. In addition to blocking the W93 funds, the committee language includes a requirement to brief Congress within 60 days of the enactment of the bill "on the benefits, drawbacks, and implications of extending the need date of the first and last production unit" of the W80-4 warhead by one year, a sign committee members are concerned about the timeline for that system, planned for [use with air-launched cruise missiles](#).

The bill also contains language barring the use of appropriations funding that would involve "working through the *Nuclear Weapons Council* to guide, advise, assist, develop or execute a budget for the National Nuclear Security Administration," a direct shot at language in the Senate Armed Services Committee bill that would give the Pentagon-led Nuclear Weapons Council greater say in how NNSA develops its budget.

Members of the subcommittee and the Department of Energy have pushed back on that proposal on the basis it would give the DoD control over how NNSA spends its funds, even over objections from the energy secretary. But **Rep. Mike Simpson, R-Idaho**, warned during Monday's markup hearing that there may be unintended consequences in the committee's language. "I support what they are intending to do with this language. I support the current structure, as an important component of maintaining civilian control over the nuclear weapons program. But as drafted, Section 309 likely would upend current law with respect to the functioning of the Nuclear Weapons Council," Simpson said.

House lawmakers remain anxious about plutonium pit production timing

Aiken Standard Online (South Carolina), July 13 | Colin Demarest

Federal lawmakers continue to be concerned about plutonium pit production and the National Nuclear Security Administration's ability to establish a reliable means of crafting enough of the nuclear weapon cores by 2030, an approaching deadline.

Given the NNSA's challenges in building complex nuclear facilities "on time and on budget, coupled with the extremely constrained timeframe and planned use of expedited processes and procedures, the risk of not meeting pit production milestones is high," reads a report, released over the weekend, accompanying a \$49.6 billion fiscal year 2021 House spending bill.

Compounding the matter is a lack of contingency planning should the National Nuclear Security Administration — the U.S. Department of Energy's weapons-and-nonproliferation agency — not meet its mark, according to the report.

The production of at least 80 pits per year is required by 2030, with some due years before that. The pits, according to officials, will be used to refresh and update the nation's aging nuclear arsenal.

"Want to know where 80 pits per year came from? It's math. Alright? It's really simple math," Peter Fanta, a former deputy assistant secretary of defense for nuclear matters, has said. "Divide 80 per year by the number of active warheads we have — last time it was unclassified it was just under 4,000 — and you get a timeframe."

The U.S. has for years not made pits en masse.

To satisfy the 80-pits-per-year demand, the National Nuclear Security Administration and the U.S. Department of Defense in 2018 recommended a cross-country, two-pronged approach: 50 pits per year would be pumped out at the Savannah River Site south of Aiken, and 30 pits per year would be pumped out at Los Alamos National Laboratory, a plutonium center of excellence near Santa Fe, New Mexico.

Forging the nuclear weapon cores at the Savannah River Site would mean repurposing the never-completed Mixed Oxide Fuel Fabrication Facility, a cost-bloated venture the NNSA canceled in late 2018 after flagging progress and a legal battle with South Carolina. Billions of dollars and years of work had been expended on the troubled nuclear-fuel project by that point.

Flipping MOX — and producing the total 80 pits per year by 2030, in general — will be no simple task. William "Ike" White, the former NNSA chief of staff, early last year described it as a significant and ambitious undertaking; Savannah River Nuclear Solutions President and CEO Stuart MacVean has said the weighty workload asks "us to do in 10 years what would typically take 15 to 20 in today's environment."

NNSA chief Lisa Gordon-Hagerty has addressed and tried to assuage the apprehension. In an interview with the Aiken Standard last summer, Gordon-Hagerty said her agency has "turned a corner" when it comes to major infrastructure projects. At the time, she cited construction of the Uranium Processing Facility in Oak Ridge, Tennessee, as proof.

"I recognize we have a long history of programs, the fits and starts of different facilities in the past," Gordon-Hagerty added. "That's no longer the case at NNSA."

House appropriators cut LRSO funding, raise possibility of W80-4 production delay

InsideDefense.com, 14 July 20 Sara Sirota

House lawmakers are proposing a \$170 million cut to the Air Force's fiscal year 2021 funding request for the Long Range Standoff Weapon and are recommending a study into the government's backup plans if the new cruise missile's warhead faces a production delay.

The House Appropriations defense subcommittee is suggesting the reduction to the Air Force's \$474 million proposed budget for LRSO, according to a report accompanying its mark of the FY-21 defense spending bill. The full committee is set to vote on the bill today.

When asked why lawmakers are recommending the funding cut, a House Democratic aide noted in an email to Inside Defense today that the Air Force had requested the \$474 million under the assumption it would be using two technology-maturation and risk-reduction phase contractors until the milestone B decision to begin development in FY-22, which is no longer the case.

Indeed, the service announced a surprise decision in April to "off-ramp" one of the companies, Lockheed Martin, and proceed with Raytheon as a sole-source contractor.

The aide said the Air Force has not given any evidence that the LRSO program cannot stay on its current objective schedule despite losing the \$170 million in FY-21, adding lawmakers would continue talking with the service until the final bill is passed.

At the time the Air Force revealed it was moving forward with one vendor, officials said they were considering accelerating the program schedule and shifting some development activities, such as flight tests, into the TMRR stage.

The service didn't immediately respond to questions about whether the program has made any such changes and if additional funding would be required.

LRSO replaces the legacy Air-Launched Cruise Missile and will have an upgraded version of ALCM's warhead that the National Nuclear Security Administration is modernizing under the W80-4 life extension program.

The House Appropriations energy and water development subcommittee recommended Congress direct NNSA to provide a briefing on the benefits, drawbacks and consequences if the first and last production units face a one-year delay, according to a report accompanying its mark of the FY-21 energy and water development spending bill. The full committee approved the bill on Monday.

"NNSA's workload is increasing at a very steep pace," the House Democratic aide told Inside Defense in a July 12 email. "This language ensures NNSA is looking at contingency plans should a scenario arise where production is delayed, which could help minimize future cost increases if there is a delay."

The agency has already experienced setbacks with the B61-12 LEP and W88 Alteration 370 programs. As a result of technical issues with nonnuclear electrical components, these modernization efforts face a delay to first production unit of about 18 to 20 months.

NNSA currently expects to deliver the W80-4 LEP's first production unit in FY-25 and complete the program in FY-31.

Key House Democrats want to lock in New START weapons limits

By: Joe Gould

WASHINGTON — The chairmen of the House foreign affairs and intelligence committees are pushing a measure meant to extend the last remaining U.S.-Russia arms control agreement amid fears President Donald Trump will let it lapse.

Led by House Foreign Affairs Committee Chairman Eliot Engel, D-N.Y., the proposal would require congressional approval to increase the nuclear arsenal above the limits of the 2010 New START treaty, if the pact is allowed to expire next year.

The measure was offered as an amendment to the 2021 National Defense Authorization Act, which is set for floor consideration next week. Engel's amendment was cosponsored by House Intelligence Committee Chairman Adam Schiff, D-Calif., and House Intelligence, Emerging Threats and Capabilities Subcommittee Chairman Jim Langevin, D-R.I.

"This Administration's recklessness has left New START as the only remaining agreement limiting Russia's nuclear weapons. Despite the White House's claims, there's no 'better deal' with Russia and China on the horizon, and the clock on New START is ticking," Engel said in a statement. "The president doesn't seem to have a problem with Russia developing more and more nuclear weapons that could strike the United States, so Congress has to do everything we can to keep these protections in place."

The action came days after Russian Foreign Minister Sergey Lavrov warned he's not very optimistic about prospects for an extension because of Washington's focus on making China sign onto the pact. U.S. and Russian envoys held talks last month in Vienna, but Beijing has refused to take part.

Engel's amendment states that the U.S. should extend the pact for five years, to an expiration date of February 5, 2026, unless Russia is in material breach of the treaty or if it is replaced by a new, stronger agreement. It also provides the executive branch with permission to continue inspection activities and other transparency measures if New START expires on February 5, 2021, assuming that the government of Russia reciprocates these steps

The New START treaty 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 compliance.

The amendment would bar funding to increase the arsenal above the treaty limits unless the president notifies Congress in advance of the new military requirements, certifies that the additional deployments are necessary and justifies the deployments, reports the associated costs and operational implications, and requires that any increase in deployed nuclear weapons is subject to a joint resolution of approval.

It also requires detailed reports on Russian nuclear forces and, with an eye toward potential growth in China's nuclear arsenal, requires briefings and reports regarding the administration's arms control approach with Beijing, according to a summary.

It also requires a presidential certification before New START would lapse that this would serve U.S. national security interests, an assessment whether continuing limits on Russian nuclear forces would serve U.S. interests and a plan for how the U.S. military and intelligence communities will address the post-New START environment, including the potential funding and development of additional nuclear deterrence and intelligence requirements.

If Engel's amendment is accepted by the House Rules Committee and adopted by the House, it would almost certainly invite resistance from hawkish supporters of the president during negotiations to reconcile the House and Senate versions of the NDAA. Senate Armed Services Committee's Chairman Jim Inhofe, a proponent of nuclear weapons spending, has historically been a skeptic of the treaty.

Kingston Reif, the Arms Control Association's director for disarmament and threat reduction policy, said the Trump administration doesn't seem like it will extend New Start and that Congress ought to be putting in roadblocks.

"Crucially, the amendment would require congressional approval to increase the nuclear arsenal above the treaty limits, if the treaty is allowed to expire next year. A decision as consequential as increasing the size of the deployed arsenal, which hasn't occurred in decades, merits special scrutiny," Reif said.

After both Moscow and Washington withdrew from the 1987 Intermediate-range Nuclear Forces Treaty last year, New START is the only remaining nuclear arms control deal between the two countries.

Russia has offered its extension without any conditions, while the Trump administration has pushed for a new arms control agreement 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.

Trump declared an intention to pull out of the agreement in May, citing Russian violations. Russia denied breaching the pact, which came into force in 2002, and the European Union has urged the U.S. to reconsider.

AROUND THE WORLD



RUSSIA:

Russia names new circumstances for deploying nuclear weapons

By: Nikolai Litovkin for Sputnik [Science & Tech](#) // July 13 2020

Russia's nuclear policy remains "defensive." However, a number of new conditions have been set for when a strike can be delivered. In mid-June 2020, Russian President Vladimir Putin approved the "Fundamentals of Russia's Nuclear Deterrence State Policy." The document identifies all cases permitting the use of nuclear weapons. Notably, this is the first time that the text of Russia's nuclear doctrine has been made publicly available. You view the document on the [Kremlin website](#) (in Russian).

When would Russia push the button

Moscow is keen to stress that its nuclear policy remains defensive. "Russia sees nuclear weapons solely as a deterrent and an emergency measure. The country is striving to reduce the nuclear threat and prevent the aggravation of international relations that could provoke military conflicts, including nuclear ones," reads the doctrine. At the same time, a number of scenarios have been identified in which Russia could deploy nuclear weapons.

First, this pertains to the "build-up of general forces, including nuclear weapons delivery vehicles, in territories adjacent to the Russian Federation and its allies, and in adjacent offshore areas." **Second**, the "deployment of anti-ballistic missile defense systems and facilities, medium- and shorter-range cruise and ballistic missiles, precision non-nuclear and hypersonic weapons, strike drones, and directed-energy weapons by states that consider the Russian Federation to be a potential adversary."

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

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

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

Sixth, the "deployment of nuclear weapons and their delivery vehicles in non-nuclear states."

Moscow also sets forth additional situations in which it is ready to take "extreme measures." Among them is the "receipt of reliable information about the launch of ballistic missiles attacking the territory of Russia and (or) its allies," as well as the "enemy deployment of nuclear or other weapons of mass destruction against Russia and (or) its allies." Furthermore, the command to deploy nuclear weapons will be given in the event of an "enemy attack on critical state and military facilities of the Russian Federation which, if incapacitated, would disrupt a nuclear response," as well as "aggression using conventional weapons that threatens the existence of the Russian state."

Assessment by military experts

The new document is the quintessence of everything that President Putin and the country's military leadership have spoken about in recent years. "Everything contained in fragments from isolated speeches is now reflected in the national security strategy. We are openly talking about our intentions so that the West doesn't

hit on the idea that Russia is ‘escalating [the international conflict] in order to de-escalate it,’” Viktor Murakhovsky, editor-in-chief of Arsenal of the Fatherland magazine, told Russia Beyond.

According to Murakhovsky, Russia’s publication of its nuclear policy is an attempt to nudge its partners into extending the Strategic Arms Reduction Treaty (START-3), which expires in a year, whereupon Russia and the United States will be free to expand their nuclear arsenals without restriction. Currently, both Russia and the United States have limited their nuclear arsenals to 1,550 nuclear warheads and 700 carriers (intercontinental ballistic missiles, submarine ballistic missiles, heavy bombers).

What nuclear missiles does Russia have -- According to the website “Strategic Nuclear Weapons of Russia,” the following missiles are currently in service:

- 46 R-36M2 (SS-18) heavy missiles
- 2 Avangard complexes (UR-100NUTTH, SS-19 Mod 4 missiles)
- 45 Topol (SS-25) mobile ground complexes
- 60 Topol-M (SS-27) silo-based complexes
- 18 Topol-M (SS-27) mobile complexes
- 135 mobile and 14 silo-based complexes with RS-24 Yars missiles

Of these, the R-36M2 and Topol are due to be decommissioned and replaced by the latest Yars (to be sited in the silos of the previous occupants and on trucks) and by the heavy Sarmat ICBM.

You can read in detail about Russia’s latest nuclear missiles [here](#); for tactical nuclear weapons that do not fall under any international treaty, see [here](#).

Guest Editor’s Comment: Colonel Litovkin while completely loyal to the regime, has a good track record for accuracy. He is writing in State media and interpreting Russian nuclear first use doctrine as having a much lower threshold of nuclear weapons first use than evident in the nuclear decree. He is saying that any time there is a threat the Putin decree allows nuclear first use. A lot of it is similar to Russian nuclear missile targeting threats. It is consistent with my analysis which said that the decree does not entail the complete doctrine but goes beyond it.

Kozin while completely loyal to the regime, he usually has a good track record for accuracy. Another interesting thing is that there is no disclaimer that this is just his personal opinion.

Here is the key language: “When would Russia push the button” -- Moscow is keen to stress that its nuclear policy remains defensive.

Russia ‘Not Optimistic’ About Saving Nuclear Pact With U.S.

By: Henry Meyer for Bloomberg News // 2 days ago

(Bloomberg) -- Russian Foreign Minister Sergei Lavrov said he doesn’t see much chance of success for talks with the U.S. on salvaging a key nuclear arms treaty that expires next year.

“Knowing the attitude of the current negotiators, I am not very optimistic about the future of the New START treaty,” Lavrov said at an online conference on Friday. The U.S. and Russia are planning to have more arms-control talks as soon as this month after a first round of discussions in

Vienna in June on nuclear-weapons stockpiles. The treaty limiting the size of nuclear arsenals between Washington and Moscow is set to expire in February and a failure to extend the pact or agree to a new one could raise risks posed by atomic weapons.

The Trump administration has insisted that China take part in the talks so that they can move forward, a condition that Moscow and Beijing have rejected. Last month, U.S. envoy Marshall Billingslea called the Vienna talks “very robust and very productive” while reiterating that Chinese officials should join future rounds. Russian Deputy Foreign Minister Sergei Ryabkov struck a far more cautious note, saying it was “unrealistic” for the U.S. to expect China to take part in the talks and that Moscow isn’t willing “to influence Beijing” in the way that the Americans would like.

The U.S. insistence on tying progress in the talks to the participation of China shows that the Trump administration has already decided to walk away from the treaty, Lavrov said, according to state news services TASS and RIA Novosti. The 10-year agreement, the last one capping the nuclear forces of the former Cold War foes, has an option to renew for a further five years with the agreement of both parties.

Russian Foreign Ministry spokeswoman Maria Zakharova didn’t respond to a request for comment on the timing for the next round of talks. Russia will raise at an upcoming summit between the five permanent members of the United Nations Security Council the need to rule out the possibility of nuclear war, Lavrov said. The U.S. for the past two years has refused to endorse the principle that such a conflict cannot be won, which marks a step back from a Soviet-era joint statement in 1985, he said.

The U.S., backed by France and the U.K., wants to restrict the agenda of the summit to disarmament and non-proliferation, which China sees as a bid to pressure it to join the talks on nuclear stockpiles, Lavrov said. (An earlier version of this article was corrected to show the date hasn’t yet been announced for the next round of U.S.-Russia talks.)

Kremlin - US-Russian relations 'remain at almost-bottom point,' unbefitting of leading nuclear powers

From the Russian News Service RT // 12 Jul, 2020 13:35

The "terrible" state of relations between the US and Russia is not what other nations expect from the two countries with the world's biggest nuclear arsenals, a Kremlin spokesman has said.

"Our relationship remains at almost-bottom point. The situation is terrible both in bilateral aspects and in terms of our responsibility for multilateral affairs, first of all, in arms control and strategic stability," Dmitry Peskov said in an interview with Russian TV. He noted that "shy" expert contacts between the two nations have been failing to preserve strategic arms control agreements, like the now-defunct Intermediate-Range Nuclear Forces Treaty (INF), which was scrapped on Washington's call last year.

The US has been working on dismantling arms control mechanisms for years. The Anti-Ballistic Missile Treaty was scrapped under George W. Bush, purportedly to protect the US and its allies from possible attacks by Iran and North Korea. The INF was axed after the US accused Russia of failing to meet its obligations under the pact. Moscow denied these accusations and said they were simply being used as a pretext to shift responsibility for an escalatory move, which the US didn't want to own.

Washington claimed that the treaties it has with Russia stopped it from fully competing with China, a nation that is not beholden to those agreements and is seen as a strategic rival by the US government. Peskov pointed out that Beijing could not be compared to either Russia or the US in terms of nuclear strength. "Out two nations hold the biggest nuclear arsenals. No other country, including China, which the Americans are pushing hard to enter [arms control] negotiations, [can compare]," he said.

The New START agreement is the last major bilateral treaty restricting Russian and US nuclear forces, limiting each nation to 1,550 operationally deployed nuclear warheads, though thousands more remain stockpiled by each nation. For comparison, China is [estimated](#) to have 320 nuclear warheads in total, according to the latest yearbook of the Stockholm International Peace Research Institute (SIPRI). The US-Russian treaty is due to expire next February unless the two parties agree to extend it. Moscow has repeatedly voiced concerns that Washington appears willing to let the treaty end.

US administration aims to destroy entire system of global security – Russian official

TASS (Russia), July 16 | Not Attributed

The latest actions by the incumbent US administration constitute an attempt to dismantle the existing system of global security, chief of the Russian National Centre for Nuclear Risk Reduction Sergei Ryzhkov said in an interview published by the Krasnaya Zvezda newspaper on Friday.

"The incumbent US administration declares the importance of arms control, but, in practice, works persistently to dismantle the existing system of global security," he said, adding that Washington is withdrawing from any international agreement that somehow restricts its activities.

"It is well known that any outside actions of the US administration always have two strategic goals in the background: ensuring the US dominance and financial interests," Ryzhkov said.

He cited as examples the US project to create the strategic missile shield launched immediately after the US withdrawal from the Anti-Ballistic Missile Treaty in 2002, and the flight test of a missile banned by the Intermediate-Range Nuclear Forces treaty held a few days after the deal was terminated last year.

Speaking about Washington's recent announcement on withdrawal from the Open Skies Treaty, the Russian official described the international accord as one of the most important instruments of ensuring international security.

"The Russian Federation has always expressed its commitment to this agreement and has been doing its best for its implementation," Ryzhkov said, adding that Russia was ready to engage in dialogue and solve issues on the basis of reciprocity.

"We are not going to yield to demands in the form of ultimatums and to sacrifice our national security," he added.

US needs billions to adjust missile shield for hypersonic missiles – Russian official

In his words "hundreds of billions of dollars of US taxpayers" have already been spent to create the missile shield, and more will be needed
TASS (Russia), July 17 | Not Attributed

MOSCOW -- The United States will have to spend hundreds of billions of dollars to make its existing missile shield efficient against hypersonic missiles, chief of the Russian National Centre for Nuclear Risk Reduction Sergei Ryzhkov said in an interview published by the Krasnaya Zvezda newspaper on Friday.

"In the conditions when hypersonic missile systems appear, the US defense industry will need additional hundreds of billions of dollars to upgrade its existing missile shield to the acceptable degree of efficiency," Ryzhkov said, adding that this is exactly what the US defense industry wants.

In his words "hundreds of billions of dollars of US taxpayers" have already been spent to create the missile shield.



CHINA:

China Rejects US Nuclear Talks Invitation as Beijing Adds to Its Arsenal

By John Xie for VoA News // July 13, 2020 03:38 PM

China has rejected any prospect of joining in nuclear talks with the United States and Russia, raising fears that nuclear weapons will become a new issue of contention between Washington and Beijing.

Chinese Foreign Ministry spokesperson Zhao Lijian told reporters Friday that "China's objection to the so-called trilateral arms control negotiations is very clear, and the U.S. knows it very well." To try to reduce the odds of nuclear annihilation, Washington and Moscow reached a reduction treaty in 2010 that limits the number of deployed nuclear warheads each can possess. As Beijing's military has steadily grown as a global power, Robert O'Brien, President Donald Trump's national security adviser, said in February that the new pact should include China.

"The president believes that it shouldn't just be the U.S. and Russia," he said to a group of 50 foreign ambassadors in Washington, adding, "The days of unilateral American disarmament are over." State Department spokeswoman [Morgan Ortagus said](#) last Thursday in a statement that the special presidential envoy for arms control, Ambassador Marshall Billingslea, would invite China to join in negotiations and that it was time "for dialogue and diplomacy between the three biggest nuclear weapons powers on how to prevent a new arms race."

However, China doubled down on its opposition last week, accusing the U.S. of "playing dumb." "The U.S. keeps badgering on the issue and even distorted China's position," Zhao said.

The US-China nuclear deadlock

The current arms control architecture, which helped keep the world from nuclear annihilation during the U.S.-Soviet Cold War of the 1980s, was a result of years of tough negotiations between Washington and Moscow. By inviting China to the talks, analysts say Washington essentially is acknowledging Beijing's status as a military power. "The U.S. knows it is unlikely that China will join the talks, but the fact that China was invited shows that the U.S. recognizes China as an increasingly very powerful country with a military that the U.S. regards as threatening.

That wasn't the case years ago," Timothy Heath, a senior international and defense researcher for the policy research group the RAND Corporation, told VOA. "The notion of trying to pull the Chinese into that agreement is, in theory, a good idea. In practice? impossible," former Defense Secretary [Robert M. Gates said](#) last month at the Center for Strategic and International Studies.

According to the [Stockholm International Peace Research Institute \(SIPRI\)](#), China has about 320 nuclear warheads, only a fraction of what the U.S. and Russia have. In comparison, SIPRI estimated that the U.S. has 5,800 warheads in its stockpile and Russia has 6,375. Analysts say that given "the huge gap" between China's nuclear arsenal and that of the U.S. and Russia, "it is unrealistic" to expect China to join the negotiations.

"My view is that the United States is unlikely to convince China to join the nuclear negotiations with Russia. Moscow and Washington retain far more nuclear weapons, so Beijing sees little reason to enter into the negotiations," said Zack Cooper, a former U.S. official working on China-related issues at the White House and the Department of Defense. "So in the view of Communist Party leaders, it is not in their strategic interest to negotiate from a position of weakness," Cooper told VOA.

A senior Chinese diplomat said last week Beijing would be happy to join talks if the U.S. agreed to lower its number of nuclear weapons to match China's. "I can assure you that if the U.S. says that they are ready to come down to the Chinese level, China will be happy to participate the next day," Fu Cong, head of the Chinese Foreign Ministry's arms control department, said at a news briefing in Beijing. "But actually, we know that's not going to happen."

Yang Chengjun, a former Chinese nuclear negotiator, said last month that Washington's true aim is getting China to provide an accurate count of its nuclear weapons. "They invited China to participate in the talks to get to the bottom of our nuclear forces." Yang wrote in the state-run Global Times.

A growing nuclear threat

While the Chinese military currently has far fewer nuclear weapons than the U.S. and Russia, it is widely believed that Beijing has dramatically increased its nuclear capability. The New York Times reported early this month that the American officials surprised their Russian counterparts with a classified briefing on China's threatening nuclear capabilities at a recent negotiation in Vienna. Billingslea described the Chinese program as a "crash nuclear buildup."

The report said that nuclear weapons are joining the other issues — including trade deals and 5G — that Trump has put at the center of a series of U.S.-China standoffs. General Robert P. Ashley, director of the Defense Intelligence Agency, said last year that "the resurgence of great power competition is a geopolitical reality." According to a speech posted on the agency's website, [Ashley said](#) China launched more ballistic missiles for

testing and training than the rest of the world combined in 2018, and over the next decade, China is likely to at least double the size of its nuclear stockpile in the course of implementing the most rapid expansion and diversification of its nuclear arsenal in China's history.

In Beijing, Washington's foreign policy choices are increasingly being seen as aggressive and aimed at containing China. They say Chinese officials may see the country's nuclear weapons program as one way to respond. "If left unaddressed, this issue would continue fueling China's anxiety about its nuclear deterrent and seriously disrupting the stability of the bilateral nuclear relationship," Tong Zhao, a senior fellow at the Carnegie-Tsinghua Center for Global Policy in Beijing, wrote on June 29. He said this comes "at a time when the world's existing arms control institutions are falling apart and there are public voices within China calling for massive Chinese nuclear expansion."

One of the calls for more weapons came from Hu Xijin, the editor-in-chief of Global Times. Hu argued in a recent Weibo post that "China needs to expand the number of its nuclear warheads to 1,000 in a relatively short time and procure at least 100 DF-41 strategic missiles." Last October, China had a massive military parade that displayed some of the country's most advanced military equipment, including a supersonic drone, hypersonic missile and a robot submarine.

But the huge intercontinental-range DF-41 ballistic missile took center stage in Beijing's Tiananmen Square. Touted as the most powerful missile on the planet in China, the DF-41 is capable of carrying 10 independently targeted nuclear warheads and could theoretically hit the continental United States in 30 minutes, according to the Missile Defense Project at the Center for Strategic and International Studies.



NORTH KOREA:

Kim Jong-un's Sister Just Put an End to Trump's Nuclear Talks

Even the smallest concessions are off the table now.

By [FRED KAPLAN](#) for SLATE // JULY 13, 2020

A little-noticed [statement last week](#) by the sister of North Korean leader Kim Jong-un indicates that no more arms talks will be held anytime soon and even that the deal Kim offered at last year's summit with President Donald Trump in Hanoi, Vietnam—to shut down one nuclear reactor in exchange for the lifting of all U.S. sanctions since 2016—is now off the table.

Kim Yo-jong, first vice director of the Workers' Party of Korea's Central Committee and a woman of steadily growing power who has spoken on her older brother's behalf several times in recent months, said on Friday that another summit with Trump would be "unpractical" and "not serve us at all." At least one [wire story](#) about her statement, released by the Korean Central News Agency, reported that she suggested such a meeting might still happen, but this isn't quite the case.

Rather, she said that a summit—or even the continuation of talks between midlevel diplomats—would happen only if the U.S. made “major changes” in its “attitude” and ended its “hostile policy” toward North Korea. To North Korea, as its diplomats have long made clear, ending America’s “hostile policy” would mean withdrawing all U.S. troops and nuclear-capable forces—in other words, pretty much all air and naval forces—from northeast Asia, including South Korea and Japan. (Some have interpreted the phrase to include almost all U.S. nuclear weapons, even the missiles and bombers based in the United States, since they have the range to hit North Korea.)

In short, the condition is a nonstarter, and North Koreans are invoking it as a way to provoke cleavages between Washington and its allies in the region. The Dear Sister—as she is sometimes called—said that even if Trump suddenly embraced the deal that he rejected in Hanoi, it would be too late. Her brother has “completely ruled out” the idea of trading disarmament for sanctions relief, she said, adding, “We are fully capable of living under any sanctions.” She repeated this point a few times.

“I have to point out clearly,” she stated toward the end of her remarks, that “when we refer to [the need for] major changes” from the United States, “it does not mean the lifting of sanctions.” It means the end of “hostile policies.” It is unclear why this change is coming now. At the time of the Hanoi summit, which took place in February 2019, North Korea’s economy was in abysmal shape, and it hasn’t improved since.

As Daniel Sneider pointed out in [Tokyo Business Today](#), its economy has probably faltered further, since the border with China—North Korea’s No. 1 trading partner—has been closed to avoid the spread of COVID-19. The Kims may be overplaying their hand, believing that Trump is desperate to take a deal—any deal—in order to tout himself as a peacemaker on the eve of the coming presidential elections. On July 9, the day before Kim’s statement, Secretary of State [Mike Pompeo](#) said he and Trump would welcome another summit. [Stephen Biegun](#),

Trump’s emissary to North Korea (who is now also Pompeo’s deputy), called for a renewal of negotiations. The Kims pay attention to such remarks. The Dear Sister said in her statement that she had recently “kill[ed] breakfast time” by watching TV news reports of “the changes of the Americans’ mind-set” about the possibility of a summit. Kim Jong-un [misjudged Trump’s desire](#) for a deal in Hanoi, coming to the table with one offer—to freeze activity at the Yongbyon reactor in exchange for a partial lifting of sanctions.

Trump didn’t take the offer, in part because he’d been briefed that Yongbyon wasn’t North Korea’s only nuclear facility. According to [John Bolton’s recent memoir](#), Trump [implored Kim](#) to put even one more concession on the table—for instance, a freeze on the production of long-range ballistic missiles—but Kim refused. Kim Yo-jong’s remarks confirm what many skeptics of an arms deal have said for years—that North Korea has no intention of giving up all its nuclear weapons, under any circumstances.

She noted “the unique friendly relations” between her brother and Trump, but stressed that, owing to the “U.S. hostilities,” North Korea has no choice but to “strengthen and steadily increase our practical capabilities”—presumably meaning North Korea’s nuclear forces. On a more assuring note, she said, “We do not have the slightest intention to pose a threat to the United States.” However, she also said that, “on the eve of presidential elections,” North Korea might yet deliver its long-promised “Christmas gift” to America, adding that this “totally depends on how the U.S. behaves.”

Toward the end of last year, well after the breakdown in Hanoi, Kim said he'd give Trump a "[Christmas gift](#)," which many feared might be the resumption of intercontinental ballistic missile tests. Nothing happened, but the Dear Sister said the gift might still be delivered if Trump or another American "spits out ill-disposed words" and "clings to useless things such as economic pressure or military threats towards us."

Her statement is odd in several ways. First, it is written in a very informal manner, almost like a rambling conversation, not at all in the stiff style of most of the country's official pronouncements. Second, it is attributed to her, not to her brother, though she says that he authorized its contents. She is known to be a rising power; during the three weeks when Kim Jong-un was unseen in public and rumored to be dead earlier this year, she appeared as the face of the ruling family.

But it is very unusual for her to be issuing a policy statement of this magnitude, especially now that her brother is back in the public eye. (He is still not seen in public as much as before, raising questions about his health.) She has also spoken much more harshly than her brother has, at least in the past year or so, about the United States and even more about South Korea. Michael Green, former director of Asian affairs on President George W. Bush's National Security Council, now a professor at Georgetown University, said in an email today,

"There was probably a group in North Korea that warned [Kim Jong-un] that he would never get the magical deal Trump was promising." Now that they've been proved right, Kim is presenting "a more explicit version of what they probably intended all along—continued nuclear weapons expansion." It may be that Kim Yo-jong is part of this more hard-line group. So is Kim Jong-un about to take a wild risk?

(Trump has given him leave to do just about anything but test a missile with the range to hit the United States.) Or is he once again misjudging Trump's desperation for a deal—any deal? Either way, history is chock-full of miscalculations sliding into escalations, which trigger further escalations. And both of these men are capable of desperate actions—Kim to keep his regime from collapsing, Trump to win reelection. It could be a tense autumn

North Korea's plan to start war with nuclear weapons unleashed

NORTH KOREA 'Utter devastation!' holds an arsenal of nuclear weapons, and although recent tensions have eased between the country and South Korea, many experts warn that Kim Jong-un would likely use nuclear power in the early stages of war.

By [JOEL DAY](#) for the UK Express // PUBLISHED: 13:27, Thu, Jul 9, 2020 | UPDATED: 13:27, Thu, Jul 9, 2020

Last month, the global community kept a watchful eye over the events unfolding in [North Korea](#).

The North's supreme leader, [Kim Jong-un](#), ramped up his acts of aggression and blew up a joint liaison office with the South in the border town of [Kaesong](#). It came after hundreds of thousands of balloons landed in the North from the South. Each balloon held anti-Kim leaflets thought to have been drawn up by non-governmental activists. Kim's sister, [Kim Yo-jong](#), reacted furiously, branding those responsible as "human scum".

She later called the South "the enemy" before cutting a telecommunications line that had been in daily use between Seoul and Pyongyang. Many have since called the string of aggression a mere ploy to draw attention to the North and reopen diplomatic negotiations with the US. This appeared

to be confirmed when Kim announced the North would be scaling back its “military action” after having taken the “prevailing situation” into consideration.

Now, the US has announced it is willing to hold talks with the North for the fourth time during [Donald Trump](#)’s presidency. The North’s willingness to oscillate between aggression and reason has, in the view of several experts, placed it in a dangerous region. In his 2018 Vox report on the North and its capabilities on the war front, journalist Yochi Dreazen revealed the extent to which the country's unpredictability is its most dangerous aspect.

“Even more frightening,” he claimed, was the fact that the majority of experts he spoke to about the North said “they believed Kim would use nuclear weapons against South Korea in the initial stages of the fighting — not just as a desperate last resort”. It is accepted that in the event of any full-blown [war](#), a power would only use nuclear weapons in the face of being completely defeated.

Yet, Mr Dreazen explained that the North's decision to use nuclear weapons at the beginning of war would, in fact, be a “a rational decision, not a crazy or suicidal one”. He cites Bruce Bennett, a senior researcher at the RAND Corporation who has spent decades studying North Korea and the Kim family specifically. Here, Mr Bennett used the example of the [Cold War](#) and how the Soviet Union approached the nuclear question.

He said: “In the Cold War, we specifically talked about a logic called ‘use them or lose them,’ which referred to the fact that the Soviet Union understood that the first goal of an American preemptive attack would be to knock out their nuclear weapons before they could be fired at the US. “Now think about how Kim is looking at the world. “He knows that any US and South Korean strike would be designed to destroy or capture his nuclear weapons.

“That means he’d need to either use them early or risk losing them altogether.” Mr Bennett also drew attention to the “decoupling” strategy employed by the US during the Cold War. Washington pledged to protect European countries from any Soviet invasion, making it clear they would use small-scale tactical nuclear weapons against advancing soviets to stop the assault. This changed when the [Soviet Union](#) developed long-range nuclear missiles capable of reaching mainland US.

The US was now tasked with the hypothetical choice of [Europe](#) or itself. Mr Bennett says this is much the same in the case of North Korea. He told Mr Dreazen: “By the time you get to the late Fifties, the French in particular are saying, ‘Wait a minute, if the US uses nuclear weapons against Soviet ground forces in Europe, the Soviets are going to fire nuclear weapons at the US. Is the US prepared to trade New York City for Paris?”

With the North progressing towards long-range missiles, already owning a handful of rockets apparently capable of reaching mainland US, Mr Dreazen explained that this point is “such a game changer” should war ever occur.



SOUTH KOREA:

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IRAN:

Iran's IRGC touts underground 'missile cities' along Gulf Coast

By: Sommer Brokaw for the UPI // JULY 6, 2020 / 4:48 PM

July 6 (UPI) -- The commander of Iran's [Islamic Revolutionary Guard Corps](#) has touted underground "missile cities," along the Gulf coastline.

Navy Rear Admiral Alireza Tangisiri [announced the construction](#) of new underground "missile cities" Sunday, as he warned that they would be a "nightmare" for Iran's "enemies." "We have missile-launching floating cities which we will display whenever our leaders see fit," Tangisiri told the Sobh-e Sadeqh weekly. Tangisiri also [referred to the new](#) missile cities as "underground cities that house vessels and missiles."

He added that southern Iran's entire shoreline has weapons. The weapons, mostly in the hands of the IRGC, include units of [Basij](#) and 428 flotillas operating along the coastline and concentrated along the Persian Gulf, according to state media reports. The boasting comes in the aftermath of a fire Thursday at Iran's Natanz nuclear complex. Atomic Energy Organization of Iran spokesman Behrouz Kamalvandi [said the incident](#) damaged one of the under-construction sheds at the complex and there were no casualties or damage to current activities at the nuclear facility.

However, the [New York Times has reported](#) that since then the government has acknowledged that the incident caused significant damage, which will set back Iran's nuclear program by months. Furthermore, the Jerusalem Post cited an Arabic-language daily newspaper, Kuwait's Al-Jarida, which [said an Israeli cyberattack](#) struck Iran's Natanz Nuclear Facility on Thursday. According to the the Kuwaiti paper, the explosion and another explosion near Parchin targeted UF6 gas storage used for uranium enrichment and Iran has now lost 80 percent of its stock of this gas.

The touting of "missile cities" also comes after [state media reported](#) that Iran successfully test fired short and long-range cruise missiles in a naval exercise in the Oman Sea and northern Indian Ocean last month, hitting targets at a distance of about 174 miles. On the other hand, Iran in May shot a missile that mistakenly hit its own ship [during naval exercises](#) in the Sea of Oman, killing at least 19 sailors and injuring 15 others, [according to Islamic Republic News Agency](#).

Iran executes defense ministry staffer as alleged CIA spy

From the [Associated Press](#) // July 14, 2020

TEHRAN, Iran (AP) — Iran has executed a former employee of the defense ministry who was convicted of spying on behalf of the Central Intelligence Agency, the country's judiciary said Tuesday. It was the second such execution in the past month.

The report said Reza Asgari was executed last week. Judiciary spokesman Gholamhossein Esmaili said Asgari had worked in the airspace department of the ministry and retired in 2016. "In the last years of his service, he joined the CIA, he sold information about our missiles ... to the CIA and took money from them," Esmaili said. "He was identified, tried and sentenced to death." Occasionally Iran announces arrests and convictions of alleged spies for foreign countries, including the U.S. and Israel.

In June, Iran said another alleged spy, Jalal Hajizavar, was hanged in a prison near Tehran. The report said Hajizavar — also a former staffer of the defense ministry — had admitted in court that he was paid to spy for the CIA. The report said authorities had also confiscated espionage equipment from his residence. It said the court sentenced Hajizavar's wife to 15 years in prison for her role in the espionage. Before that, in 2016, Iran executed a nuclear scientist convicted of spying for the United States.

Mysterious Explosions Continue in Iran

Fires break out on vessels in Iranian shipyard

By: [Jack Beyrer](#) for the WFB // JULY 15, 2020 1:00 PM

At least seven ships were set ablaze in the Iranian port of Bushehr, marking another instance of potential foreign sabotage, the [Times of Israel](#) reported Wednesday.

Local firefighters and a crisis management team from a nearby nuclear power plant responded to the fire, which broke out at a Persian Gulf shipyard that builds hulls for Iranian boats. The fire was the [fourth](#) to break out near a major Iranian military-related industrial area in the past month. The blasts have fueled [speculation](#) of foreign sabotage by the United States or Israel. The fires rage as the coronavirus pandemic, political unrest, and economic sanctions continue to hit Iran hard.

The Islamic Republic faces "one of its biggest economic challenges in decades," according to an Atlantic Council [report](#). In an attempt to mitigate this downturn, Tehran is nearing a [strategic partnership](#) with China which could bail out its oil and energy industries. Iranian officials have offered conflicting explanations for the explosions. After a recent explosion in Tehran, one provincial official said the incident occurred due to faulty systems at a gas cylinder factory, while another said it stemmed from failures at a nearby power plant.

One expert [likened](#) the recent series of explosions to covert operations undertaken through the United States-led Stuxnet cyberattacks on Iranian nuclear plants during the Bush administration. The Stuxnet offensive targeted nuclear centrifuges across Iran, successfully causing damage to more than a thousand of the machines. Israel has suggested it will spare little quarter for Iranian military expansion. "Iran cannot be allowed to have

nuclear capabilities," Israeli foreign minister Gabi Ashkenazi said. To counter Iranian aggression, "we take actions that are better left unsaid," he added.



INDIA:

India vs. China vs. the United States

How the world's three most populous countries compete for global influence

By Richard W. Rahn for the Washington Times // 14 July 2020

Will China overtake the United States and will India catch up to China?

The world's three most populous countries are in an increasingly competitive struggle for global influence and domination. The incredible rise of China over the past three decades took most everyone by surprise, and then the awakening and sudden growth in India has caused another surprise. Forty years ago, both China and India were very poor countries. China was even a bit poorer than India as a result of the imposition of a total Communist system under Mao Zedong.

India obtained independence from Britain in 1947, but its first leader, Jawaharlal Nehru, was also a committed socialist who imposed a less authoritarian but very bureaucratic version of socialism on the country. As would be expected, the economic results in both countries were disastrous. China and India each have more than 1.3 billion citizens, with China slightly larger, but India is expected to overtake China in total population within the next few years. Tensions between these neighboring giants have been an eternal fact of life.

The border has been in dispute forever and, just within the last month, another small clash took place between their respective armed forces, inflaming public opinion in India. After Mao's death in 1976, Deng Xiaoping gained control. Deng retained the Communist political system but allowed the development of a market economy with private ownership. China was soon able to achieve exceptional growth, with the economy growing more than 10% per year in many years.

Forty years of high growth has enabled China to create the world's second largest economy with per capita incomes equal to middle-income countries. India slowly and in fits-and-starts opened up its economy, giving it very modest growth until recent years. India is far more diverse than China with many different ethnic, religious and language groups, with English being the only real national language (which is increasingly proving to be an advantage).

The Chinese, being far more brutal in their exercise of power than the Indians, have been able to impose more of a "national culture" and governing system — but even so continue to meet considerable resistance. The Chinese have focused much more than the Indians on building infrastructure.

They have built an equivalent to the U.S. interstate highway system, new high-speed railroads and many air and seaports, all of which have reduced transportation costs and time.

They have also built many dams, both for flood control and power generation, as well as a large number of coal-fired and nuclear power plants. The Indians have lagged in all of these areas, in part because the national government has limited powers to override local governments. Because there is functional democracy in India — with a number of political parties — along with a bureaucratic state, it becomes relatively easy to block many needed projects.

Despite the impediments, India has made considerable economic progress in recent years under Prime Minister Narendra Modi, who was elected in 2014. Mr. Modi is more of a reformer than his predecessors, but is not a Western-style free marketeer and has protectionist tendencies. Many have argued, including officials of the Trump administration, for a tilt from China toward India. India has many problems but, unlike China, does attempt to follow the rule of law, and abide by intellectual property and trade agreements.

Two knowledgeable and very experienced (in dealing with both China and India) trade and economic development experts — Bart Fisher and Arun Tiwari — have written a completely up-to-date book, “India Wakes: Post Coronavirus New World Order,” on the history and relationships between China, India and the United States (though published in India, it is easily available to U.S. readers through Amazon).

Mr. Fisher has been a leading trade lawyer and economist for many decades; and, along with his many other publications, he is the author of a classic book on international trade. Mr. Fisher is also an active international businessman and lawyer, as well as an academic, having taught both economics and trade law at a number of U.S. universities. Mr. Tiwari is a scientist and engineer who has received a number of important rewards for his scientific work.

In addition, he has also been heavily involved in both scientific and economic policy in India, serving as adviser to senior Indian government officials. He has co-authored five books with APJ Abdul Kalam, former president of India, and written many other books and important articles. Mr. Fisher and Mr. Tiwari make the case that it is in the long-term interest of U.S.-based companies to shift more of their investment and resources to India.

India is increasingly well positioned to replace China as part of the global supply chain, and India is now and likely will continue to be a rapidly growing market. Mr. Fisher and Mr. Tiwari conclude with a series of recommendations that should be taken by both the Indian and U.S. governments to speed and strengthen the economic relationships between the two countries. This well written and very interesting book makes a real contribution.

Richard W. Rahn is chairman of the Institute for Global Economic Growth and Improbable Success Productions.



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JAPAN:

Japan may still build Aegis Ashore despite reports of cancellation

By Tim Kelly for Japan Today // Today 06:28 am JST

TOKYO -- Japan may still build Aegis Ashore missile defense systems to defend against attacks by North Korea and other regional rivals, including China, a source told Reuters just weeks after reports that the proposal had been killed.

Japan's defense minister, Taro Kono, last month cancelled plans to build two Aegis Ashore sites, citing cost and concerns that falling booster stages from the interceptor missiles could drop on local residents. Japan, however, has not cancelled the \$1 billion contract for the defense system's radars,

built by Lockheed Martin, and is mulling a technical assessment from the U.S. government that makes recommendations on using other sites that would eliminate the safety issues, said the source, who has direct knowledge of the process.

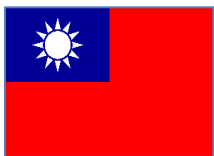
"Japan wants to preserve its contracts and reutilize equipment," said the source, who declined to be identified because of the sensitivity of the matter. Options include installing missile launchers on sea platforms or in remote coastal locations to eliminate the risk from falling boosters, the source said. Japan also has warships equipped with ballistic missile interceptors. Any decision to stick with Aegis Ashore could upset both Beijing and Moscow, which have pushed for an end to the deployment.

With at least three times the range of older Aegis radars on Japanese warships, the land-based systems can look deep into China and Russia. In its 2019 defense white paper, Japan for the first time listed China as its main security threat, pointing to burgeoning defense spending, increased military maneuvers and a growing arsenal of modern weapons, including ballistic missiles. The document also noted a resurgence in Russian activity in the waters and skies around Japan.

Aegis Ashore could be built at two of 28 existing air defense radar stations dotting Japan's coast, according to Gen Nakatani, a former defense minister, who along with other former defense chiefs is in a group reconsidering defense policy in the wake of Kono's surprise decision. "There is no reason why we couldn't put the radar, the combat system and missile launcher in separate locations. That is something we can consider," he said in an interview.

Nakatani said he welcomed Kono's decision to cancel Aegis Ashore because it was an opportunity to build an integrated air and missile defense (IAMD) system to tackle broader threats. Japan picked Aegis Ashore in 2017 after Pyongyang fired 40 missiles over two years, some over Japan, and tested three nuclear bombs, the last of which had an explosive yield of 160 kilotons, eight times as powerful as the atom bomb that destroyed Hiroshima.

Subsequent North Korean missile advances, however, meant that Japan would have to pay more to upgrade Aegis when it switched on in 2025 so it could counter other threats, such as missiles on depressed trajectories that remain inside the atmosphere. Japan's National Security Council is considering new defense proposals, including the possibility of acquiring a strike capability to attack enemy missiles launchers, before reaching a conclusion by the end of September.



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