WASHINGTON ICBM CONTRACTORS (ICons) GROUP



12 Sep 2020



Sep ICons:

Location: Virtual **Date:** 23 Sep

Time: 10:30 EDT

ADMINISTRATION/PROGRAM SPECIFICS

Department of the Air Force awards contract for new ICBM system that enhances, strengthens US triad

By Secretary of the Air Force Public Affairs / Published September 08, 2020

WASHINGTON (AFNS) --

The Department of the Air Force awarded an Engineering and Manufacturing Development contract for the Ground Based Strategic Deterrent (GBSD) intercontinental ballistic missile (ICBM) program to Northrop Grumman on Sept. 8.

The contract award of \$13.3 billion is an investment in enhancing the United States' nuclear deterrence, as it is the cornerstone of national security policy and fundamental in continued protection for the U.S. and its allies.

"Modernizing the nuclear strategic triad is a top priority of our military," said Defense Secretary Dr. Mark Esper. "It's key to our nation's defense. It provides that strategic nuclear deterrent that we depend on day after day – that we've depended on decade after decade."

The program advances the nation's ability to maintain a robust, flexible, tailorable and responsive strategic nuclear deterrent to meet current and changing global threats.

"I am fully confident in the evolutionary warfighting effectiveness GBSD will ensure," said Gen. Tim Ray, commander of Air Force Global Strike Command. "We are leveraging stable requirements, modern technology, we own the technical baseline, and have a modular design to keep the program rapid, relevant and affordable. The increased accuracy, extended range and improved reliability will provide the United States a broader array of options to address unforeseen contingencies, giving us the edge necessary to compete and win against any adversary."

The GBSD ICBM is the follow-on to the aging LGM-30G Minuteman III ICBM and first became operational in 1970. The GBSD ICBM will have increased accuracy, enhanced security and improved reliability to provide the U.S. with an upgraded and broader array of strategic nuclear options to address the threats of today and the future.

The contract is for the Engineering and Manufacturing Development phase of the weapon system's acquisition efforts. The Department of the Air Force plans to deploy the system beginning in the late 2020s.

"Across the Department of the Air Force, we are looking for opportunities to inject innovation into programs to stay ahead of our adversaries," said Dr. Will Roper, assistant secretary of the Air Force for acquisition, technology and logistics. "Our GBSD team is doing just that by leveraging a modular open system approach to ensure our next generation ICBM system is adaptable to challenges posed by the pace of technological advancements and new threat environments."

The dispersed basing of the ground-based deterrent enhances strategic stability by creating an extraordinarily high threshold for a large-scale conventional or nuclear attack on the U.S. homeland. This investment will protect a vital leg of the nuclear triad, according to U.S. Strategic Command officials.

The Air Force Nuclear Weapons Center is the lead for the Department of the Air Force's GBSD acquisition effort. The center is responsible for synchronizing all aspects of nuclear materiel management on behalf of Air Force Materiel Command in direct support of AFGSC.

"This contract provides the best overall value to the warfighter and taxpayers," said Brig. Gen. Anthony Genatempo, commander of Air Force Nuclear Weapons Center and Air Force program executive officer for strategic systems. "The GBSD program is leveraging technologies to reduce the program's technical risk and ensure time-certain delivery to meet the warfighter's needs. Its acquisition strategy focuses on mature technologies, smart commonality, modular designs and maintaining the Air Force's ability to leverage competition throughout the weapon system's lifecycle to ensure it will effectively adapt to evolving environments."

The Air Force Isn't Dominant Anymore ... Says Air Force Chief of Staff

https://news.yahoo.com/air-force-isnt-dominant-anymore-124000907.html By: Kyle Mizokami for the Popular Mechanics // September 9, 2020

- General Charles Q. Brown, Jr., the new head of the U.S. Air Force, warned <u>casualties will be heavy in a future war</u>.
- Brown believes the U.S. will face World War II-level losses against an advanced adversary like Russia or China.
- The general believes his service must "accelerate change or lose" the next war.

The new U.S. Air Force Chief of Staff is warning his service it faces stiff competition in a future war, involving aircraft and personnel losses not seen for 80 years. General Charles Q. Brown, Jr. believes the Air Force must work to accelerate change, adapting to new technologies faster than its potential adversaries. Brown warns that "good enough today will fail tomorrow," with grave implications for the entire country.

In his first new statement as Air Force Chief of Staff, Brown warns the Air Force, its ability to maintain air dominance, and the success of any future war is in serious jeopardy. Writing in <u>Accelerate Change or Lose</u>, Brown dumps a cold bucket of water on his service, saying the Air Force can longer count on the dominance it has enjoyed since the early 1990s, and that threats to the nation won't always be faced thousands of miles from the country's borders.

Brown also notes U.S. adversaries are equipping themselves with new tech as quickly as the Pentagon is, if not sooner. The Air Force has essentially been the supreme air force on the planet since 1991. The destruction of the Yugoslav Air Force in 1999 marked the beginning of more than 20 years of virtually uncontested air operations for the service lasting to this day. Since then, combat operations over Iraq, Syria, Afghanistan, Somalia, and elsewhere have largely been uncontested.

Air Force fighters, bombers, attack aircraft, tankers, and surveillance planes fly wherever they want and bomb whoever they want, largely without concern of being shot down. With the exception of a handful of several uncrewed drones, most aircraft losses during this time period were due to

pilot error or mechanical issues. Brown believes a future war will require airmen to think differently about how to fly, fight, and win. Russia and China, with their large air forces and capable air defenses, are a world away from land power-only forces like the Afghan Taliban and the fighters of ISIS. These fully modern air forces, armed with weapons on par with those used by the U.S. Air Force itself, will inflict serious losses.

Brown writes:

"Airmen are more likely to fight in highly contested environments, and must be prepared to fight through combat attrition rates and risks to the Nation that are more akin to the World War II era than the uncontested environment to which we have since become accustomed. The forces and operational concepts we need must be different. Our approach to deterrence must adapt to the changes in the security."

The U.S. Army Air Force lost over 40,000 aircraft in World War II, a number greater than the total number of planes in the current U.S. Air Force many times over. How will the Air Force do this? Drones, drones, and more drones. Manned military aviation has been in a death spiral for some time. Technological complexity leads to increasingly sophisticated aircraft that require more time and money to develop.

As a result, planes like the <u>F-35 Joint Strike Fighter</u> require two decades to develop, cost \$90 million each, and require months to build. The result is a smaller air force where even brand-new fighter jets feature 20-year-old technology, which isn't capable of making up for World War II-style losses. Drones, on the other hand, promise to break this death spiral. Uncrewed drones are easier and faster to develop, cost less, and can be built faster than crewed aircraft.

Drones can also be stockpiled in larger numbers to quickly replace wartime losses. A shorter development time means new technology can be more quickly integrated into an uncrewed platform, and a modular capability means a single drone can be adapted to a multitude of tasks simply by swapping out the drone's payload.

The U.S. Military Will Soon Have a New 'Nuclear Sea-Launched Cruise Missile'

https://nationalinterest.org/blog/buzz/us-military-will-soon-have-new-nuclear-sea-launched-cruise-missile-168528

"We are going to be unveiling the nuclear sea-launched cruise missile, which is our response to Russia's tactical nuclear weapons," Dr. Robert Soofer, Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy, told The Mitchell Institute for Aerospace Studies, according to a Pentagon transcript.

by Kris Osborn for The National Interest // September 7, 2020

The Pentagon will be unveiling a new tactical nuclear weapon as part of a broad effort to further deter <u>Russia</u> and China while also implementing the aims of the 2018 Nuclear Posture Review, which called for the addition of several low-yield nuclear weapons to the U.S. arsenal.

"We are going to be unveiling the nuclear <u>sea-launched cruise missile</u>, which is our response to Russia's tactical nuclear weapons," <u>Dr. Robert Soofer</u>, Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy, told The Mitchell Institute for Aerospace Studies, according to a Pentagon transcript. The emerging sea-launched, nuclear-armed cruise missile will complement the already delivered W76-2 tactical nuclear weapon. The Pentagon has configured a <u>lower-yield warhead</u> and reentry body to operate as part of an adapted Trident II D5 variant.

A cruise missile, able to fly at <u>lower altitudes parallel</u> to the ocean or terrain can in some cases better elude enemy air defenses, radar systems, or interceptor missiles and offer additional options to warfare commanders seeking to match and therefore deter potential Russian activity. While

taking time to carefully and <u>thoughtfully entertain</u> elements of the longstanding debate about the rationale for engineering and deploying new tactical nuclear weapons, Soofer articulated several concepts now defining the Pentagon's current position.

He was careful and deliberate about entertaining the argument that adding these weapons could lower the threshold to <u>nuclear engagement</u> and complicate the importance of an all-out response deterrence strategy. Saying "reasonable people can disagree," Soofer embraced the concern from those who argue that U.S. deterrence policy should include an <u>unambiguous assurance</u> that "any" use of nuclear weapons will result in the complete destruction of the attacker.

In response, Soofer delineated some of the tenets of the current DoD posture regarding deterrence theory, explaining that additional "flexibility" was needed to effectively counter an aggressive Russian nuclear weapons policy. Russia's rapid addition of <u>low-yield tactical nuclear weapons</u>, as part of an "escalate to de-escalate" strategy, required a specific response, Soofer explained.

"We had to do something to counter Russia's perceived perception that they could use these weapons to coerce us in a -- in a regional conflict, and this led to the recommendation for the 76-2 and to the nuclear sea-launched cruise missile. The requirements for such a nuclear strategy place a premium on the survivability, flexibility and readiness of U.S. and allied nuclear capabilities. It requires a range of delivery systems and nuclear yields," Soofer said.

Given the existence of a wider <u>sphere of enemy weapons</u>, the U.S. needed to adjust to more "diverse circumstances," he added. "We don't need to match them weapon for weapon, but we do need to be able to -- to give the president and our regional combatant commanders another option to address these Russian capabilities," Soofer said.

Kris Osborn is Defense Editor for the National Interest. Osborn previously served at the Pentagon as a Highly Qualified Expert with the Office of the Assistant Secretary of the Army—Acquisition, Logistics & Technology.

Check Out These Remarkable New Infrared Images of a Minuteman III ICBM Blasting Off

The Air Force released these rare images a day after the service formally hired Northrop Grumman to build its next ICBMs TheDrive.com (The War Zone), Sept. 9 | Joseph Trevithick

The U.S. Air Force has released rare shots of an LGM-30G Minuteman III intercontinental ballistic missile shortly after launch during a recent test launch from Vandenberg Air Force Base. This comes as the Air Force is celebrating the 50th anniversary of these missiles entering service this year and just a day after formally awarding Northrop Grumman a contract to continue development and eventually build the Minuteman III's replacement, known as the Ground-Based Strategic Deterrent.

Air Force Global Strike Command (AFGSC), which oversees America's intercontinental ballistic missile (ICBM) force, which is presently made up entirely of Minuteman IIIs, released the pictures on its Facebook page on Sept. 9, 2020. A camera team at Vandenberg captured the infrared images during a scheduled test launch of an LGM-30G from that base on Sept. 2.

"We just had to share these amazing shots of our #MMIII operational test launch on Sept. 2 taken by the optics camera team at Vandenberg Air Force Base!" AFGSC's brief Facebook post read. "It's not often you see shots like these!"

"Not often" is something of an understatement. Official images of this quality showing one of these missiles in flight are very rare. Typically, after Minuteman III tests, the Air Force only releases pictures and video of the missile leaving the silo and streaking across the sky. Since these launches are almost exclusively conducted at night, the imagery generally does not provide much in the way of detail.

However, the Air Force had already released video footage of the Sept. 2 test showing more of the initial flight than usual. It's not immediately clear why there has been this apparent push to provide more visuals surrounding this particular launch.

The Sept. 2 test involved the launch of a missile with a single reentry vehicle. The reentry vehicle came down approximately 4,200 miles away from Vandenberg at Kwajalein Atoll in the Marshall Islands in the Pacific. "These test launches verify the accuracy and reliability of the ICBM weapon system, providing valuable data to ensure a continued safe, secure and effective nuclear deterrent," the Air Force said of this particular launch.

This followed a more uncommon test launch in August involving a Minuteman III in a Multiple Independent Reentry Vehicle (MIRV) configuration with three reentry vehicles, as it was originally designed to carry. All operational LGM-30Gs are presently equipped with a single reentry vehicle only as a result of various arms control agreements, which you can read more about in this <u>past War Zone piece</u>.

2020 does mark 50 years in service for the LGM-30G, the first examples of which were operationally deployed in 1970. The anniversary has put an additional focus on these missiles. The Minuteman III was the first MIRVed ICBM to enter service anywhere in the world.

In addition, on Sept. 8, 2020, the Air Force declared Northrop Grumman to be the formal winner of the Ground-Based Strategic Deterrent (GBSD) competition, awarding it a deal worth more than \$13 billion. This company had been the only remaining contestant after Boeing dropped out of the running last year.

Boeing's decision, along with the factors that led up to it, had prompted criticism, including from members of Congress who warned that having just one bidder could lead to increased costs. The total cost of replacing the Minuteman IIIs with new GBSD missiles, which have been tentatively designated YLGM-182As, is estimated to be around \$100 billion, including various ancillary spending, such as infrastructure improvements.

This is just one part of a broader and potentially budget-busting nuclear modernization push across the U.S. military, which you can read about in more detail in this <u>previous War Zone piece</u>. The ICBM leg of America's nuclear deterrent triad, also known as the "nuclear sponge" since it is meant to "soak up" incoming nuclear strikes, forcing an opponent to commit multiple warheads to each silo and hardened command bunker, is already, at best, a controversial part of the U.S. defense budget, as <u>The War Zone has explored in the past</u>.

All of this also comes as the U.S. government continues to negotiate with its Russian counterparts about the future of the New Strategic Arms Reduction Treaty (New START), which is set to expire next year if the two sides can't agree on terms to extend it. The United States is looking to bring China, which is expanding its nuclear and ballistic missile capabilities, into any future agreement, as well.

The end of New START would open the door for dramatic changes in America's nuclear arsenal, broadly. For the ICBM force, this might lead to re-MIRVing of the Minuteman IIIs or a change to the planned configuration of the GBSD. The latter missiles are slated to begin replacing the existing LGM-30Gs starting in 2029.

Whatever the case, the Air Force has clearly been particularly keen recently to highlight the existing Minuteman IIIs, including with rarely seen imagery of the missile in flight.

DHS Combats Potential Electromagnetic Pulse (EMP) Attack

 $\underline{https://www.dhs.gov/news/2020/09/03/dhs-combats-potential-electromagnetic-pulse-emp-attack}$

DHS Release Date: September 3, 2020

Releases: Electromagnetic Pulse (EMP) Program Status Report

WASHINGTON - The U.S. Department of Homeland Security (DHS) continues to prepare against ever evolving threats against the American homeland, most recently highlighting efforts to combat an Electromagnetic Pulse attack which could disrupt the electrical grid and potentially damage electronics. Today, the department is releasing the <u>Electromagnetic Pulse (EMP) Program Status Report</u> as part of an update on efforts underway in support of Executive Order (E.O.) 13865 on Coordinating National Resilience to Electromagnetic Pulses. E.O. 13865 establishes resilience and security standards for U.S. critical infrastructure as a national priority.

EMP weapons have the potential to disrupt unprotected critical infrastructure within the US and could impact millions over large parts of the country. Since the <u>President's signing of the E.O. in March 2019</u>, DHS, through the Cybersecurity and Infrastructure Agency (CISA), in coordination with the Science and Technology Directorate (S&T) and the Federal Emergency Management Agency (FEMA), has taken key actions to address known EMP-related vulnerabilities to critical infrastructure. The EMP Program Status Report highlights efforts taken across the public and private sector to foster increased resilience to EMP events.

Through data analysis, vulnerability and risk assessments, testing and pilot programs, and government and industry engagement, the department is identifying critical infrastructure and associated functions that are at greatest risk from an EMP, and developing and implementing best practices to reduce the risk. "EMP attacks are part of the emerging threats against our nation and demand a response," said Senior Official Performing the Duties of the Deputy Secretary Ken Cuccinelli.

"That is why DHS is taking these contingencies very seriously, working diligently to mitigate our risks and equipping our state and local partners with the resources they need to do the same. We've made significant progress and look forward to the work ahead." "As the Nation's risk advisor, one of CISA's priorities is understanding and mitigating threats associated with EMPs," said CISA Director Chris Krebs.

"Over the past year, we have worked with interagency and industry partners to identify the footprint and effects of EMP threats across our National Critical Functions, and are developing sustainable, efficient, and cost-effective approaches to improving the Nation's resilience to EMPs." In 2018, DHS released the Strategy for Protecting and Preparing the Homeland against Threats from Electromagnetic Pulse (EMP) and Geomagnetic Disturbance (GMD), which was the Department's first articulation of a holistic, long-term, partnership-based approach to protecting critical infrastructure and preparing to respond and recover from potentially catastrophic electromagnetic incidents.

Last Published Date: September 4, 2020

U.S. Reveals First Assessment of Chinese Nuclear Weapons Stockpile

https://www.usnews.com/news/world-report/articles/2020-09-01/us-reveals-first-assessment-of-chinese-nuclear-weapons-stockpile

A new report from the Pentagon documents the scale of Beijing's nuclear arsenal at a time the Trump administration is pressuring China to join nuclear talks with Russia. U.S. Reveals Chinese Nuclear Strength By Paul D. Shinkman, Senior Writer, National Security for US News .. Sept. 1, 2020, at 2:53 p.m.

THE DEFENSE DEPARTMENT for the first time Tuesday revealed the number of nuclear warheads it believes China possesses, saying in a new report that Beijing's arsenal will double over the next decade – while still lagging far behind America's and Russia's capacities.

China possesses at least 200 warheads now with plans for a dramatic increase, according to the annual China Military Power Report, released Tuesday. The expansion of its arsenal will also include developing more sophisticated nuclear weapons, as well as modernizing the methods to launch them to include submarines, bombers, road-mobile carriers and new ground-based silos. The 2020 report studies the Chinese armed forces through the end of 2019 and is prepared for Congress and the public.

It had previously documented the potency of Chinese nuclear weapons but had not provided such specifics. The new information comes at a time the Trump administration is <u>pressuring China to participate</u> in talks to renegotiate the New START treaty with Russia, <u>set to expire</u> in February failing a new agreement. A top official said shortly after the report's release that the Pentagon made the decision to release the information to better demonstrate the threats China poses and the importance of a U.S. response.

"We should be attentive – certainly we are – and that's the rationale for why we ensured we included the best number and best understanding we could have in this report," Deputy Assistant Secretary of Defense for China Chad Sbragia said at an event organized by the American Enterprise Institute think tank to accompany the report's release. The U.S. currently has 5,800 nuclear warheads, 3,800 of which are still active with another 2,000 awaiting dismantlement, the <u>Arms Control Center</u> reports.

Russia has roughly <u>6,400</u> with roughly 4,300 still active. Prior estimates, including from the <u>Arms Control Center</u>, had placed China's arsenal at significantly higher than the Pentagon's assessment. Tuesday's revelation comes as the U.S. continues to work toward <u>modernizing its own nuclear arsenal</u>, which is far larger than China's but is also aging, with many components dating back to the Cold War.

The Trump administration announced earlier this year it would not participate in talks to renew its last remaining nuclear limitation pact with Russia if China did not also participate. Some analysts, however, expressed concerns that the report furthers an incomplete argument that U.S. and Russian limits on nuclear weapons development must now be tied to China as well. "Even if DoD is correct and China doubles its arsenal by 2030 to 400-500 warheads, China's arsenal will remain far smaller and less capable than that of the U.S. and Russia," Kingston Reif, director of Disarmament and Threat Reduction Policy at the Arms Control Association, wrote on Twitter.

"The foolishness of throwing away an extension of New START due to concerns about China can't be overstated." A separate section of the report highlighted a key shift in U.S. understanding of the Chinese Communist Party's intentions for its military – that it's ambitions to use it are global. "The CCP does not intend for the PLA to be merely a showpiece of China's modernity or to keep it focused solely on regional threats," the report

states. Sbragia said China's leadership "does have an aspiration for great power status by virtually every measure. ... They have to have global convergence at the broadest possible scale."

Global Strike Command Opens New Innovation Hub

National Defense Magazine Online, Sept. 9 | Mandy Mayfield

Following in the footsteps of other military agencies and offices, Air Force Global Strike Command is reaching out to nontraditional industry partners with the launch of a new innovation hub.

The command — which is tasked with operating the Air Force's bomber fleet, intercontinental ballistic missiles and nuclear command, control and communications systems — set up a new facility called STRIKEWERX in May to connect with academia, small businesses and even "garage inventors," said Donna Senft, the command's chief scientist.

"We call it our storefront," she said in an interview. "It is a facility that enables anyone to come in who wants to work with us and they can bring us their good ideas."

While the focus of STRIKEWERX is on expanding the command's innovation base, the door is also open to traditional defense contractors and large businesses, she noted.

"Sometimes within the large businesses we have people who are investing in new ideas through internal research and development and they're eager to talk to us," she said. "Any of those types of people, we're happy to talk to them and connect and hear more."

The STRIKEWERX facility is located outside of Barksdale Air Force Base, Louisiana, where Global Strike Command is headquartered. The hub was strategically placed off-base to avoid difficulties for those looking to meet with the command, Senft said.

"It can be a little bit hard sometimes for some of our partners to get through the gate," she said. "Sometimes they don't know anybody in particular within the command to work with, and so now we have a facility that's located off-base where they can just walk in the door and talk to our people there and say, 'I have a great idea. I think you would be interested in it."

The effort is modeled after AFWERX, an Air Force initiative that was set up in 2017 to boost the service's engagement with industry, academia and nontraditional partners while developing much-needed capabilities more quickly and flexibly. AFWERX now has locations in Austin, Texas, Las Vegas and Washington, D.C.

Global Strike Command hopes its new hub will aid in facilitating a cooperative "ecosystem" where its particular needs can be addressed.

"In the old days, the Department of Defense drove a lot of new innovations. They had enough funding to go out and invest in and invent the things that we needed, and some of those spinoffs ended up out in the private sector today," Senft said. However, now there is more investment in the private sector than there is by the Pentagon, she noted.

The command is looking to harvest the "great technologies out there and bring them inside Global Strike Command to solve our needs," she said.

The STRIKEWERX facility was slated to open in April. However, the ongoing COVID-19 pandemic forced the command to push its grand opening to May. The organization has since hosted multiple "open houses" where small groups of interested parties registered ahead of time to attend both in person and virtually, Senft said.

"These days it can be a little bit more difficult to travel to the Shreveport–Bossier City, Louisiana, area and walk in the door. But we have a virtual presence online," Senft said.

"We all along had the idea that ... STRIKEWERX would have a virtual presence."

Moving forward, the hub will be home to events, workshops, meetings and industry challenges to find technology to fill the command's operational gaps. One area STRIKEWERX is already working to address is electromagnetic pulse hardening, Senft said. An electromagnetic pulse, or EMP, is an intense burst of energy that can be released by a nuclear weapon detonated high in the atmosphere, or by a geomagnetic disturbance caused by natural phenomena such as solar flares.

In 2019, President Donald Trump released the "Executive Order on Coordinating National Resilience to Electromagnetic Pulses," which called for the nation to reduce its vulnerability to such attacks.

"The federal government must foster sustainable, efficient and cost-effective approaches to improving the nation's resilience to the effects of EMPs," the order said.

Global Strike Command is facing the same EMP issues and vulnerabilities as the rest of the nation, Senft said. "We're interested in good ideas across the country that could help us more cheaply and more effectively harden some of our equipment."

STRIKEWERX will soon open its doors to industry for a challenge to get after EMP hardening. Invited members of industry will be able to bring their designs, "so it's more of a problem-solving interaction," she said.

Innovators that don't receive an invitation to participate in the challenge won't be shut out of the facility.

"For companies that haven't been invited and they have great ideas, they can go to our website and interact with us or walk in the front door," Senft said.

Another topic of interest for STRIKEWERX is chemical, biological, radiological and nuclear defense, or CBRN.

The innovation center will host a CBRN virtual event in September in partnership with SOFWERX, an initiative founded in 2016 to facilitate cooperation with industry partners and Special Operations Command. The event will include a technology assessment to identify capabilities that could aid in the development of a next-generation CBRN mask.

Focus areas for the effort include reducing user burden, interoperability and an enhanced face seal.

During the event, individuals will be allotted one-on-one virtual sessions with SOCOM to pitch or demonstrate their solutions.

Other partners for the event include the Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense, the U.S. Army Combat Capabilities Development Command's Chemical Biological Center, and the Defense Threat Reduction Agency.

Meanwhile, the hub has helped Global Strike Command discover a number of local businesses in the surrounding area that may be able to address its problem sets.

"People don't think of Shreveport, Louisiana, as a hotbed of technology activities normally," Senft noted. "But we're finding out there are some great companies that we want to work with that we didn't know about before. So it has already paid off."

In the future, the hub will have a topics list to compare proposals presented by companies and members of industry to the command's needs for compatibility purposes. At this point, the command does not plan to release its future needs list to the public, Senft said.

The STRIKEWERK facility will also be a place for airmen's "ideas to become reality," according to the command. It will give servicemembers access to experts, acquisition coaching, and engineering and technical support.

Andrew Hunter, director of the Defense-Industrial Initiatives Group at the Center for Strategic and International Studies, a Washington, D.C.-based think tank, said smaller scale Pentagon efforts to reach out to industry, such as STRIKEWERX, have shown to be effective.

"What we've seen today have been pretty discreet efforts to tackle clear problems ... that really lend themselves to being solved with innovative software," he said. "These organizations have proven a lot of utility in doing that and in doing it with a mixture of military folks with real coding skills themselves working on the problem, but also getting innovative solutions from industry and being able to combine those two capabilities."

There have been signs of success, said Hunter who previously led the Pentagon's Joint Rapid Acquisition Cell.

"Initially what we heard is: 'We just don't know how to get access. We don't know how to find out what the military needs. We can't get through the contracting process," he said. That now seems to be changing in a positive way with the creation of organizations such as AFWERX, the Defense Innovation Unit and others.

The Defense Innovation Unit, also known as DIU, set up its headquarters in Silicon Valley in 2015 to try to help bridge the divide between the military and commercial tech hubs. It has since opened additional offices in Austin and Boston.

Through such initiatives, companies have been able to gain insights about the military's requirements, how their products could be applicable, receive initial contracts and begin working with the Defense Department, Hunter said.

"There's a lot of success in the fact that some of those problems that industry has long complained about — I wouldn't say they've been totally solved forever — but a lot of progress has been made in solving them," he said.

What many companies now struggle with is crossing over the Pentagon's dreaded "Valley of Death" from the initial exploratory prototyping phase of a program to implementing their solutions and products on a larger scale across the military, he noted.

"It's still proving challenging to get the follow-on contracts to those initial contracts," he said.

One key piece of the equation for initiatives like STRIKEWERX to see positive results boils down to the hub's business models for industry, Hunter said.

"One of my things that I've been focused on a lot lately is thinking about the business model for some of these innovative, especially software-oriented solutions, which is: How does the contractor profit in the near term and the long term?" he said. "Where does that profit incentive come to constantly innovate? Which is what we're kind of asking industry to do."

News & Opinion

Looming Middle East Arms Race Sparks Fear of Unprecedented Regional War

Armed by Russia and China, Iran poses historic security threat, sources say

https://freebeacon.com/national-security/looming-middle-east-arms-race-sparks-fear-of-unprecedented-regional-war/

By: Adam Kredo for the WFB // AUGUST 28, 2020 11:30 AM

The impending expiration of an international weapons ban on Iran threatens to flood the Middle East with high-tech Russian and Chinese military equipment, a situation that senior Trump administration officials warn will spark an arms race and could ignite a massive regional war.

A United Nations ban on the sale of weapons to Iran is set to expire in mid-October despite a last-ditch effort by the Trump administration to renew it. Senior U.S. officials involved in regional discussions told the Washington Free Beacon that Israel and its traditional Arab foes are united in opposition to the arms embargo lifting. Without the arms ban, Russia and China are poised to bolster their already close military alliances with Iran, selling the country stockpiles of advanced weapons that will be available to the Islamic Republic's terror proxy groups, including Hezbollah in Lebanon.

Both countries have sold Tehran arms in the past—including aiding its nuclear endeavors—and have been clear in recent months about their desire to amplify the relationship. The Trump administration is trying to block this outcome by invoking a mechanism known as snapback that was written into the nuclear deal. Snapback would reapply a litany of international sanctions on Iran and also ensure the arms ban remains in place.

"Letting the arms embargo expire would set off an arms race in the Middle East," Brian Hook, who served as the administration's top Iran envoy, told the Free Beacon following a fresh round of meetings this week with Israel and Gulf Arab leaders. "I have heard that repeatedly from Gulf leaders and Israel during this trip. The permanent members of the Security Council dismissed the request from all six Gulf nations and Israel to extend the arms embargo and add new sanctions on Iran. The council failed."

Hook vowed the United States would "do the right thing and restore U.N. sanctions on Iran—and that includes the arms embargo." However, the likelihood of reapplying all international sanctions on Iran remains unclear. European nations have already rejected the United States' bid to indefinitely extend the arms embargo and are now opposing further efforts to restore all sanctions on Iran that were lifted under the 2015 nuclear agreement.

The stalemate at the U.N. Security Council has decimated the United States' historically close relationship with France, Germany, and the U.K. and could prompt the Trump administration to diplomatically retaliate against these nations, the Free Beacon <u>reported</u> on Thursday. "If the arms embargo on the Islamic Republic of Iran lapses, military planners in Washington, Jerusalem, and Arab capitals should assume that they will soon be confronting more formidable Iranian military and proxy forces," Bradley Bowman, a former national security adviser in the U.S. Senate, told the Free Beacon.

Bowman currently serves as senior director of the Center on Military and Political Power at the Foundation for Defense of Democracies, a D.C.-based think-tank. Iran's terror affiliates stand the most to gain from these looming arms deals. Tehran has troops stationed across the region and has been a primary irritant in Syria, Lebanon, Yemen, and Iraq—all countries in which Iran has spent significant resources arming anti-U.S. forces.

These terrorist factions "will more easily acquire advanced weapons systems that will exacerbate regional conflicts and encourage a regional arms race," according to information compiled by Norman Roule, who served as the national intelligence manager for Iran at the Office of the Director of National Intelligence from 2008 until 2017. As Iran suffers under the weight of U.S. economic sanctions, it has struggled to update its aging weapons systems and military equipment.

If the international arms ban is lifted, Tehran will seek advanced Russian and Chinese fighter jets, battle tanks, and air defense systems, according to Roule, a senior adviser to United Against a Nuclear Iran, which tracks Tehran's procurements. U.S. intelligence services have made similar assessments in recent years. The threat posed by a well-armed Iran has pushed Israel and its regional foes into a closer alliance, as evidenced by the United Arab Emirates' historic peace deal with Israel earlier this year.

Iran is a top priority for all of these countries, and they are likely to work together in combating the increased threat. "The U.S., Israel, and Arab partners should look for prudent opportunities to increase joint and combined military capability to deter and punish additional aggression and terrorism from Tehran," said FDD's Bowman. The U.S., Israel, and the UAE, for instance, could begin annual military exercises "focused on building readiness, trust, and interoperability."

The great debate over Russian nuclear doctrine

https://www.msn.com/en-us/news/politics/the-great-debate-over-russian-nuclear-doctrine/ar-BB18Lopo?ocid=msedgdhp

The great debate among U.S. analysts over Russian nuclear doctrine, and how worrisome its threat may be, finally has been resolved - and the hawks win.

Dr. Peter Vincent Pry, contributor to THE HILL // 21 hrs ago September 6, 2020

During the Cold War decades and afterwards, military "hawks" and "doves" argued over Russian thinking and planning for nuclear war.

The doves - usually liberals, anti-nuclear academics or State Department bureaucrats - argued that Russia views nuclear weapons just as we do. Doves said both Moscow and Washington understand nuclear weapons are instruments of last resort, so destructive as to be practically unusable and only for deterrence, not warfighting. Therefore, according to doves, the U.S. should not worry so much about Russian nuclear threats and refrain from building up nuclear weapons and strategic defenses, because this provokes costly, unnecessary, potentially dangerous arms-racing.

Hawks - usually conservatives, think tank academics or Defense Department bureaucrats - argued that Russia views nuclear weapons differently from us. Hawks said Russia sees nuclear weapons as just another instrument of warfare, does not have an uncrossable "bright line" between conventional and nuclear conflict, and might well launch a nuclear surprise attack. Therefore, according to hawks, the U.S. should engage in arms-racing to prevent Moscow from gaining any real or perceived <u>numerical or technological advantage</u> in nuclear weapons that could tempt Russian aggression.

Now the Congressional Research Service (CRS), which is supposed to be nonpartisan but has been on the dovish side of the debate, appears to have begrudgingly surrendered (without admitting it) to the hawks. The surrender is reflected in two new CRS reports by Andrew Bowen ("Russian Armed Forces: Military Doctrine and Strategy") and Amy Woolf ("Russia's Nuclear Weapons: Doctrine, Forces, and Modernization").

Bowen sets up a hawk straw man so he can pretend to knock it down later, stating that "many analysts assert that Russia maintains an 'escalate to deescalate' strategy, where Russia might threaten the use of nuclear weapons early in a crisis if it risked losing a conflict." In fact, Russian nuclear doctrine provides for not merely threatening but actually using nuclear weapons early in a crisis or conflict - not just to avoid losing but to win from the outset through "shock and awe."

Bowen then offers a "rebuttal" to the above, but it doesn't sound very dovish: "Other analysts contend, however, that this explicit policy ['escalate to de-escalate'] does not exist. They note that Russian military doctrine focuses on escalation management rather than thresholds for nuclear use and escalation control. Additionally, Russian doctrine gives policymakers flexibility in identifying the type and nature of its responses and does not exclude possible use of NSNW [non-strategic nuclear weapons]. However, damage would be applied progressively and in doses to demonstrate the potential for further punishment and provide incentives for settlement."

Yet, Bowen's description of Russian nuclear doctrine is perfectly consistent with the "escalate to de-escalate" strategy as one of Russia's many possible nuclear warfighting options. His bottom-line: "Accordingly, Russian military doctrine appears to utilize escalation management to control the growth of conflicts, deter outside actors, and support resolutions that are acceptable to Russia."

In other words, translating from dovish to more hawkish lingo: Russian military doctrine seeks escalation dominance and use of nuclear weapons in any way necessary to achieve victory. Of the original dovish view of Russian nuclear doctrine - that, even for Moscow, nuclear war is "unthinkable" - hardly a feather remains.

With the June publication of Russia's "On the Fundamentals of the State Policy of the Russian Federation in the Field of Nuclear Deterrence," and Moscow's threat that it would view "the launch of any ballistic missile toward Russia as nuclear," the doves' goose is cooked.

Bowen is right that "Russia's newly published nuclear doctrine notwithstanding, some ambiguous language and the secretive nature of the topic means that analysts continue to debate the true nature of strategic deterrence and the role of nuclear weapons in Russian military doctrine." However, the great debate over Russian nuclear doctrine now appears to be more quibbling over semantics and nuances than real disagreement over substance. Hawks and doves will continue arguing vehemently, despite really agreeing on essentials, because our strategic culture, like everything else, is so polarized.

For the unadulterated view of Russian nuclear doctrine, read the Russians themselves and Dr. Mark Schneider's "Russian Nuclear 'De-Escalation' of Future War" in the journal Comparative Strategy (March 25, 2019); "Russia's Military Strategy and Doctrine" by Glen E. Howard and Matthew Czekaj (Jamestown Foundation, 2019); and Dr. Stephen Blank's 2019 publication, "The Russian Military in Contemporary Perspective."

For doves, the great debate never really was over Russian nuclear doctrine but about stopping U.S. nuclear-weapon modernization, deeply reducing nuclear arsenals and "banning the bomb." Doves continue to see nuclear weapons - not Russia - as the real threat.

Doves may now agree that Russian nuclear doctrine is alarming - but do not expect to see a new consensus on modernizing the U.S. nuclear deterrent. Some doves already insist that the increasing nuclear threat from Russia, China and North Korea means it is more urgent than ever for the United States to lead toward "a world without nuclear weapons" by setting a good example.

Not too long ago, the House Armed Services Committee held hearings on abolishing U.S. nuclear bombers and ICBMs, and reducing ballistic missile submarines from 14 to 6.

Doves may yet get their way, after the 2020 elections.

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Extending the New START nuclear pact will help stabilize U.S.-Russia relations

Defense News Online, Sept. 3 | Daniel DePetris

There aren't many bright spots in U.S.-Russia relations these days. But just as arms control negotiations had a stabilizing impact on the geopolitical rivalry between Washington and Moscow during the Cold War period, strategic stability talks today could help arrest the yearslong degradation in this critical, bilateral relationship.

Last month, U.S. and Russian national security officials met in Vienna for follow-up discussions on nuclear doctrine, transparency and verification. Moscow describes previous talks in July as "professional," a word you don't usually hear expressed by the Kremlin.

The dialogue comes at an especially tense time in the broader U.S.-Russia relationship, with the trust deficit the highest it has been since the early 1980s. Weeks ago, U.S. and Russian ground forces engaged in an altercation in northeast Syria. U.S. and Russian pilots continue to intercept one another from the Black Sea and Mediterranean to airspace off the Alaskan coast.

Fortunately, there is still time for both nuclear superpowers to reintroduce some guardrails in their relationship. However, none of this is likely if the Trump administration continues to tie the extension of the New START accord to a more ambitious and unrealistic arms control agreement between Washington and Moscow. And it will be impossible if Washington insists on China's participation.

With the Intermediate-Range Nuclear Forces Treaty dead and buried, and the Open Skies Treaty on life support (Washington signaled its intent to withdraw from Open Skies in May after months of internal debate), the New Strategic Arms Reduction Treaty is the only mechanism keeping the world's two largest nuclear powers from expanding their arsenals. The Russians are on record supporting an extension of the agreement for an additional five years, and it is not hard to see why.

New START caps the number of U.S. and Russian deployed strategic nuclear warheads at 1,550, and limits the number of deployed nuclear-capable bombers and land-based and submarine-launched missiles to 700 apiece.

Just as important, the accord also provides the U.S. and Russia with significant access and information about one another's strategic arsenals, a transparency that enhances each nation's confidence about compliance.

With a COVID-19 pandemic affecting the lives of tens of millions of people worldwide and the global economy suffering its most serious shock in over a decade, the last thing the world needs is a new arms race between two powers that already possess over 90 percent of the global nuclear stockpile. This, however, is precisely what the result could be if the Trump administration continues to hold out and waste time.

There are two main problems with the administration's current approach.

The first is practical: There is simply not enough time to negotiate a new strategic stability agreement — trilateral or otherwise — before New START expires in February 2021. To believe U.S. negotiators could entice a reluctant China to the table and negotiate the highly complicated military technicalities associated with nuclear transparency and verification as well as dispute resolution mechanisms in six months is to believe the impossible can happen. It took Washington and Moscow nearly three years and more than a few headaches before U.S. President Ronald Reagan and Soviet Premier Mikhail Gorbachev signed the IMF Treaty — an accord that consisted of only one class of missiles. The probability of negotiating a nuclear agreement that includes more weapons systems, more participants and more stringent verification protocols in less than one-fifth of the time is about as great as winning the Powerball jackpot.

The second is China. Over the past year, Chinese officials have been persistent in their opposition to a trilateral U.S.-Russia-China arms control accord and have described it as a transparent bid to kill New START. This is anything but a surprise; with a nuclear arsenal one-twentieth the size of Washington's and one-twenty-second the size of Moscow's, it makes absolutely no sense for Beijing to join such a negotiation. The nuclear disparity is too lopsided for China to even consider putting its own stockpile on the table.

The longer Washington persists with this delusional negotiating position, the more unnecessary risk it is choosing to accept.

There is no question China is a rising power, seeking to enlarge the quantity of its arsenal and modernize the quality of its nuclear deterrent. The U.S. Defense Department's projection that Beijing will double its nuclear arsenal in the next decade could very well come to pass. It is also an indisputable fact that Russia is continuing to diversify its own nuclear capability and relying on its missile program to an even greater degree for external defense. All of these difficult issues will eventually need to be addressed in what will inevitably be long, arduous, extremely frustrating diplomacy.

The job, however, would be infinitely more complicated if Washington allowed the last remaining nuclear accord between the U.S. and Russia to wither on the vine.

A straightforward, unconditional extension of New START won't please everyone — particularly those who hope to establish a new arms control system that accounts for the 21st century weapons platforms and technology. But it's likely the best outcome the U.S. could expect in the short term.

Saving New START from expiring would add time to the clock, preserve a portion of an otherwise decaying strategic stability regime, and help Washington and Moscow put the brakes on a struggling bilateral relationship before it falls over the cliff.

-Daniel R. DePetris is a fellow at Defense Priorities and a columnist for the Washington Examiner

China's Growing Nuclear Weapons Arsenal: How Worried Should We Be?

https://nationalinterest.org/blog/buzz/chinas-growing-nuclear-weapons-arsenal-how-worried-should-we-be-168369
Washington is also working on upgrading its own nuclear triad while Beijing seeks to fully establish one of its own.
by Kris Osborn for The National Interest // September 4, 2020

China's clear ambition to massively expand its nuclear arsenal is generating extreme concern among U.S. military leaders who recognize the pace at which new weapons are being added dramatically alters the global calculus, according to the Pentagon's 2020 China Military Report.

"We do believe that over the next decade, that 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 its history, China's history," Brad Sbragia, Deputy Assistant Secretary of Defense for China, told reporters according to a Pentagon transcript. "An ability to double the stockpile demonstrates a move away from their historical minimum deterrence posture."

The report specifies China's fast increase in the <u>number of warheads</u> arming Beijing's intercontinental ballistic missiles (ICBMs) capable <u>of threatening</u> America will likely grow to 200 in the next five years. As an element of this expansion, China is increasing its inventory of long-range land-fired DF-26 Anti-Ship missiles able to fire both conventional and nuclear missiles. "Combined with a near-complete lack of transparency regarding their strategic intent and the perceived need for a much larger, more diverse nuclear force, these developments pose a significant concern for the United States," the report explains.

The report also makes the point that China is solidifying a <u>nuclear triad</u> by developing nuclear-capable air-launched ballistic missiles and, according to the text of the report, "publicly revealed a modified bomber that would carry this missile." Meanwhile, all of this is taking place within the context of <u>U.S. nuclear modernization</u> which, among many things, includes the construction of 400 new ICBMs.

However, many U.S. Air Force leaders believe the new <u>Ground Based Strategic Deterrent</u> (GBSD) may not come soon enough, given the age and obsolescence issues associated with the decades-old Minuteman III ICBM. Interestingly, the Air Force is working aggressively to sustain its arsenal of Minuteman IIIs while concurrently developing GBSD. In fact, Air Force leaders often cite the high-number of ongoing <u>Minuteman III</u> <u>modernization</u> programs, adding that the service recently test-fired a Minuteman III as part of an effort to <u>demonstrate nuclear readiness</u>.

"A team of Air Force Global Strike Command Airmen launched an unarmed Minuteman III intercontinental ballistic missile equipped with a test reentry vehicle at 12:03 a.m. Pacific Time Sept. 2 from Vandenberg Air Force Base, Calif.," an Air Force statement said. Given all of these

dynamics, the report makes the clear statement that the "United States believes it is time for China to participate in <u>nuclear arms control</u>. While China has praised agreements such as the <u>New START</u> and INF, it has also sought to avoid participating in the arms control itself."

Kris Osborn is the defense editor for the National Interest. Osborn previously served at the Pentagon as a Highly Qualified Expert with the Office of the Assistant Secretary of the Army—Acquisition, Logistics & Technology.

How China's Ballistic Missile and Nuclear Arsenal Is Ballooning According to the Pentagon

Beyond rapidly growing its ballistic missile force, the report says China could double its nuclear stockpile in the coming years TheDrive.com (The War Zone), Sept. 3 | Joseph Trevithick

A new report from the Pentagon offers an updated public assessment of China's ballistic missile arsenal, which shows a notable increase in its size and the scope of its capabilities. The annual review of the Chinese military also indicates that these developments are, at least in part, tied to important developments in the country's nuclear posture and the doctrine and policies surrounding it.

The Pentagon released the latest iteration of its report on the Chinese military and its capabilities, an updated version of which it is required to send to Congress every year, by law, on Sept. 2, 2020. It warned that the People's Liberation Army is continuing to make strides in a variety of important and advanced technologies, including, but certainly not limited to hypersonic weapons, artificial intelligence, cyber warfare, counter-space systems, air defenses, and the construction of large capital ships and advanced submarines. The review's discussion about ballistic missiles and nuclear capabilities, including a first-ever public estimate from the Department of Defense about the size of the Chinese nuclear arsenal, was especially significant.

"The PLARF [People's Liberation Army Rocket Force] develops and fields a wide variety of conventional mobile ground-launched ballistic missiles and cruise missiles," the report said. "The PRC [People's Republic of China] is developing new intercontinental ballistic missiles (ICBMs) that will significantly improve its nuclear-capable missile forces."

The Pentagon estimates that China has added 10 new ICBMs to its arsenal since its 2019 report, as well as 10 more launchers, including silos and road-mobile transporter-erector-launchers, to fire them. This brings to the estimated size of the country's total operational IBCM force from 90 to 100.

The most notable addition are examples of the new DF-41 ICBM, also known to the U.S. intelligence community as the CSS-X-20, which reportedly has the ability to deploy Multiple Independently Targetable Reentry Vehicle warheads, or MIRVs, allowing a single missile to strike multiple targets. You can read more about the DF-41, which represents a significant technology leap over previous Chinese ICBMs and that the Chinese government publicly paraded for the first time last year, in this <u>past War Zone piece</u>. China has also been developing DF-5C and DF-31B variants of those existing ICBM types.

There is no year-over-year change in the number of short-range ballistic missile (SRBM) and medium-range ballistic missile (MRBM) launchers, though the number of total missiles in both cases have been revised. In 2019, the Pentagon said that China had between 750 and 1,500 SRBMs and between 150 and 450 MRBMs, while it simply said that the country had more than 600 SRBMs and more than 150 MRBMs in 2020. SRBMs are

defined as ballistic missiles with ranges between 300 kilometers (186 miles) and 1,000 kilometers (621 miles), while MRBMs can reach distances of between 1,000 kilometers (621 miles) and 3,000 kilometers (1,864 miles).

The most dramatic change in the Pentagon's assessment of the PLARF's ballistic missile inventory between 2019 and 2020 was with regards to intermediate-range ballistic missiles (IRBM), which have ranges between 3,000 kilometers (1,864 miles) and 5,500 kilometers (3,417 miles). At present, China's sole operational IRBM is understood to be the DF-26, "which is capable of conducting both conventional and nuclear precision strikes against ground targets, as well as conventional strikes against naval targets," according to the Pentagon. The Chinese military highlighted its long-range anti-ship ballistic missile capabilities in a recent major exercise in the South China Sea.

The new report says that the total number of DF-26 road-mobile transporter-erector-launchers has surged from 80 to 200, while the total number of actual missiles has risen from between 80 and 160 to over 200. The DF-26 is rapidly becoming one of the most important missiles in China's arsenal, but there does not appear to have been any public discussion from Chinese authorities about such a significant expansion of this part of the PLARF. The Pentagon offers no context for how it arrived at this estimate.

Adding 120 new TELs would very likely reflect a notable increase in the overall DF-26 force, as well as supporting elements and infrastructure. Experts have openly questioned whether this might be a typo, with the launcher figure being an accidental copy-paste of the missile figure, or some kind of other error. There is at least one clear quantitative error elsewhere in the new Pentagon report, with another section of the text saying the PLARF only has 200 SRBM launchers, instead of 250, as found in tables in both the 2020 and 2019 editions.

In addition to the ground-based ballistic missiles, the Pentagon report also notes that the People's Liberation Army has six Type 094 Jin class ballistic missile submarines, "four operational and two outfitting at Huludao Shipyard," each of which can carry up to 12 nuclear-tipped JL-2 submarine-launched ballistic missiles. The combination of the Type 094s and the JL-2s, which China also paraded publicly last year, represent "the country's first viable sea-based nuclear deterrent." The Chinese are also working to develop a follow-on ballistic missile submarine, known as the Type 096, as well as an improved submarine-launched ballistic missile, the JL-3.

The DOD report also raises the possibility that the People's Liberation Army Navy's Type 055 warships, which it classifies as cruisers, rather than destroyers, may be able to carry anti-ship ballistic missiles of some kind in the future. It has been previously reported that the CM-401 short-range anti-ship ballistic missile, which the China Aerospace Science and Industry Corporation unveiled in 2018, might be a future armament for the Type 055. The assessment does not appear to be talking about the integration of larger ballistic missiles, such as anti-ship variants of the DF-21 or DF-26, onto these ships.

"In October 2019, China signaled the return of the airborne leg of its nuclear triad after the PLAAF publicly revealed the H-6N as its first nuclear-capable air-to-air refuelable bomber," the report adds. "The H-6N features a modified fuselage that allows it to carry externally either a drone or an air-launched ballistic missile (ALBM) that may be nuclear capable."

The report further notes that China continues work on a reportedly flying wing-type stealth bomber, known as the H-20, but it remains unclear when that aircraft may enter service. You can read more about the H-20 in these past War Zone pieces. There is no mention of a potential advanced

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regional bomber program, which the Defense Intelligence Agency discussed in its public report last year and is commonly referred to as the JH-XX. You can read more about that aircraft in this <u>previous War Zone story</u>.

The Pentagon says that these developments are, at least in part, a component of broader efforts to expand the size and scope of the People's Liberation Army's nuclear capabilities. The 2020 assessment includes, for the first time ever, an estimate of how many nuclear warheads China has — "in the low-200s" — with the possibility of that stockpile doubling in the coming years. As many as 200 warheads may be capable of threatening the United Staes within the next five years, according to the review.

The report offers limited detail about how the Pentagon arrived at this assessment, saying that it is due in part to the expected introduction of more MIRVed DF-41s. However, it also says "China probably has enough nuclear materials to at least double its warhead stockpile without new fissile material production," but that it "will require increased nuclear warhead production" in order to make this a reality. The "low-200s" warhead estimate is also notably lower than past Defense Intelligence Agency assessments, as well as those from experts outside of the U.S. government, and may only reflect deployed weapons and not those held in reserve.

This assessment itself is based in part in the Pentagon's belief that China is looking to reorganize and improve its nuclear forces to better withstand a potential first strike. It says specifically:

"The PRC's nuclear weapons policy prioritizes the maintenance of a nuclear force able to survive a first strike and respond with sufficient strength to inflict unacceptable damage on an enemy. China is enhancing peacetime readiness levels for these nuclear forces to ensure their responsiveness. In addition, China insists its new generation of mobile missiles, with warheads consisting of MIRVs and penetration aids, are intended to ensure the viability of its strategic nuclear forces in the face of continued advances in U.S. and, to a lesser extent, Russian strategic ISR [intelligence, surveillance, and reconnaissance], precision strike, and missile defense capabilities. India also plays a factor in China's nuclear threat perceptions."

Part of this increased peacetime readiness could include the expansion of the PLARF's silo-based ICBM force, according to the Pentagon. With regards to this development, it says:

"Commercial imagery from 2019 has revealed that China has constructed an ICBM silo at one of the PLARF's Western training ranges that is smaller than China's existing CSS-4 (DF-5) silos. According to state media, the CSS-X-20 (DF-41) ICBM can be launched from silos; this site is probably being used to at least develop a concept of operations for silo basing this system. There are also some indications that China may be building new CSS-4 (DF-5) ICBM silos."

"Their size precludes use by the DF-5 and may support concept development for a silo-based DF-41 or one of China's smaller ICBMs. When taken with China's past concerns about silo survivability and ongoing strategic early warning developments, these new silos provide further evidence China is moving to a LOW [launch-on-warning] posture."

Launch-on-warning refers to a nuclear deterrent policy to launch a massive counterstrike upon detecting incoming nuclear threats. This helps ensure that a retaliatory strike can be successfully initiated before the hostile weapons reach their targets.

The Federation of American Scientists (FAS) was the first to spot the silo at the PLARF's nuclear missile training site near Jilantai in the Gobi Desert and released its own assessment in September 2019. FAS said that it was possible that this silo, which is a distinctly different design from the ones China uses for the DF-5, could be part of the development of an alternate basing option for the DF-41 or for some other future solid-fuel ballistic missile.

However, at present, there does not appear to be any further public evidence of new Chinese silo construction for the DF-41 to further support the Pentagon's assessment. There is also mention of possible rail-mobile DF-41s, something China reportedly tested in 2015, but it is unclear how seriously the PLARF is exploring this capability. The Soviet Union notably did deploy a similar system during the Cold War, the RT-23 Molodets, and Russia more recently looking into bringing that capability back before shelving those plans in favor of missiles armed with nuclear-armed hypersonic boost-glide vehicles, known as Avangard.

The Pentagon also separately said that China's nuclear arsenal could grow to include new warheads, including a potential lower-yield warhead for the DF-26, and new delivery systems. A lower yield nuclear weapon could indicate that the Chinese military may bee looking at a so-called escalate-to-deescalate policy, in which a limited nuclear strike could be used to bring a quick end to a conflict before outside powers might be able to intervene or to otherwise dissuade them from doing so. The U.S. government says that Russia has such a policy in its nuclear doctrine, but experts dispute that it exists.

The U.S. government has accused China, as well as Russia, of conducting low-yield nuclear tests in violation of international agreements, which could support the development of new nuclear weapons, but has not publicly provided evidence to substantiate this. In addition, as The War Zone, among others, has pointed out in the past, so-called sub-critical nuclear testing, in which there is no actual nuclear detonation, is permitted under existing arms control regimes and the U.S. conducts such experimentation, as well.

All of this comes as the United States is engaged in negotiations with Russia about extending the New Strategic Arms Reduction Treaty (START), which limits the number of nuclear warheads and various strategic delivery systems that each country can have, and is otherwise set to sunset next year. The U.S. government has been campaigning to bring China into the discussions and potentially expand the deal into a trilateral arrangement.

China has expressed virtually no interest in doing so. Beyond a spike in geopolitical friction with Washington over a host of different issues, Beijing is unlikely to see any benefit in making itself a party to such an agreement in the near future given that its existing nuclear arsenal is so small compared to that of the U.S. and Russian militaries. The Pentagon looks to be making a case in its latest China assessment for getting them to accept limits now before they can expand the size of their stockpile. Chinese officials have already countered these calls by saying it would be willing to talk nuclear arms control with the United States if it agreed to reduce its arsenal to China's level first.

Whether or not the Chinese grow their ballistic missile and nuclear forces in the ways that the Pentagon expects, it is clear that the People's Liberation Army is working to significantly expand its capabilities in both regards to better challenge the United States, as well as other potential adversaries.

-- Joseph Trevithick is Assistant Editor of the War Zone

Experts warn China-India standoff risks unintentional war

https://apnews.com/d27ec36d89d5b8011ebaaeef2983809f By AIJAZ HUSSAIN for Associated Press News // today

SRINAGAR, India (AP) — As a monthslong military standoff between India and China along their disputed mountain border protracts, experts warn that the nuclear-armed countries — which already have engaged in their bloodiest clash in decades — could unintentionally slide into war.

For 45 years, a series of agreements, written and unwritten, maintained an uneasy truce along the border on the eastern edge of the Himalayan region of Kashmir. But moves and clashes over the past few months have made the situation unpredictable, raising the risk that a miscalculation from either side could have serious consequences that resonate beyond the cold-desert region. "The situation is very dangerous on the ground and can spiral out of control," said Lt. Gen. D.S. Hooda, who was head of the Indian military's Northern Command from 2014 to 2016.

"A lot will depend on whether the two sides are able to control the volatile situation and make sure it doesn't spread to other areas." The two Asian giants have held several rounds of talks, mainly involving military commanders, without success. In a sign that the talks are now shifting to the political level, their <u>defense ministers</u> met in the Russian capital on Friday to try end the impasse. It was the first high-level direct contact between the sides since the standoff erupted in the Ladakh region four months ago.

Last week, the world's two most populous nations, which share thousands of kilometers (miles) of disputed border, accused each another of fresh provocations, including allegations of soldiers crossing into each other's territory. India said its soldiers thwarted "provocative" movements by China's military twice last week. In turn, China's Defense Ministry accused Indian troops of crossing established lines of control and creating provocations along the border.

Tensions first erupted in early May with a brawl between soldiers from the two sides. The situation <u>escalated dramatically</u> in June when they fought with clubs, stones and fists, leaving 20 Indian soldiers dead and dozens wounded. China did not report any casualties. The standoff is over disputed portions of a pristine landscape in a region that boasts the world's highest landing strip and a glacier that feeds one of the largest irrigation systems in the world.

Hooda said that while he doesn't think either side is looking for full-scale war, the "real calamity" is the breakdown of existing agreements and protocols. Wang Lian, a professor of international relations at Peking University in Beijing, said the possibility of open warfare is unlikely because both sides have shown restraint in recent encounters. But he also said that New Delhi is under pressure from domestic anti-China sentiment and has been emboldened by tougher U.S. measures against Beijing.

"I don't think (India) would go so far as to escalate military conflict of a larger scale, but I believe both sides are making some preparations," Wang said. India and China share a disputed and undemarcated 3,500-kilometer (2,175-mile) border, known as the Line of Actual Control, that stretches from the Ladakh region in the north to the Indian state of Sikkim. The two nations fought a border war in 1962 that also spilled into Ladakh and ended in a fragile truce.

Since then, troops from both sides have patrolled and guarded the undefined border area, according to protocols worked out by the two countries that included not using firearms against each other. But defense analyst Rahul Bedi said that India changed the rules of engagement along the border following the deadly June clash. He said local commanders have been given "freedom to initiate adequate and proportionate responses to any hostile acts" by Chinese troops.

Members of India's strategic community, including defense analysts and retired generals, say China's army is opening new fronts, deepening mistrust and delaying immediate disengagement before winter, when temperatures in the region can fall to minus 50 degrees Celsius (minus 58 Fahrenheit). They argue that the cost of deployments through the winter would be punishing for an <u>Indian economy already decimated</u> by the coronavirus pandemic.

Another area of concern for India's military is the country's decades-old territorial dispute over Kashmir with archrival Pakistan, a key ally of China. Indian military policymakers say that if a full-scale conflict erupts between India and China, Islamabad could throw its support behind Beijing, creating an even more dangerous situation for New Delhi. Kashmir is divided between India and Pakistan.

Its eastern edge, the cold, high-altitude desert region of Ladakh, borders China on one side and Pakistan on the other, and is home to the world's only three-way nuclear-armed junction. Most Kashmiri Muslims on the Indian side support an armed movement that demands the territory be united either under Pakistani rule or as an independent country. Gen. Bipin Rawat, India's chief of Defense Staff, warned Pakistan last week not to exploit the crisis with China.

"Pakistan could take advantage of any threat developing along northern borders (from China) and create trouble for us," Rawat said, warning that Islamabad "may suffer heavy losses should they attempt any misadventure." India unilaterally declared Ladakh a federal territory and separated it from Kashmir in August 2019, ending its semi-autonomous status and straining the already prickly relationship between New Delhi and Beijing. China was among the countries to strongly condemn the move, raising it at international forums including the U.N. Security Council.

According to some Indian and Chinese strategic experts, India's move <u>exacerbated existing tensions</u> with China, leading to the June border clash. "We are entering into a very difficult phase," said Pravin Sawhney, a defense analyst and China expert. "Disengagement is a criticality to avoid war, which the two nations don't want. But if any war breaks out, Pakistan will pitch in, and so would Kashmiris. It will be a three-front conflict."

Associated Press writer Ashok Sharma in New Delhi contributed to this report. -- Follow Aijaz Hussain on Twitter at twitter.com/hussain_aijaz

Northrop wins the Air Force's contest for next-gen ICBMs

https://www.defensenews.com/space/2020/09/08/northrop-wins-the-air-forces-contest-for-next-gen-icbms/?utm_source=Sailthru&utm_medium=email&utm_campaign=EBB%2009.09.20&utm_term=Editorial%20-%20Early%20Bird%20Brief

By: Valerie Insinna for Defense News // 13 hours ago

WASHINGTON — Northrop Grumman has captured a \$13.3 billion award for the Ground Based Strategic Deterrent competition and will build the Air Force's next-generation intercontinental ballistic missiles, the service announced on Sept. 8.

Begining in 2029, GBSD will start replacing the LGM-30G Minuteman III ICBMs, which were fielded in 1970, Northrop said in a statement. According to the Air Force, GBSD "will have increased accuracy, enhanced security, and improved reliability to provide the United States with an upgraded and broader array of strategic nuclear options to address the threats of today and the future."

Northrop was the sole bidder for the engineering, manufacturing and development contract after Boeing dropped out from the competition last July over Northrop's acquisition of solid rocket motor manufacturer Orbital ATK, now known as Northrop Grumman Innovation Systems. Boeing contended that the company did not have enough time to negotiate a competitive price for the motors needed for the GBSD program due to Northrop's slow pace in signing an agreement that would allow Boeing to work with NGIS while firewalling Boeing's intellectual property away from its rival GBSD team. However, the Air Force declined to alter its acquisition strategy.

In December, Northrop Grumman <u>submitted a bid</u> for the engineering and manufacturing development phase of the program, while Boeing confirmed that it had not entered its own proposal. "Our nation is facing a rapidly evolving threat environment and protecting our citizens with a modern strategic deterrent capability has never been more critical," said Northrop top executive Kathy Warden.

"With more than 65 years of technical leadership on every ICBM system, our nationwide team is honored and committed to continuing our partnership with the U.S. Air Force to deliver a safe, secure and effective system that will contribute to global stability for years to come." Northrop's industry team for the program includes Aerojet Rocketdyne, Bechtel, Clark Construction, Collins Aerospace, General Dynamics, HDT Global, Honeywell, Kratos Defense and Security Solutions, L3 Harris, Lockheed Martin, Textron Systems and other businesses, the company said in a statement.

Its own work on the missiles will predominantly be carried out at Northrop's facilities at Roy and Promontory, Utah. During an August interview with Defense News, Boeing defense head Leanne Caret <u>declined to comment</u> on whether the company would pursue a protest or other legal action. On Tuesday, the company gave no indication on whether it would lodge a protest. "Boeing supports the U.S. Air Force and its efforts to modernize the nation's intercontinental ballistic missile (ICBM) force," a spokesman said in a statement.

'We will continue working alongside airmen to keep the Minuteman ICBM mission-ready while delivering innovative solutions in support of strategic deterrence today and tomorrow." The Air Force had intended to finance two competitors through the technology maturation and risk reduction (TMRR) phase, with Boeing and Northrop winning contracts worth up to \$359 million in 2017. However, in October 2019, the service stopped the flow of funds to Boeing under the TMRR award, causing Boeing to halt work on the program early.

Despite having only a single bidder, the Air Force stressed that Northrop's GBSD proposal is on track to stay on schedule and within its budget. "This contract provides the best overall value to the warfighter and taxpayers," said Brig. Gen. Anthony Genatempo, the service's program executive officer for strategic systems. "The GBSD program is leveraging technologies to reduce the program's technical risk and ensure time-certain delivery to meet the warfighter's need. Its acquisition strategy focuses on mature technologies, smart commonality, modular designs, and maintaining the Air Force's ability to leverage competition throughout the weapon system's lifecycle to ensure it will effectively adapt to evolving environments."

Losing World War III at home

https://washingtontimes-dc.newsmemory.com/?token=ec252f4c4092ab9f7330a1d0c5d46c21_5f58d2de_d3019ac&selDate=20200909

Ninety days and counting of U.S. homeland insecurity puts America at risk of attack from foreign adversaries

By Dr. Peter Vincent Pry for the Washington Times // 09September 2020

Foreign adversaries planning the next big war now have two examples of the United States being unable to cope with revolutionary violence in the homeland.

During the 1960s, the New Left, anti-war, Black liberation and counterculture movements spawned rioting, looting, burning, killing police and 4,000 bombings. Today, Antifa and Black Lives Matter are stoking revolutionary violence — 4,000 bombings haven't happened yet, but the revolution is just starting. Moscow, Beijing, Pyongyang and Tehran see the U.S. government helpless to stop mayhem in America's cities, mayors and governors cowed, police "taking the knee" in token surrender, revolution right outside the White House.

Tyrannies never tolerate much if any peaceful protest, let alone violence. They ruthlessly crush dissent. For example, China killed at least 10,000 of the Tianamen Square peaceful protesters, according to a secret U.K. estimate. Human Rights Watch estimates North Korea has 120,000 concentration camp inmates and killed 400,000 suspected of disloyalty. Dictatorships know America's free and open society is potentially a wartime Achilles heel.

The USSR planned operations by elite Spetsnaz and GRU special forces to paralyze U.S. warfighting and nuclear retaliatory capabilities at home, including by vaporizing the White House and Pentagon with mandelivered "nuclear suitcases." (See GRU Col. Stanislav Lunev and KGB Col. Oleg Gordievsky's testimony, House Armed Services Committee, Jan. 24, 2000; Oct. 26, 1999 and Col. Lunev's book "Through the Eyes of the Enemy" 1998).

Ninety days and counting of mass violence in U.S. cities must be inspiring among hostile foreign Napoleons a Renaissance planning special forces operations designed to win a war — even before the outset of war — by defeating America at home. Enemy special forces could blackout national electric grids, crippling U.S. power projection (the national grid supplies 99% of electricity used by CONUS military bases), coordinated with an Information Warfare campaign blaming Antifa and Black Lives Matter.

Then the real aggressor — Russia, China, North Korea or Iran — could make their overt move against the Baltic states, Taiwan, South Korea or Israel. The president and Pentagon would be reluctant, and perhaps deterred altogether, from a major war opposing overseas aggression with a crippled military, while believing, mistakenly, that the United States is already facing an existential threat from domestic terrorists.

Security at U.S. military bases and even for U.S. bombers, ICBMs and submarines is designed for a 1950s "Ozzie and Harriet" America where Antifa and Spetsnaz were unthinkable.

Enemy special forces masquerading as domestic or international terrorists could shootdown bombers and tankers. Modern shoulderfi red SAMs like Russia's SA-7, SA-14, SA-16 and SA-18 have proliferated around the world (50,000 manufactured) and can range outside peacetime security zones for USAF bases.

ICBMs can be shot-down during boost-phase by snipers armed with hunting rifles or shoulder-fired SAMs. Submarines, both ballistic missile and attack subs, could be targeted in their berths by armed drones (like those used by Iran to destroy the Saudi Abqaiq-Khurais oil refinery in 2019), by shoulder-fired missiles, or even by armor-piercing sniper fire. Just one hole in the pressure hull of a submarine would render it inoperable.

The loss of just a few, or even one, bomber, tanker or submarine to "terrorists" during "peacetime" could become enormously consequential when Russia, China, North Korea or Iran make their "big play" overseas. Even unsuccessful attacks on U.S. strategic forces or critical infrastructures by "domestic terrorists" could deter or significantly slow U.S. reaction to overseas aggression, until the homeland is assuredly secure.

The present worldwide advertisement of U.S. homeland insecurity in places like Portland, Seattle, Minneapolis, Kenosha, Chicago, New York and Washington, D.C., coincides with a revolution in special forces super-weapons:

- China's Pterodactyl drone can fly 15,000 miles, from Beijing to Chicago and back, carrying smart bombs while jamming radars and conducting electronic warfare.
- China's CH-500 unmanned mini-helicopter carries laser-guided missiles, can shoot through windows and destroy tanks.
- Russia's rocket-propelled grenade launchers like the RPO-M lob a thermobaric warhead, giving one lone gunman firepower equivalent to a 152mm howitzer firing high-explosive shells.
- Russia and China both have battle robots armed with guns that can deliver high-explosives.
- Russia and China both have sniper super-rifles that can fire armorpiercing rounds over 3 kilometers.
- Even Iran has armed drones that can travel hundreds of kilometers and deliver strikes with great accuracy.

Such drones could be equipped with a non-nuclear EMP warhead and programmed to follow powerlines to blackout electric grids. Most of Russia and China's special forces super-weapons are available to client states North Korea and Iran. Some superweapons used during a "Gray Zone War" inside the United States could give away the game that attacks are not from Antifa. But the best, most effective, weapons could be used last, just before the conflict goes big and overt, becoming a major war against the United States or allies.

Another military disadvantage of being a free and open society is that bad guys can easily stockpile special weapons within U.S. borders long before hostilities. America must not become a "surveillance state" like China. However, we do need better security for military bases, including "Iron Dome" anti-missile/drone defenses and hardened shelters for submarines.

America's life matters.

Dr. Peter Vincent Pry, director of the Task Force on National and Homeland Security, served as chief of staff on the Congressional EMP Commission, and on the staffs of the House Armed Service Committee and the CIA. He is author most recently of "The Power And The Light" (Amazon.com)

China's Nuclear Buildup Changes Balance of Power

https://www.bloomberg.com/opinion/articles/2020-09-07/china-s-nuclear-buildup-changes-u-s-defense-strategies
Whether this strategic shift is good or bad for the U.S. is open to interpretation.

By: Hal Brands For Bloomberg News // September 7, 2020, 6:00 PM EDT

It wouldn't be a new cold war without an accelerating nuclear arms race.

The Pentagon reported last week that China is undertaking a significant nuclear buildup, which will double the size of its arsenal by 2030. That development isn't surprising, given China's strategic situation. But it's still distinctly challenging for the U.S., because it compounds the worsening military situation in the western Pacific. Since its first nuclear test in 1964, Beijing has possessed a relatively modest deterrent — an arsenal numbering first in the dozens and now in the low 200s of warheads.

China is now rapidly expanding that deterrent, building more and better intercontinental ballistic missiles that will improve its ability to hit targets in the U.S. It is developing a more robust "triad" — a combination of long-range bombers, ballistic missile submarines and land-based missiles — that will make its nuclear capabilities more survivable against any potential attack. The Defense Department projects that in addition to the doubling of China's nuclear warhead stockpiles over a decade, the number of warheads that can strike the U.S. will grow to roughly 200 by 2025.

The People's Liberation Army is also improving the readiness of its nuclear forces, by developing a launch-on-warning capability — a posture in which Beijing would respond to an incoming nuclear attack with a retaliatory strike before enemy warheads hit their targets. In one sense, it's not shocking that a country involved in a deepening rivalry with U.S. — which has <u>about</u> 1,400 deployed nuclear warheads — would improve its nuclear capabilities as its power grows. The more challenging question is how much, and in what ways, the Chinese buildup matters.

One interpretation is that it doesn't. Even with 400-plus warheads, China will be far short of nuclear parity with the U.S. Beijing has retained its longstanding, if <u>ambiguous</u>, "no first use" policy, and it seems highly unlikely that China would use nuclear weapons in an unprovoked attack. Indeed, the scholars Fiona Cunningham and M. Taylor Fravel have <u>argued</u> that China remains very hesitant to employ nuclear weapons in most conflicts, for fear that any nuclear war could spin out of control. From this perspective, the Chinese buildup might be a strategic nothing-burger.

Yet this interpretation raises the obvious question of why the Chinese would engage in a pointless buildup. A second interpretation holds that the buildup is strategically meaningful, but in a good way. Nuclear strategists have long warned that it can be dangerous for both sides when one actor fears that its nuclear forces are vulnerable to a disarming first strike. In a crisis, an insecure nuclear power might feel pressure to use or lose its arsenal — to fire off its warheads before they are wiped out by an enemy strike.

For this reason, Secretary of Defense Robert McNamara actually <u>worried</u> about the vulnerability of Soviet ICBMs during the 1960s. This hypothesis is somewhat plausible, given concerns that U.S. conventional strikes on Chinese command-and-control assets could accidentally make Beijing fear losing contact with its nuclear forces. The trouble is that nuclear stability can, paradoxically, be destabilizing.

This possibility underpins a third interpretation — that the Chinese buildup will make life harder for the U.S. America's nuclear shield has typically been designed to shore up the conventional defense of exposed allies. During the Cold War, NATO would have struggled to stop a Soviet invasion with conventional forces, so it had to be willing to escalate to nuclear war. For that threat to be believable, the U.S. had to have a meaningful "damage-limitation" capability — the ability to wipe out most or all Soviet nuclear forces, so Moscow could not inflict catastrophic harm on America in a retaliatory attack.

There are similar considerations at work today. As the conventional military balance in the Taiwan Strait deteriorates, the U.S. might feel compelled to threaten nuclear escalation to deter or defeat a Chinese attack. But that option is only credible if the U.S. can destroy enough of China's nuclear

arsenal — on the ground or with missile defenses — to prevent a devastating riposte. As one Chinese military official <u>remarked</u> during a crisis over Taiwan in 1996, America would surely not save Taipei if it meant losing Los Angeles.

This is where China's buildup matters. As recently as the mid-2000s, Beijing's arsenal was small and vulnerable enough that some experts believed that the U.S. could perhaps destroy it in a first strike. Several years later, the scholar Thomas Christensen wrote that the Chinese themselves worried that they had only a tenuous second-strike capability, and were improving their arsenal accordingly.

If China's nuclear expansion removes any remaining possibility of an effective U.S. first strike, then Washington might well be deterred from going nuclear in the first place. And that, in turn, could make Beijing more confident in its ability to wage a winning conventional war as the balance of power shifts in its favor. There's no easy fix, from an American perspective. The U.S. could try to improve its ability to target China's expanding nuclear forces, but that would be very hard and expensive when resources for nuclear modernization are already stretched quite thin.

It could look for limited nuclear options against China: strikes that use a small number of weapons simply to demonstrate that the war will get out of hand if Beijing doesn't call it quits. Yet there is no guarantee that limited strikes wouldn't spiral into something more catastrophic. Or Washington could simply defend its allies and partners conventionally. That's the most attractive option in theory, but one that will also require lots of money and innovation as China's military capabilities improve.

China's nuclear buildup thus demonstrates two uncomfortable truths. First, that the requirements of strategic stability and American strategy are often at odds. In theory, the most stable situation is one of perfect mutual assured destruction, in which neither side has an incentive to use nuclear weapons first because neither side can escape a society-shattering response. But America's global commitments require the advantage provided by strategic instability if the U.S. is to reinforce those commitments with the threat of nuclear escalation.

This was why the U.S. never really accepted mutual assured destruction during the Cold War, and why the emergence of a still-inferior but more secure Chinese arsenal is troubling. Second, the dilemmas of defense in the western Pacific are only getting harder. The overriding thrust of Chinese military modernization for a quarter-century has been neutralizing the conventional advantages — long-range power projection, space-enabled precision-strike capabilities — that would allow Washington to intervene decisively in a war in China's neighborhood. The People's Liberation Army is narrowing the nuclear imbalance that backstops an eroding conventional edge. A revisionist state is getting closer to the point at which it might be able to expand its influence by force. That has, historically, been a formula for trouble.

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China's second century of shame, thanks to its Communist Party

https://thehill.com/opinion/international/515390-chinas-second-century-of-shame-thanks-to-its-communist-party BY JOSEPH BOSCO, CONTRIBUTOR to THE HILL // 09/08/20 10:00 AM EDT

For the Chinese Communist Party (CCP), China's "century of humiliation" is the gift that keeps on giving. Beijing returns again and again to the theme of Western imperialism, oppression and exploitation to keep stoking the embers of grievance and resentment against the West, and especially the United States.

But the People's Republic that announced China had "stood up" in 1949 soon made clear what that would mean for the Chinese people and the world — and it was not an agenda that would engender pride among ordinary Chinese, or peace of mind in the international community. At home, Mao Zedong launched radical social and economic initiatives that led to domestic disasters of unfathomable proportions.

The <u>Great Leap Forward</u> and the <u>Cultural Revolution</u> together accounted for as many as 60 million Chinese deaths, eclipsing by an order of magnitude the losses sustained during the <u>Japanese invasion</u> and occupation that the CCP is happy to invoke at a moment's notice. Aside from the tragic toll in Chinese lives lost to the revolution, the destruction of China's cultural, artistic and spiritual heritage was colossal, exceeding anything perpetrated during 14 years of brutal occupation by Imperial Japan.

Beyond China's borders, war against the world was the Chinese Communists' calling card. Within months of its creation, China joined in North Korea's invasion of South Korea, for which it was <u>branded an aggressor state</u> by the United Nations. At the same time, it invaded and occupied the autonomous states of Tibet and East Turkestan. It prepared to do the same to Taiwan until the United States intervened to prevent an even wider Asian war.

In subsequent years, China invaded parts of India, Vietnam and the Soviet Union, and fomented "wars of national liberation" throughout Asia, Africa and Latin America. At home, the communist regime instituted one grotesque cruelty after another, such as its <u>one-child policy</u> that led to widespread forced abortions and female infanticide, or the industrial-scale harvesting of organs from live prisoners of conscience. Because of its inhuman behavior domestically and its international aggression, China had become a pariah nation.

When Richard Nixon contemplated what he would do if he won the presidency in 1968, he saw the world's greatest danger in a "Red China" ruled by a government whose primary mission seemed to be to "nurture its fantasies, cherish its hates and threaten its neighbors." He made the historic decision to bring China out of its "angry isolation" and welcome it into "the family of nations." He believed that, short of war, it was the only way "to draw off the poison from the Thoughts of Mao."

That process of "dynamic detoxification" would help "open China to the world and open the world to China." All subsequent administrations, until <u>Donald Trump</u>'s, hewed to the same expanded engagement policy with the hope that China's leaders would find it in their collective heart to end the sense of grievance and anti-West hostility. But it proved to be a false expectation. As the decades passed, China grew more powerful economically and militarily, but without ever softening its paranoid view of the outside world.

It consistently failed to institute the economic and political reforms that would move it toward fulfillment of the aspirations it had signed onto in the <u>Universal Declaration of Human Rights</u> and the <u>International Covenant on Civil and Political Rights</u>. Western hopes that China finally would become a "normal" nation reached their first peak in the late 1980s when Deng Xiaoping, the diminutive and genial anti-Mao, loosened internal restrictions and introduced limited market reforms.

But, when students and workers gathered peaceably in Tiananmen Square and a hundred other cities to support Deng's economic opening and encourage parallel political reforms, he turned the guns and tanks of the People's Liberation Army against the Chinese people to remind them they

lived in the People's Republic. Despite that shock, the West convinced itself it had to do even more to encourage internal political reform in China and pinned its hopes on China's accession to the World Trade Organization.

When I <u>testified against this</u> in 2000, the Senate Foreign Relations Committee chair asked if joining the WTO would change China. I said I feared it would change us. It certainly did not change Communist China. On the contrary, Beijing followed its well-established practice of exploiting as weakness every generous Western opening it now found in trade, investment, technology and intellectual property transfer (licit and illicit).

Chinese companies with ties to the Communist Party and the military even gained special lenient access to the U.S. stock markets. While Vladimir Lenin said capitalists would sell communists the rope to hang them, China proved the West also would provide it the money to buy the rope. China has escalated the attack on its own people with its human rights atrocities in Tibet (cultural genocide) and East Turkestan/Xinjiang (cultural and actual genocide), its crackdown in Hong Kong, and its persecution of all forms of dissent and free expression throughout the mainland.

On virtually a daily basis, it threatens war against democratic Taiwan for showing the Chinese people a better way. Its unleashing of the coronavirus pandemic first on its own people and then on the world — whether by strategic design or cruel and reckless disregard of the consequences of its actions — has added to the gathering shame and doubts the rulers have earned. They truly have "hurt the feelings of the Chinese people," who do not yet have the full picture of the growing opprobrium directed at communist officials by members of the international community.

Even a tiny European state such as the Czech Republic has <u>demanded an apology</u> for the crude threats issued by China's foreign minister because a Czech official visited Taiwan. Given its behavior within and outside China, the communist government has matched the reputations of Nazi Germany and the Soviet Union as abominations in the civilized world. For many, PRC soon may stand for the "Pariah Republic of China." The Chinese people deserve better.

In his July <u>speech at the Nixon Library</u>, Secretary of State <u>Mike Pompeo</u> talked of the joint responsibility the Chinese people and the outside world share to bring about long-promised change: "We must ... engage and empower the Chinese people — a dynamic, freedom-loving people who are completely distinct from the Chinese Communist Party. ... Changing the CCP's behavior cannot be the mission of the Chinese people alone. Free nations have to work to defend freedom."

As during the Cold War, the most powerful liberating instrument the free world can provide to the Chinese people is the truth. When they have it, they certainly will decide that 71 years of humiliation at the hands of their communist rulers is enough; they don't need a second full century of shame.

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.

Triangles of Instability: Nuclear Dilemmas and How They Feed into Each Other

https://thediplomat.com/2020/09/triangles-of-instability-nuclear-dilemmas-and-how-they-feed-into-each-other/
Two overlapping triangular nuclear relationships could compound risks and complicate deterrence calculi for all the parties involved.
By Abhijnan Rej for The Diplomat // September 08, 2020

The Pentagon's <u>recently published report</u> on China's military capabilities highlights American concerns about the country's growing nuclear arsenal and delivery systems, at a time when key nuclear dyads are adopting increasingly competitive postures.

That there has been considerable churn in the India-China relationship over the past few months is evident. The Trump Administration has also insisted that Beijing participate in a three-way New START arms control talks along with Moscow — the U.S.-Russia New START Treaty is set to expire early next year — though it appears to have eased back on that demand more recently. Along with growing speculation about India's nuclear capabilities and strategic intent vis-à-vis Pakistan, these independent developments highlight the complex interlocking problems linking five out of the nine (de jure or de facto) nuclear powers.

At hand is what is emerging to be two overlapping triangular relationships, with China as the common node: India-Pakistan-China and China-U.S.-Russia. To be sure, Robert Einhorn and W.P.S. Sidhu have argued in the past that when it came to nuclear risks, India, Pakistan, China, and the United States formed a single "strategic chain," with the posture of each affecting the others and with few restraint measures between them in place.

But the recent spike in strategic competition within the two triangular relationships — including at the levels of conventional weapons and emerging technologies — add an additional layer of complications. The India-Pakistan-China nuclear dynamics are old, so much so that scholars speak of a "Southern Asia" strategic space involving all three powers' geopolitical preferences, nuclear postures and capabilities.

China's support for Pakistan's nuclear weapons program has a long history. <u>Some have claimed</u> that China tested a nuclear weapon on Pakistan's behalf in 1990, a full eight years before Pakistan (and India) openly declared themselves nuclear powers by carrying out tests in 1998. But at the very least, <u>China has consistently provided technical help</u> for Pakistan's nuclear program.

For its own part, India's nuclear-weapons capabilities increasingly emphasize contingencies with regard to both.

The country's Agni V ICBM is reported to be <u>capable of holding all of China's eastern coast at risk</u>. <u>As Hans Kristensen and Matt Korda noted</u> in their most recent update on India's nuclear forces, "[w]hile India's primary deterrence relationship is with Pakistan, its nuclear modernization indicates that it is putting increased emphasis on its future strategic relationship with China." India's <u>dogged though somewhat haphazard pursuit</u> of a sea-based nuclear deterrent shows a keen awareness in ensuring a credible second-strike option when it comes to China.

But as Yogesh Joshi has argued, India's quest for deterrence stability with China — the ability to have a secure second-strike option against that country — has created crisis instability with Pakistan, where Islamabad/Rawalpindi worries that the INS Arihant, India's sole nuclear ballistic missile submarine (SSBN), will be used for a first strike against Pakistan's nuclear weapons in a crisis.

Such a belief is likely to generate a "use it or lose it" pressure for Pakistan in a contingency involving India. Repeated Indian statements chipping away at India's official No First Use (NFU) policy haven't helped matters. Add to this already complex three-way dynamic the possibility that India may face a two-front conventional military threat from China and Pakistan — either with both colluding, or with one taking advantage of the other's military action to open a new front against India.

The question here is the extent to which either nuclear threats from India or an Indian tactical nuclear-weapons capability can forestall that possibility or, in the event of a conventional deterrence failure, generate favorable outcomes. <u>Analysts have argued</u> that the India-China conventional balance across the Line of Actual Control between the two countries is not unfavorable to India and therefore, the country should take a lead in promoting nuclear restraint globally.

India is unlikely to take part in any such initiative as long as China seeks to augment its nuclear capabilities, if not in the number of warheads per se, then through pursuit of technologies such as Multiple Independently Targetable Reentry Vehicles (MIRVs) or even conventional Hypersonic Glide Vehicles (HGV). China is currently pursuing both as countermeasures for Washington's ballistic missile defense (BMD) plans. (While not originally intended as such, MIRVs are considered <a href=""effective countermeasures" for BMD systems.)

But China's pursuit of such technologies also stands to complicate India's belief in the survivability of its own second-strike ability — especially if it fails to increase the size of its SSBN fleet in the near future. One recurring theme in the debate around the future of India's nuclear weapons has been the extent to which it may move — or already has — from the official NFU posture to one in which it decides to use nuclear (or even conventional) missiles to attack the adversary's nuclear weapons first.

Some analysts have argued — though <u>not all are convinced</u> — that India is already contemplating such a shift, <u>and that, as part of a "counterforce" strategy</u>, India might use the Russian defensive S-400 system to pick off "residual" incoming Pakistani nuclear missiles following a first Indian strike that takes out most (though not all) of them. India has decided to go ahead with the purchase of the S-400 system despite repeated U.S. statements noting that the purchase could attract sanctions or, at the very least, limit further U.S.-India defense cooperation.

Notably, Russia has also sold the S-400 system to China, though it reportedly halted important related deliveries and installation last month, which would render the system inoperable for China.

But it is the Russian <u>deployment of a ground-launched cruise missile</u> that sealed the fate of the Intermediate-Range Nuclear Forces Treaty (INF). The Trump administration formally announced its withdrawal from the INF in August last year. That, in turn, paves the way for the American deployment of ground-launched intermediate range missiles in Asia.

This is a worry for Beijing notwithstanding the fact that South Korea and Japan — the farthest the missiles can be stationed by the U.S. to target China — are both likely to be unwilling to host these systems. But Beijing's reaction to this development may lead it to consider countermeasures to enhance the survivability of its nuclear assets. This in turn could lead India to push for new capabilities of its own. (On September 7, India tested a "Hypersonic Technology Demonstrator Vehicle," the fourth country to successfully do so.) At the very least, China may think India's pursuit of certain nuclear capabilities is action taken in tandem with the U.S.

You get the picture.

GBSD, B-21 Spending Could Top \$10B In 2027: Cowen Group

B-21 production costs, the Cowen analysis finds, will ramp up fast, from \$202 million in 2022 to \$4 billion in 2027.

By THERESA HITCHENS on September 09, 2020

WASHINGTON: The Air Force's combined spending on the <u>Ground Based Strategic Deterrent (GBSD)</u> and the <u>B-21 bomber</u> is likely to triple by 2027 to some \$10.2 billion annually, as production begins to ramp up under both programs, the Cowen Washington Research Group estimates. <u>The \$13.3 billion GBSD contract, announced yesterday by the Air Force</u>, covers engineering, manufacturing and development (EMD) of the new ICBMs through 2029. The Cowen analysis, out today, notes that while the contract announcement does not explain whether LRIP is included, it can be assumed. This is because Air Force budget justification documents detail plans for "five option years" under the contract to include "early production and deployment," author Roman Schweizer explains.

GBSD, which will replace the aging <u>LGM-30G Minuteman III missiles</u> that first became operational in 1970, represents one third of DoD's top priority nuclear modernization effort. The third leg of the modernization program is the Navy's planned buy of 12 new Columbia-class nukelaunching submarines, which the Pentagon's 2021 budget documents estimate to cost \$110 billion to buy.

The Congressional Budget Office in 2019 estimated the price tag for the total DoD triad modernization effort at \$234 billion through 2028. This ginormous price tag does not include spending by the Energy Department to build the nuclear warheads that would be carried by DoD's ICBMs, bombers and subs.

Northrop Grumman was the sole bidder for the GBSD program <u>following Boeing's decision last year to drop out</u> over concerns about Northrop's acquisition of one of the two makers of solid rocket motors in the country, Orbital ATK.

Cowen estimates that research and development spending for GBSD will jump from \$1.5 billion in 2021, peaking at \$3.07 billion in 2024, and decreasing to \$1.9 billion in 2027. Production, the analysis says, will begin in 2027 with a budget of \$2 billion. The Air Force's press release yesterday says that it expects to begin deploying GBSD in late 2020.

For the B-21, the analysis estimates that R&D spending will steadily decline from the \$2.8 billion in the Air Force's 2021 request to \$1.2 billion in 2027. But production costs, the analysis finds, will ramp up: from \$202 million in 2022 to \$4 billion in 2027.

B-21 Program Profile												
Spending Type	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26"	FY27*
B-21 R&D	710	1,358	1.915	2.190	2.982	2,848	2,896	2.670	2,260	1,661	1,412	1,200
B-21 Prod							202	2,400	3,350	4,020	4,690	5,096
Total Budget Authority	710	1,358	1,915	2,190	2,982	2,848	3,098	5,070	5,610	5,681	6,102	6,296
Est Y/Y BA Change		91%	41%	14%	36%	-4%	9%	64%	11%	1%	7%	3%
Proj. Qty					1	1	1	3	5	6	7	8
GBSD Program Profile	EV4¢	EV47	EV40	EV40	EV20	EV24	EV22	EV22	EV24	EVar	EV261	EV27
Spending Type	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26*	
	FY16 65	FY17 114	FY18 222	FY19 401	FY20 557	FY21 1,524	FY22 2,536	FY23 3,034	FY24 3,072	FY25 3,031	FY26* 2,728	FY27* 1,910
Spending Type												
Spending Type GBSD R&D												
Spending Type GBSD R&D GBSD Prod	65	114	222	401	557	1,524	2,536	3,034	3,072	3,031	2,728	1,910 2,000
Spending Type GBSD R&D GBSD Prod Total Budget Authority	65	114	222	401	557 557	1,524	2,536	3,034	3,072	3,031	2,728	1,910 2,000 3,910
Spending Type GBSD R&D GBSD Prod Total Budget Authority Est Y/Y BA Change	65	114	222	401	557 557	1,524	2,536	3,034	3,072	3,031	2,728 2,728 -10%	1,910 2,000 3,910 43%
Spending Type GBSD R&D GBSD Prod Total Budget Authority Est Y/Y BA Change	65	114	222	401	557 557	1,524	2,536	3,034	3,072	3,031	2,728 2,728 -10%	1,910 2,000 3,910 43%

Source: DoD, Cowen and Company

The analysis is largely based on Air Force budget estimates through 2025, and Schweizer's own projections. Of course, this means the numbers are squishy. That's especially true for the B-21, whose program is highly classified.

Indeed, the number of B-21 bombers the Air Force intends to buy, originally set at 100, remains unclear. <u>As *Breaking D* readers know</u>, senior service officials have been hinting loudly that they need more.

In addition, unit costs for the stealth bomber's production are also classified. Way back in 2015, when the Air Force awarded Northrop Grumman the B-21 contract, it put a cap on the Average Production Unit Cost per aircraft of \$550 million in 2010 dollars. "The APUC from the independent estimate supporting today's award is \$511 million per aircraft, again in 2010 dollars," the release added. No updated assessments have been released. Several high officials have said the program is on budget and on schedule, without providing any details.

Finally, the production schedule and the count of how many are to be built each year, is classified, along with the planned annual procurement costs. That said, <u>our colleagues at Bloomberg reported in February</u> that internal Air Force budget documents show procurement starting in 2022 budgeted at \$193 million. That jumps to \$4.3 billion in 2025. Schweizer said in an email that his estimates are based on those numbers, and that the projections for 2026 and 2027 are his own.

Cowen's analysis notes that Congress is by and large supportive of both efforts. While some have fretted that presidential candidate Joe Biden might reconsider building the GBSD, the document says that is not likely. After all, the Obama administration, during which Biden served as Veep, actually started the program.

Russian nuclear missile threat continues unabated

https://www.timescall.com/2020/09/08/john-kotson-russian-nuclear-missile-threat-continues-unabated/

BYLINE: John Kotson for the Times-Call // DATE: September 8, 2020

Russia has issued a warning to America in the military newspaper Red Star, any ballistic missile launched against Russian territory or its allies will be met with a full nuclear counter strike. This warning pertains to any ballistic missile, even those with high explosive warheads, as they will be considered nuclear. This elevates the prospect of nuclear war to hair trigger levels.

The United States withdrew from the Anti-Ballistic Missile treaty in 2002, to build a shield against Intercontinental Ballistic Missiles (ICBM's). Russia became concerned that their ICBM's would no longer be an effective deterrent to nuclear attack, so they began development of a new class of hypersonic missiles. Trump allowed deployment of these weapons to Russia's rocket forces by withdrawing from the Intermediate Nuclear Forces Treaty. He threatens to withdraw from the New Start ICBM Treaty, the last one protecting America from nuclear attack.

The first hypersonic weapon deployed by Russia in significant quantities is the Avanguard boost-glide missile. This missile has intercontinental range, is maneuverable, and will reach a terminal velocity of Mach 20 (15,000 mph). It carries a 2 megaton nuclear warhead which is 125 times more powerful than the Hiroshima bomb that killed 140,000 people. If used against Washington, millions would be killed by the fireball and blast pressure. Millions more would be killed by the radioactive fallout from megatons of dirt and debris sucked into the atmosphere. Prevailing winds would cause

deadly fall-out all the way to Philadelphia, New York and Boston. Russia is moving their ICBM launchers to Arctic Siberia to further reduce our defensive reaction time.

Multiple Avanguard missiles will be carried into space aboard heavy lift ICBM's. When released, each missile's booster rocket will accelerate the vehicle to Mach 20 in a dive towards earth's atmosphere. At an altitude of 100,000-200,000 feet the missile levels out, drops its expended booster and flies to its target. Due to its shape the missile rides its own shock wave (called wave-rider) over long distances. When it reaches the target, it will dive, glowing like a meteor, through earth's atmosphere until it detonates. No current U.S. military defense system will be effective against Avanguard.

The Russian Navy has completed sea trials of the Zircon 3K32 hypersonic anti-ship missile. Its range is 600 miles at a velocity of Mach 8 (approximately 1.7 miles per second) and can be used against both sea and ground targets. It will be deployed on all Russian missile ships and on new Yasen class submarines. Missile equipped submarines present a significant threat to the U.S. coastal areas. They could lie 186 miles off the east coast and strike Washington with a nuclear warhead in 109 seconds, destroying our top level defense echelons. Zircon will enter production next year and deployed on Russian ships in 2022.

Russia continues developing the Poseidon doomsday, intercontinental, nuclear powered torpedo. It carries a huge nuclear warhead (possibly 100 megatons) and is 30 times the size of conventional torpedoes. It begins testing in the Arctic Ocean this fall. Sixteen Poseidon torpedoes will be produced and deployed on two specially built submarines, the Belgorod and Khabarovsk.

Kinzal, an air launched, tactical, hypersonic, glide missile is fully operational in MiG-31B squadrons. It has a range of 1200 miles, speed of Mach 10 and carries a nuclear warhead. The Burevestnik nuclear powered intercontinental cruise missile, designed to fly under U.S. defense systems, has encountered problems; a nuclear engine exploded during sea recovery operations at Nenoksa test range last August.

Military experts warn hypersonic weapons will change the face of modern warfare. It will be at least 2023 before the U.S. military can field a hypersonic weapon. The U.S. has concentrated on precision high explosive weapons that could destroy Russian military weapons and command structures. These weapons might be mistaken as nukes and trigger a holocaust. The Trump-Putin love-fest has left America in a precarious position; develop a super expensive space-based defensive system or rush the development of hypersonic nuclear weapons as a deterrent?

Iran's Long-Ignored Existential EMP Threat Now Explicit!

By: Henry F. Cooper Posted // on September 8, 2020 by

"By sending a military satellite into space, Iran now has shown that it can target all American territory; the Iranian parliament had previously warned [the US] that an electromagnetic nuclear attack on the United States would likely kill 90 percent of Americans." ~ Afkar News article in Farsi, "American Soil Is Now Within the Range of Iranian Bombs" [Emphasis added.]

<u>Click here</u> for this important September 5, 2020 Gatestone Institute article by Mzajid Rafizadeh. Dr. Rafizadeh is a business strategist and advisor, Harvard-educated scholar, political scientist, board member of Harvard International Review, and president of the International American Council on

the Middle East. Iran's state-controlled Afkar News article boasted about the damage that the Iranian regime could inflict on the U.S. and our troops and allies abroad, most importantly from my perspective with an emphasis on an electromagnetic pulse (EMP) attack that could kill 90-percent of all Americans. This was an echo of the warning decades ago from the authoritative Congressional EMP Commission and reiterated numerous times by the Commissioners and other authors, including yours truly. For example, <u>click here</u> for over 145 links to High Frontier messages that reference this existential threat from Iran, now made explicitly clear by Iran itself.

Moreover, Rafizadeh's article came on the heels of Alfred Kredo's September 4, 2020 Washington Free Beacon article, "Iran Caught Stockpiling Enriched Uranium Needed for Bomb." Click here for Kredo's report that the International Atomic Energy Agency (IAEA) just indicated Iran has nearly doubled its stockpiles of enriched uranium, indicating Iran's continued progress toward building nuclear weapons — based on recent IAEA inspections of several contested nuclear sites that had previously been off-limits. Kredo also reports that the "watchdog" nuclear scientists at the Institute for Science and International Security have stated that Iran's existing enriched uranium store is sufficient for a breakout time as short as 3.5 months to achieve a nuclear weapon.

This finding is not surprising — as many of the above referenced High Frontier messages have shown that prudent planners should long ago have assumed that Iran already had nuclear weapons that could be carried by satellite to be detonated above the United States to create an major EMP event that could shut down the nation's electric power grid indefinitely — and we are so dependent on electricity that its loss would lead to the death of most Americans due to starvation, disease, and societal collapse.

Click here for a pertinent February 12, 2016 National Review article, "Underestimating the Nuclear Missile Threat from North Korea and Iran," in which I joined Ambassador R. James Woolsey (Former CIA Director), Dr. William R. Graham (EMP Commission Chairman), Fritz Ermarth (former Chairman of the National Intelligence Council) and Dr. Peter Vincent Pry (EMP Commission Executive Director), to make this explicit point that U.S. authorities should then have assumed Iran posed this threat. And click here for a year earlier, February 1, 2015 Newsmax article that reflects this same viewpoint, "Experts: Iran Now a Nuclear-Ready State, Missiles Capable of Hitting US."

Considering North Korea and Iran together makes sense since they are allies, and prudent planners would presume Iran knows most if not everything Iran knows and even could have purchased nuclear weapons from North Korea — notably, with funds foolishly provided by U.S. authorities while negotiating the Joint Comprehensive Plan of Action (JCPOA).

High Frontier's reports have long emphasized such warnings, especially from the Congressional EMP Commission, which first warned of the existential EMP threat in a closed session of Congress in 2004, and in numerous public reports. Click here for their unclassified 2004 Executive Report and note the last paragraph of its Abstract: "The current vulnerability of our critical infrastructures can both invite and reward attack if not corrected. Correction is feasible and well within the Nation's means and resources to accomplish." [Emphasis added.]

To emphasize that the Commission's view of the threat and how to defend against it was publicly reinforced long ago, <u>click here</u> for the July 10, 2008 testimony before the House Armed Services Committee (HASC) by Dr. William R. Graham, Chairman for 17 years of the EMP Commission, which included a number of nationally known competent authorities on EMP and its important threat to all we hold dear.

Subsequently, several members of the HASC championed reinstating the EMP Commission to make public more of what we had learned from decades of effort to protect our most important military systems. Click here for links to the subsequent public EMP Commission reports, from a webpage, now maintained by private funds because the government ceased to maintain easy public access to most of those important products of the EMP Commission.

Among many other important findings, commissioners have publicly reported that this existential EMP threat to the United States is included in military doctrine of Russia, China, North Korea and Iran — repeat Iran, as illustrated by the articles referenced above. --- So, what are the "powers that be" doing to address this existential threat? First, it should be noted that Donald J. Trump announced his support for addressing this long ignored threat in the 2015-16 campaign, and has followed through by highlighting its importance in his December 18, 2017 National Security Strategy and by issuing several Executive Orders and signing into law National Defense Authorization Acts that have directed the Federal Bureaucracy to address this existential threat.

Regrettably, the Federal bureaucracy has so far failed dismally to respond effectively to this direction. Click here for my July 14, 2020 message "On Washington's Stumbling, Fumbling, Bumbling Responses to the Existential EMP Threat." My descriptively titled message was triggered by a 13-page report issued by the President's Science Advisor and Director of the White House Office of Science and Technology Policy (OSTP) — that absurdly claimed we need more studies.

My July 14, 2020 message also discussed the lethargic (to be generous) response of the Secretary of Energy, who is supposed to be leading a "whole of government" response to the May 1, 2020 Executive Order 13920, which is supposed to be securing the electric bulk power grid against cyberattack. Note that the most comprehensive cyber-attack is an EMP attack. Click here for the EMP Commission Chairman's April 20, 2017 letter to the Secretary of Energy making this point (among other important ones), apparently since ignored by the Department of Energy, if not the rest of the Washington establishment, supposedly now while alleging to respond to Executive Order 13920.

And now — even as we see more evidence of the Existential EMP threat from Iran, we have the latest example of yet another dismal, lethargic bureaucratic response to the President's initiatives. Click here for the latest delinquent, very disappointing, Department of Homeland Security (DHS) report, dated August 17, 2020 and titled "Electromagnetic Pulse (EMP) Program Status Report." Click here for the Homeland Security Today article on this 4-page anemic report that alleges to respond to the March 26, 2019 Executive Order 13865 that called for a substantive report by March 26, 2020. It, in fact, is little more than a self-aggrandizing recipe for more studies, with consequent more delays in addressing the existential EMP threat.

Is President Trump aware of how poorly his administration is responding to his 2016 campaign pledge, his December 18, 2017 National Security Strategy, his March 26, 2019 Executive Order 13865, his April 17, 2020 Executive Order 18920, and no doubt others that were intended to fulfill his campaign promise to address the existential threat of an EMP attack that is included in the military doctrine of Russia, China, North Korea and Iran?

Long before President Trump's watch, I commented on Washington's dysfunctional federal efforts to protect our critical civil infrastructure against EMP. <u>Click here</u> for my February 25, 2013 message, in which I poked fun at these dysfunctional arrangements by recalling the famous Abbott and Costello "Who's on First" comedy routine of yesteryear — <u>click here</u>. And <u>click here</u> for my June 24, 2014 message, 16 months later, again attempting a bit of humor in the title, "What Did They Know and When Did They Know It?"

But there was, and is, very little humor in recounting the federal government's dysfunctionality — that is still so pervasive. We must get beyond such "Stumbling, Fumbling, Bumbling Responses to the Existential EMP Threat" if ever the American people are to be protected from the existential EMP threat. In my view, this critically important matter must be addressed "from the bottom-up," e.g., as we have been pursuing in the Lake Wylie Pilot Study in South Carolina. We have demonstrated that methods long used to protect our most important military systems can also be employed to affordably protect the electric power grid throughout South Carolina and beyond. Click here for pertinent related previous High Frontier messages.

We don't need more studies in Washington, certainly not like those recently illustrated in the above discussion. Informed local and state authorities only need to be funded. Personally, I believe this action should be assigned to the nation's Adjutants General and the National Guard; and Washington should get out of the way!

Bottom Lines.

Senator Ron Johnson (R-Wisconsin) — Chairman of the Senate Homeland Security and Governmental Affairs Committee and primary advocate of the Amendment of the National Defense Authorization Act for 2020 that significantly improved EO 13865 above — should understand that the Federal Government, and especially the Department of Homeland Security, is not at all responsive to his February 17, 2019 assessment following an important hearing on the EMP threat:

"We have known about the existential threat posed by electromagnetic pulses (EMP) and geomagnetic disturbances (GMD) for decades.

Because most people are either unaware of the danger, or view these as very low probability events, there has not been sufficient public pressure to take effective action to mitigate these threats. Instead, we establish commissions and study panels, conduct research, and develop plans to develop strategies. It is way past time to stop admiring this problem, and actually begin to do something concrete to protect our vulnerable electrical grid, control systems, and the ever-increasing array of electronic devices our society has become dependent upon." ~ Senator Ron Johnson (R-WI)

The bureaucratic beast has not changed its spots; and I believe we can expect more deficient administration studies, unless and until the President again takes an interest in this important issue and demands better from the Executive Branch — and Congress. --- "We the people" should insist that this existential threat be addressed from the "bottom-up" and demand Washington support.

How to deal with a nuclear North Korea

The U.S. must not accept North Korea as a nuclear weapons state By Joseph R. DeTrani for the WT // 10 September 2020

North Korea wants to be accepted as a nuclear weapons state, a goal it's pursued for the last 26 years of failed negotiations.

Eventually, the leadership in Pyongyang thinks it'll accomplish this goal, despite the U.S. and others demanding complete denuclearization. But despite our efforts, North Korea has progressed exponentially with its nuclear and missile programs, defying international sanctions. North Korea is

playing the long game, convinced we'll eventually cave, as we did with Pakistan, and accept them as a nuclear weapons state, which would be a monumental strategic mistake.

North Korea with nuclear weapons would be a nuclear proliferation threat to the region, with other countries, like South Korea and Japan, seeking their own nuclear weapons for deterrence purposes, despite U.S. extended nuclear deterrence assurances. Also, the possibility that a rogue state or terrorist organization will get its hands on a nuclear weapon or fissile material for a dirty bomb would become more of a reality.

Consider some of the facts. North Korea now has an arsenal of nuclear weapons, reportedly between 20 and 60, using plutonium and highly enriched uranium, from fissile material produced at a number of undeclared sites in the North. These nuclear weapons reportedly can be mated to a fleet of ballistic missiles, ranging from short- and mid-range Scud and Nodong missiles capable of targeting Seoul and Tokyo, to intercontinental ballistic missiles (Hwasong 14 and 15) capable of reaching the whole of the United States.

North Korea continues to upgrade its submarine-launched ballistic missiles, while maintaining its conventional long-range artillery deployments in the Kaesong Heights area north of the DMZ, targeting Seoul, with a population of 10 million. Over the last few months, North Korea refrained from conducting another nuclear test and launching a ballistic missile, but it continued to produce fissile material for nuclear weapons, while continuing to upgrade its submarine fleet.

Much attention correctly has focused on the North's nuclear and missile programs, but their chemical and biological programs reportedly are still operational, as witnessed by the 2017 assassination of Kim Jong-nam, the older brother of Kim Jong-un, using VX nerve agent at the Kuala Lumpur International Airport. Also of concern is North Korea's history of human rights abuses, with estimates of more than 100,000 people in political detention camps throughout the country.

North Korea continues to support its military programs and the lifestyle of its elites through a continued aggressive illicit activities program. Previously, the North sold ballistic missiles to rogue regimes like Libya, Syria and Iran, while also providing the Assad regime in Syria with nuclear materials and assisted with the construction of a nuclear reactor in Al Kibar that, just prior to going operational, was destroyed by Israel in 2007.

The North's criminal cyber programs, most evident in 2014 with its attack on Sony Pictures, and its ongoing extensive and sophisticated attacks on banks and cryptocurrency facilities, is a principal source of its illicitly acquired revenue. Previously, it was North Korea's sophisticated counterfeiting operations that enriched its leadership, starting with the counterfeiting of the U.S. \$100 bill and its industrial

scale counterfeiting of cigarettes and pharmaceuticals. This is the North Korea we continue to deal with, hoping to convince its leadership that dismantling its nuclear weapons and facilities and halting its ballistic missile and chemical and biological programs, while ceasing its criminal cyber and related programs, will provide the North with security assurances, a peace treaty ending the Korean War, economic development assistance and a path to normal relations with the United States.

To date, we haven't been successful, although we had periods of temporary success, in 1994 with the Agreed Framework, in September 2005 with the Six Party Talks Joint Statement and the June 2018 Singapore Summit Joint Statement. What we learned from this history of talks and fleeting successes is that North Korea currently is not prepared to dismantle its nuclear weapons and facilities.

This could change, which is why we continue to negotiate with the North, in search of a peaceful resolution of issues, knowing that conflict on the Korean Peninsula would result in catastrophic losses. But what should be clear is that the North will not agree to dismantle all of its nuclear and ballistic missile programs prior to receiving security assurances and the lifting of sanctions, on an action-foraction basis.

The 2019 Hanoi Summit failed exactly on these issues. Kim Jongun said he was prepared to halt activities at its Yongbyon nuclear facility in return for the lifting of sanctions imposed after 2016. When Mr. Kim was told that he had to include all of the North's nuclear facilities, in addition to its ballistic missile and chemical and biological programs, Mr. Kim refused, bringing the Hanoi Summit to an abrupt end.

As we approach the November presidential election, there should be some public discussion of how the respective candidates will manage the North Korean nuclear issue. It's an issue that affects the security of the U.S. and its allies in South Korea and Japan. Past efforts have failed to resolve an issue that has become more of a threat, thus requiring greater creativity and leadership, working even more closely with our allies and partners. The candidates owe it to the public to address this important national security issue.

Joseph R. DeTrani was the former direc-tor of the National Counterprolifera-tion Center. The views expressed in this publication are the author's and do not imply endorsement of the Office of the Director of National Intelligence or any other U.S. government agency

China's Air Force Might Be Back in the Nuclear Business

https://thediplomat.com/2020/09/chinas-air-force-might-be-back-in-the-nuclear-business/
Circumstantial evidence suggests that China now possesses a full nuclear triad.

By Roderick Lee for The Diplomat // September 09, 2020

The Department of Defense's recent 2020 China Military Power Report reiterated an assessment first made in the 2018 China Military Power Report: that the Chinese People's Liberation Army (PLA) has re-assigned the PLA Air Force (PLAAF) with a nuclear counterattack mission after a several-decade-long hiatus. (The PLAAF conducted most of the PLA's early nuclear testing, but the PLA then-Second Artillery, now Rocket Force, later took on the role as China's primary nuclear force.) This assessment is based on the fact that the new H-6N bomber is capable of carrying a new air-launched ballistic missile, currently in development, that may be nuclear-capable.

Unlike platforms that the PLA explicitly associates with nuclear missions, such as intercontinental ballistic missiles and ballistic missile submarines, it is harder to positively demonstrate China's intent to use long-range bombers as part of a nuclear triad just because they are technically capable of delivering a nuclear payload. However, there is now a growing body of evidence to suggest that China has created an operational bomber unit tasked with conducting nuclear strikes, alongside the acquisition of weapon systems needed to conduct air-launched nuclear strikes.

Where Did the H-6Ns Go?

The first piece of evidence suggesting that the PLA has elevated a new bomber unit is the disappearance of China's new H-6N bombers. The PLA finally <u>unveiled</u> the new H-6 variant, capable of aerial refueling, at its 70th National Anniversary military parade in 2019. Although the refueling

probe and semi-recessed underside fuselage, capable of mounting an air-launched ballistic missile, attracted the most attention, the numbers painted on the side of the aircraft merit equal scrutiny.

The three H-6Ns featured in the parade had "55301," "55302" and "55034" painted onto their fuselages. The PLAAF uses these numbers, called "bort numbers," to identify the unit to which a particular aircraft belongs. But the 553XX numbering scheme does not conform to any known PLAAF bomber unit. To further complicate issues, these aircraft cannot be found at any known PLA H-6 base on publicly available overhead imagery dating from after the parade, nor in any handheld photographs released by PLA official press sources. However, it is possible that the PLAAF may have stationed this aircraft at an airfield not previously associated with an active H-6 unit.

Facility Built for Nuclear War

Enter Neixiang Airfield. Although historical Google Earth imagery shows that this airfield only saw periodic use hosting transport aircraft from 2010 to 2015, it now appears to be a facility built with nuclear operations in mind. In July 2017, the PLAAF initiated a major renovation of the airfield to include larger aprons, large aircraft shelters capable of accommodating aircraft up to 36 meters in wingspan, and adjacent garrison facilities for aircrew and other personnel. By April 2019, it had completed the large aircraft shelters. While no publicly available imagery shows any aircraft in open areas since the PLA completed the airfield renovations, the latest imagery from May 2020 shows runway skid marks consistent with those found exclusively at other H-6 bases. This suggests that the missing H-6Ns may in fact be stationed at Neixiang.

The other more telling feature of Neixiang Airfield that is suggestive of a nuclear mission is the adjacent underground facility (UGF). This facility has been in place since at least 2009, and has allowed the PLA to store aircraft stationed at the airfield in relative safety while not in use. The original configuration features two portals that are both roughly 36 meters wide. Both portals lead to the flight line. Although the original portals are barely wide enough to accommodate an H-6, a ground crew would likely have to carefully tow the aircraft in and out of this facility to prevent any damage to the aircraft. However, recent enhancements to the UGF make this a unique facility compared to other H-6 bases.

The latest imagery from May 2020 reveals that the PLA constructed two additional portals on the western reverse-slope side of the UGF that are around 61 meters in width (an H-6 has a wingspan of roughly 33 meters). Furthermore, the PLA expanded the width of the taxiway to which these portals lead. This suggests that an aircraft as large as an H-6 can now comfortably taxi out of the UGF under its own power and reach the runway in about 12 minutes – a number not dissimilar to the United States Air Force's (USAF's) 15-minute minimum interval takeoff time for B-52s.

The Neixiang Airfield UGF is also built with survivability in mind. The UGF lies under roughly 220 meters of <u>limestone</u> overburden. Assuming that the PLA installed rock supports and tunnel lining commensurate with what is has previously installed at PLA Rocket Force UGFs, the Neixiang Airfield UGF <u>may be able to withstand</u> a 300-400 kiloton surface burst – roughly equivalent to a U.S. B61 nuclear weapon. The two large portals are also on a reverse slope and dug into the middle of the mountain to mitigate cruise missile and low-altitude air attacks.

A Mystery Unit at Neixiang

In addition to the circumstantial evidence suggesting that the PLA could be stationing nuclear-capable bombers at Neixiang and reinforcing the infrastructure with an eye toward nuclear missions, the PLAAF also reactivated what is likely an old bomber unit – publicly known as 93671 Unit. An <u>academic article</u> published in mid-2018 is the first known reference to 93671 Unit. The article identifies it as an "aviation unit" located in

Wugong county. However, by late 2019, the unit appears to have <u>relocated</u> to Nanyang in Henan province – the prefecture in which Neixiang county is located. Subsequent local Dengzhou government press from 2019 <u>suggests</u> that a radar station located 5 miles east of Neixiang provides flight training support for a "106th Brigade."

There is no other known PLAAF unit with this true unit designator and Neixiang is the closest airfield to the radar station in question. 93671 Unit being a brigade-level unit is corroborated by <u>photography</u> of the unit's political commissar, Sun Jun, showing that he is a brigade-level officer. This all suggests that 93671 Unit is in fact the 106th Brigade. Overhead imagery also offers some clues regarding what type of aircraft are located at Neixiang. Although publicly available imagery does not show any aircraft stored in the open at Neixiang, the skid mark patterns found on the runway are consistent with the skid marks found exclusively at other H-6 air bases.

Circumstantial Nuclear Ties

The two academic articles published by this unit also suggest that 93671 Unit may be involved in nuclear activities. The first article is titled "Development of the First-Generation Associated Particle Tube" and is co-authored by individuals from the PLA Rocket Force Engineering University's School of Nuclear Engineering, the Chinese Academy of Atomic Energy's Institute of Nuclear Physics and the Chinese Academy of Engineering Physics. Particle detectors are used to detect, track and identify ionizing particles associated with nuclear decay.

The second article is titled "Molecular Dynamics Study on Effects of Doping Defects on Properties of PBXs" and is co-authored by individuals from the Rocket Force Engineering University and the PLA Navy's 91515 Unit – a unit likely associated with the Navy's nuclear submarines at Hainan. Doping of explosives is commonly used to improve detonation performance, and PBX is a common material used for explosive lenses <u>found in fission weapons</u>.

A Lopsided Triad?

Although the PLA has long discussed the potential role of PLAAF bombers in nuclear counterstrike missions, this part of the triad has received the least amount of attention. Assuming that 93671 Unit is indeed a new PLAAF bomber brigade with a nuclear mission, the implication for the U.S. government is that China now possesses a full nuclear triad, albeit somewhat lopsided. In addition to the air-launched component of the PLA's nuclear triad being relatively small as of 2020, its potential range is also limited. While PLA Rocket Force intercontinental ballistic missiles (ICBMs) and PLA Navy ballistic missile nuclear submarines (SSBNs) can range parts of the continental United States (CONUS) from relatively safe launch locations near or within China, H-6Js equipped with even long-range standoff munitions face a challenging geography should they wish to target CONUS.

In order to range CONUS targets, an H-6J and accompanying tankers would have to either fly over Russian airspace, or take a vulnerable 8,000 km route across the Pacific. Neither of these options seems optimal. This begs the question of why the PLA is pursuing an air-launched nuclear capability in the first place. There are at least three non-mutually exclusive plausible explanations for why the PLA is pursuing a nuclear-armed bomber force:

Other Nuclear Neighbors: The U.S. is obviously not the only power with which the PLA must contend. China shares land borders with four nuclear states (Russia, India, Pakistan and North Korea) and has an active border dispute with one (India). Nuclear armed H-6s may be intended to deter and retaliate against one or more of China's nuclear neighbors.

Tactical Use: Discussions in the "Science of Second Artillery Campaigns" suggests that military bases are acceptable targets during a nuclear counterattack. H-6s equipped with nuclear-armed standoff munitions may be intended to deter U.S. regional allies from getting involved in a conflict and to retaliate against U.S. bases if necessary. A Safer Pacific in the Future: The PLA might see the Western and Central Pacific as being a "safer operating area" in the next few decades, although there is no PLA discourse discussing such a future.

If the PLA is able to push most U.S. forces beyond the second island chain in the coming decades, long-range bomber flights supported by tankers could range CONUS targets with greater confidence than they can at present. In the meantime, the PLA wishes to establish nuclear mission competencies within the PLAAF. At this point, one might expect a cursory list of "big things to do" to respond to the new development. However, the U.S. is already doing many of these things. Instead, the possible emergence of a PLAAF bomber unit with a nuclear mission suggests two "small things to do" for the U.S.

First, this unit can serve as a starting point or supplementary information when discussing Chinese theater nuclear weapons policy. Just as the emergence of the nuclear DF-26 intermediate range ballistic missile prompted <u>discussions of risk and ambiguity</u>, the possibility of nuclear-armed H-6Js should add to that discussion. Second, observers can now use the activities at Neixiang and of the 93671 Unit as an additional data point when trying to better understand overall Chinese nuclear policy. The PLA typically shrouds the activities of its nuclear units in secrecy, but cannot totally eliminate all public traces. Knowing that 93671 Unit may be called to participate in nuclear counterstrikes will help guide further research into how the PLA views nuclear war.

Roderick Lee is the director of research at the Air University's China Aerospace Studies Institute (CASI), where he oversees research on Chinese military aerospace forces and the Chinese civilian aerospace sector as it relates to the military. He earned his Master of Arts degree from The George Washington University's Elliott School of International Affairs.

The rising risk of conflict between China and India

https://www.washingtonexaminer.com/opinion/the-rising-risk-of-conflict-between-china-and-india?utm_source=deployer&utm_medium=email&utm_campaign=Beltway+Confidential&utm_term=Website+Poll&utm_content=20200909141835 by Tom Rogan, Writer for the Washington Examiner // September 09, 2020 09:58 AM

Tensions between China and India continue to boil over along the two nations' contested "line of control" border. Conflict between the nuclear powers is an increasing possibility.

Given the enveloping concerns over national pride, territorial interest, and <u>leadership credibility</u>, the ingredients for escalation are abundant. The conflict threatened to boil over back in June, when more than a dozen Indian soldiers <u>were killed in a melee</u> with their Chinese counterparts. Diplomats have sought to cool tensions since then, but they have not been successful.

Evincing as much, Beijing and New Delhi traded blame on Tuesday over an interaction by their respective forces in Jammu and Kashmir's eastern border region. India claims that Chinese People's Liberation Army forces attempted to intimidate an Indian patrol into retreating. When the Indian Army refused to move, Chinese forces apparently fired into the air. Conversely, China says the Indian patrol fired into the air with a "very vile nature." Both sides deny firing. But irrespective of responsibility, any exchange of gunfire would be the first time in 45 years.

So, what's going on? Why can't the two sides sit down and forge a compromise over control of the sparsely populated area in question?

One complication is the PLA's deployment of its more aggressive officers into the contested border area. Resorting to regular screaming at their Indian counterparts, trust and corollary deconfliction channels are lacking. For the PLA, which is keen to earn Xi Jinping's continued favor, the showdown with India is a crucial test of resolve and capability. Put simply, its officers are highly reluctant to appear being perceived as weak or unable to contest territory with the Indian military. The PLA is also motivated by propaganda narratives that present its role as the deliverer of a grand Chinese destiny.

At the specific military level, both sides are trying to undermine the other's effort to formalize conditions on the ground in their tactical favor. As the *Times of India* notes, Indian forces have recently consolidated their position in mountain observation posts, giving New Delhi strongholds with which to resist Chinese incursions and hold at risk any PLA formations which might attempt to move against Indian bases in the area. India has also bolstered the capabilities of its specialized XVII Corps. Consisting of 70,000 troops trained in mountain warfare, the Corps is designed to counter China's overmatching infantry, artillery, and armored formations.

Prime Minister Narendra Modi and President Xi Jinping have their own reasons not to back down. Both leaders situate their foreign policies in a vision of expansive influence and power around the world. But both leaders also rely on carefully constructed domestic narratives of nationalist prestige. To be seen to give in would be to risk jeopardizing their credibility.

Where does this leave us?

Ultimately, while a nuclear exchange remains very unlikely, the possibility of a conventional border conflict is growing.

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

BY JAMES R. HOLMES, OPINION CONTRIBUTOR — 09/10/20 10:30 AM EDT 64
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

The Pentagon's latest annual <u>report on Chinese military power</u> serves a reminder that the world has embarked on a second nuclear age, following the first one that began at Hiroshima and Nagasaki 75 years ago. The good news is that arms-control accords slashed the number of weapons built for the Cold War. The bad news is that the nuclear club now includes far more countries than before. New members come in many shapes and sizes, with varying economic and military potential. Some border one or more potential antagonists. Some newcomers are building up their <u>inventories</u> while old-timers from the first nuclear age cut back or hold them steady.

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

There is no guarantee atomic deterrence will hold in this brave new world.

That's why the China report makes for troubling reading. The report's authors forecast that the People's Liberation Army (PLA) will at least double its stockpile of nuclear arms over the coming decade. That means China's doomsday arsenal will expand from 200 warheads or thereabouts to 400 or more. The PLA is diversifying its inventory, for instance by <u>putting to sea</u> its first working class of nuclear-powered ballistic-missile submarines (SSBNs). These "boomers," as they're known colloquially in the U.S. Navy, constitute an invulnerable second-strike capability. That is, they can vanish into the depths and strike back at a foe with nuclear-tipped missiles even if China suffers a disarming first strike against its ground-based forces.

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

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

That would be a dramatic departure. China's leadership long contended itself with a "minimal deterrent" force composed of a few land-based ballistic missiles. It accepted a "<u>striking</u>" degree of vulnerability to superpower coercion while forswearing first use of nuclear arms. By contrast, a contender that embraces a launch-on-warning policy reserves the right to cut loose with nuclear counterstrikes before an incoming raid hits home. It refuses to take the first punch before retaliating.

A launch-on-warning posture raises a host of problems. It compresses the time available to frame and deliver a response. The potential for error is immense. Early-warning radars may give false indications of a strike. People may misinterpret the data under extreme stress. Worse, data are oftentimes ambiguous. Weapons are black boxes to outside observers. It's hard to tell from a blip on a radar scope whether a ballistic or cruise missile is tipped with a conventional or nuclear warhead. Furthermore, defense manufacturers have made a habit of designing weapons to carry either type of munition. Ambiguity only compounds the retaliatory dilemma. Small wonder launch-on-warning proved controversial among U.S. defense officials in the 1970s and 1980s, when they were debating the proper stance for releasing ground-based Minuteman ballistic missiles. Needless to say, the repercussions could be dire when two nuclear-armed adversaries that possess hard-to-decipher weapons and put themselves on hair-trigger alert square-off.

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

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

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

And relaxation would be an improvement.

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CONGRESSIONAL

By Susan Cornwell

Defense authorization bill delayed until after election

https://www.defensenews.com/congress/2020/09/09/no-defense-authorization-bill-before-election-says-thornberry/?utm_source=Sailthru&utm_medium=email&utm_campaign=Air%20Force%20DNR%209.10.20&utm_term=Editorial%20-%20Air%20Force%20-%20Daily%20News%20Roundup By: Joe Gould for Defense News // 1 day ago

WASHINGTON — A bipartisan compromise and vote on the 2021 defense policy bill isn't likely before the Nov. 3 elections, but it should come "quickly" thereafter, the House Armed Services Committee's top Republican said Wednesday.

The vote would delay a decision from Congress about whether the Defense Department to <u>rename military bases honoring Confederate leaders</u>. It's <u>defining issue</u> for the \$740.5 billion defense authorization bill, which includes must-pass provisions like military pay hikes, defense equipment purchase plans and strategic posturing of forces in coming years. "There are more negotiations that have to occur, and part of that negotiation is talking with the White House about the shape of that provision," Rep. Mac Thornberry, of Texas, said at the Defense News Conference.

"Is there a way to get everybody to 'good?' Of course there is. Is it likely to happen before the election? No, it's not." Republicans and Democrats in the House and Senate voted overwhelmingly to back language requiring the changes, though the House requires the names changed within one year and the Senate bill requires them within three years. President Donald Trump has threatened to veto the 2021 National Defense Authorization Act over the Confederate name changes among other issues.

Trump has said Senate Armed Services Chairman Jim Inhofe, R-Okla., personally assured him that Congress will not force the Pentagon to change the names. That's fueled speculation that bipartisan negotiations to reconcile the bills could drag on. The summer's sustained protests over racial injustice have buoyed the provision, while Trump has argued that changing the names would dishonor troops who have served at the sites and that Confederate symbols aren't racist. "We can't cancel our whole history," he told Fox News last month.

Thornberry, who had offered a softer alternative as a House amendment, said Wednesday that both sides have political incentives not to compromise on the base renaming provision, among other issues. "I don't know how that will come out in conference, but I do think we are in a time when neither party is rewarded for compromise, and coming together and getting things done," he said. "On the other hand, I think we should be able to get a conference report pretty quickly after the election."

Five things to watch in talks on massive defense bill

https://thehill.com/policy/defense/515180-five-things-to-watch-in-talks-on-massive-defense-bill BY REBECCA KHEEL for THE HILL // 09/07/20 03:48 PM EDT

The House and Senate are expected to begin negotiations in earnest in the coming weeks on a massive defense policy bill <u>President Trump</u> has threatened to veto. Staffers on the House and Senate Armed Services committees have started unofficial talks since both chambers passed their versions of the \$740.5 billion National Defense Authorization Act (NDAA) in July, a congressional aide said.

But lawmakers have not yet officially formed a conference committee to reconcile the two bills. It's unclear exactly when Congress will vote to go to conference, but the aide said it typically happens about 45 days after each chamber passes its version of the NDAA. Last year's conference started in September after both chambers passed their versions in June and July. Trump has threatened to veto the NDAA over a provision — variations of which are in each bill — that would require the Pentagon to rename military bases named after Confederate leaders. Here are five issues to watch when the NDAA conference negotiations start.

Confederate base names

By far the issue that has attracted the most attention in this year's NDAA is whether to force the Pentagon to rename military bases and other Pentagon property that have Confederate monikers. The Senate's version of the bill would require bases to be renamed in three years, while the House version of the bill would force the change in one year. The issue is most prominent in the Army, which has 10 bases named after Confederate military officers.

The fight to change the names gained momentum after this summer's widespread protests against racial injustice, and Pentagon leaders said they would be open to renaming the Army bases. Proponents of changing the base names argue traitors who fought to preserve slavery should not be honored with a namesake military base and that the names demoralize Black service members. But the provisions attracted a Trump veto threat, with the White House arguing the bill is "part of a sustained effort to erase from the history of the nation those who do not meet an ever-shifting standard of conduct."

Senate Armed Services Committee Chairman <u>James Inhofe</u> (R-Okla.) has assured Trump the provision won't be in the final version of the bill. But it's unclear how he hopes to remove it after it received bipartisan support in both chambers of Congress.

The Insurrection Act

This summer's protests also thrust the 1807 Insurrection Act into the forefront of national debate. Trump first threatened to invoke the law in June in order to send active-duty troops into cities to quell protests. He alluded to the possibility again in late August, though the White House said days later he does not want to invoke the Insurrection Act. After Trump's earlier threats, the House voted to include in its version of the NDAA an amendment that aims to curtail a president's powers under the Insurrection Act.

Among other changes, the House amendment would require the president and Defense secretary to make a certification to Congress that a state is unwilling or unable to suppress an insurrection in order to invoke the law. The certification would have to include "demonstrable" evidence that a state is unwilling or unable to act. The Senate's version of the bill includes a provision that would block Pentagon funding and personnel from being used against peaceful protesters.

But the Senate Armed Services Committee also rejected along party lines an amendment that would have curtailed Insurrection Act powers. The Senate amendment went further than the amendment the House approved, but Republicans' opposition to any Insurrection Act changes sets up a likely clash for the conference committee.

Nuclear weapons tests

The possibility of the United States conducting its first explosive nuclear test in decades became a flashpoint after reports that the Trump administration raised the possibility of doing a test as a negotiating tactic in arms talks. The administration is seeking a new arms control agreement with Russia and China to replace the expiring New START treaty between Washington and Moscow. Beijing has repeatedly rejected joining the talks.

The Senate's version of the NDAA includes \$10 million to "carry out projects related to reducing the time required to execute a nuclear test if necessary." The House's version of the bill, though, would prohibit funding from being used "to conduct or make preparations for any explosive nuclear weapons test that produces any yield." Opponents of the House language argue it is too restrictive, preventing any tests that might be necessary in an emergency and thereby emboldening U.S. enemies. But opponents of resuming nuclear testing argue doing so would trigger an arms race and be detrimental to human health and the environment while providing no practical benefit because the safety and reliability of the U.S. nuclear arsenal is checked with other technology.

U.S. troops in Germany and Afghanistan

The House version of the NDAA includes provisions that would put up roadblocks to Trump's plans to withdraw thousands of U.S. troops from Germany, as well as from Afghanistan. The bill would require several certifications be made before the Trump administration can proceed with plans to pull nearly 12,000 U.S. troops from Germany. It would also require certifications before the United States can go below 8,000 troops in Afghanistan and then again before any drawdown below 4,000 troops.

There are about 8,600 troops in Afghanistan now, with administration officials saying they plan to be at about 5,000 by Election Day. The Senate's version includes language warning against a "precipitous" withdrawal in Afghanistan, but does not have any provisions matching the House's requirement for certifications before drawing down in Afghanistan or Germany. There is bipartisan opposition to both drawdowns in both chambers of Congress.

But Trump has gained a key supporter in the Senate for his Germany withdrawal that could make negotiations more difficult for that language, at least. Inhofe said in July he thinks the Germany plan does "a good job of following the guiding principles I've described as the 'three Fs'— forward presence, force projection and families."

The border wall

The president's wall along the U.S.-Mexico border has become a perennial fight for major legislation during the Trump era. Negotiations over last year's NDAA dragged on in part over provisions in the initial House version that would have blocked Pentagon funding from being used for the wall and restricted the department's ability to transfer funding between accounts after it moved around billions of dollars to use on the wall.

The language was jettisoned from the final version of the bill signed into law last year, and this year's House version does not include similar provisions. But there are still some wall-related provisions in the House bill that could trip up negotiations. Specifically, the House NDAA would create caps on emergency use of military construction funding, setting them at \$100 million for domestic projects and \$500 million for overseas projects. Trump has used \$3.6 billion in military construction funding for the wall since he declared a national emergency.

House Democrats argue the numbers in their bill are above what was needed even during the height of the Iraq and Afghanistan wars. But the Trump administration in its objections to the bill argued the limits would "greatly restrict" the military's ability to respond to an emergency or war, saying in a July statement that "these arbitrary limits increase risks to the Armed Forces and the national security of the United States."

A New START Withdrawal Will Not Cost Half a Trillion Dollars

.By Michaela DodgeSeptember 09, 2020

Responding to a request from the top Democrats on the House and Senate Armed Services Committees, the Congressional Budget Office (CBO) last week reported the cost of a New Strategic Arms Reduction Treaty (New START) withdrawal could be anywhere from zero to half a trillion dollars. Sen. Bob Menendez, D-N.J., and Rep Adam Smith, D-Wash., are now using the CBO's worst-case estimate to argue that New START withdrawal will cost the U.S. hundreds of billions of dollars.

Even if that half-trillion-dollar price tag were accurate (and, remember, \$0 is just as likely), the notion that we should stay in this treaty for "cost-savings" is as flawed as the treaty itself.

Decisions about the size, makeup, and positioning of America's nuclear force must be guided by geopolitical developments more than the existence of arms control agreements—especially when the other party is developing a whole suite of nuclear capabilities outside of the New START framework.

Moreover, arms control agreements reflect the state of political relations among countries at the time those deals are reached. And relations between Russia and the U.S. are far tenser now than when New START was signed a decade ago. That tension is due entirely to Russia's increasing revanchism and belligerence.

New START reflects the 2010 Nuclear Posture Review premise that Russia was no longer an adversary and the potential for conflict was low. This faulty appraisal was foundational to the Obama administration's "reset" policy, a placating approach to the Russian Federation that emboldened Moscow to annex Crimea and launch a "civil war" in Ukraine.

One wonders what the CBO would estimate to be the cost the U.S. has paid for this "reset," an entirely misguided approach to foreign relations with a belligerent adversary.

Menendez and Smith argue that absent New START's "confidence and transparency measures," countries will be compelled "to increase their arsenals to hedge against that uncertainty, which could, in turn, lead to an arms race like the one we experienced during the Cold War." But New START's verification provisions are weak, and the treaty's central warhead limit cannot be effectively verified. New START's "transparency" is not even close to what it is touted to be.

Making matters worse, Russia, a serial arms control violator, is developing a whole host of nuclear weapon capabilities not addressed by the treaty. Those new weapons will most definitely generate new instability in the strategic relationship.

Meanwhile, unlike its adversaries, the U.S. has not deployed a single new nuclear warhead design since the end of the Cold War, and its nuclear delivery systems are old. Unless the U.S. wants to disarm by attrition—an incredibly dangerous proposition in the current environment—it must modernize its last-generation systems.

While the CBO argues that the U.S. and Russia "could take various actions to compensate for the lack of treaty limits, perhaps to address a real or perceived buildup of forces by the other party," the decision on whether or not to extend New START will not be even a marginal consideration in either country's force posture decisions. Such changes take years to implement, and a five-year extension will only delay the serious questions of what to do next in a seemingly exhausted arms control process.

New START is slated to expire on Feb. 5. If it does not get extended, this doesn't mean that there will be no arms control agreement ever. And even with a new agreement, the United States might still choose to change its strategic posture in accordance with future geopolitical developments on which New START has no bearing at all.

Dr. Michaela Dodge is a visiting research fellow at the Heritage Foundation.

Feinstein, Paul, Van Hollen, Collins to Trump: Extend New START

Sep 08 2020

Washington—Senators Dianne Feinstein (D-Calif.), Rand Paul (R-Ky.), Chris Van Hollen (D-Md.) and Susan Collins (R-Maine) today sent a <u>letter</u> calling on President Donald Trump to immediately extend the New START arms control agreement with Russia for another five years. The treaty is set to expire in February 2021 if no action is taken to extend or replace it.

"Allowing New START to expire in February would have a dangerous and destabilizing effect. Losing New START's extensive and effective verification regime would create greater uncertainties about Russia's current and future nuclear plans, intentions, and capabilities. As transparency between our mutual nuclear force structures decreases, it could undermine fundamental prerequisites of mutual deterrence and increase the risks of nuclear crises similar to those we experienced during the Cold War, like the Cuban Missile Crisis," wrote the senators.

"Therefore, Mr. President, we urge you to use your authority to extend New START for five years and prevent us from returning to an era of destabilizing nuclear competition."

Full text of the letter below.

September 8, 2020

The Honorable Donald J. Trump President of the United States The White House 1600 Pennsylvania Avenue, N.W. Washington, D.C. 20500

Dear Mr. President,

We write to urge you to immediately extend our New START arms control agreement with Russia for another five years. We believe that New START, as our last remaining bilateral nuclear arms control treaty with Russia, is pivotal to reducing the chances of nuclear confrontation, and ending it now would be detrimental to our national security.

Allowing New START to expire in February would have a dangerous and destabilizing effect. Losing New START's extensive and effective verification regime would create greater uncertainties about Russia's current and future nuclear plans, intentions, and capabilities. As transparency between our mutual nuclear force structures decreases, it could undermine fundamental prerequisites of mutual deterrence and increase the risks of nuclear crises similar to those we experienced during the Cold War, like the Cuban Missile Crisis.

We agree with many of the concerns expressed by administration officials that the current treaty should be improved. For example, eventually including China into nuclear arms control talks and agreements is a worthy goal, as is the inclusion of shorter-range, nonstrategic nuclear weapons.

However, extending the current treaty would cap current Russian strategic forces until at least 2026, which would provide greater predictability and transparency as we begin to replace our own aging nuclear weapons systems. It would also allow us to continue verifying Russia's adherence to the treaty's terms and provide unique and valuable intelligence on the size, capabilities, location, and operation of Russia's strategic forces. The agreement's expiration could also lead to an expensive and ultimately unnecessary expansion in U.S. nuclear forces if we lose the important insights it provides, in addition to increased nuclear spending by other nations.

At this juncture it is unlikely significant changes to the New START treaty could be successfully negotiated, nor a new treaty ratified in the Senate, prior to the lapse of the current agreement. The best course of action would be for the United States to extend the current treaty, allowing time to negotiate with Russia, as well as China, on the contours of a new agreement. Some other justifiable concerns, such as the application of New START to new types of Russian strategic weapons, could be discussed through the treaty's existing Bilateral Consultative Commission.

Therefore, Mr. President, we urge you to use your authority to extend New START for five years and prevent us from returning to an era of destabilizing nuclear competition.

Sincerely,

Dianne Feinstein United States Senator

Rand Paul, M.D. United States Senator

Chris Van Hollen United States Senator

Susan M. Collins United States Senator

Thornberry Expects NDAA Conference Report After Election

Air Force Magazine | Sept. 9, 2020 | By Brian W. Everstine

The House and Senate fiscal 2021 National Defense Authorization Act conference report is not likely to come together until after November's election, once intense political rivalries subside, the House Armed Services Committee's ranking member said.

Rep. Mac Thornberry (R-Texas) told the Defense News Conference on Sept. 9 that even though the House version was unanimously passed in committee and received a "strong" vote on the floor, its differences will not be worked out for months because of "the times we are living in." Thornberry pointed to the provision in the House bill and Senate bills that would require the Pentagon to rename bases that bear the names of Confederate leaders, a measure President Donald J. Trump has said he would veto, and one Thornberry acknowledged comes with highly partisan emotions.

"I don't know how that will come out in conference, but I do think we are in a time where neither party is rewarded for compromise and coming together and getting things done," Thornberry said. "Both sides have incentives to kind of stake out your positions and go to battle. And so, it's not just one provision I think that prevents us from getting a conference report, it's the times that we are living in. On the other hand, we should be able to get a conference report pretty quickly after the election."

One of the other provisions that differs between each chamber's bills is the creation of a new funding initiative aimed at the Pacific. The House's version includes about \$3.6 billion for its Indo-Pacific Reassurance Initiative, while the Senate proposes \$6 billion for a Pacific Deterrence Initiative. The proposals are different in scope and levels of funding, but Thornberry said the important point now is that both lawmakers and Pentagon leaders see the importance of building up the presence in the region.

Defense Secretary Mark T. Esper now "supports a version [of the Pacific funding initiative], he was reluctant for a while, so we'll work out the details," Thornberry said. "The key thing is that if the Indo-Pacific is our priority theater, we need to put our money where our mouth is."

As the Pentagon shifts its eyes more to the Indo-Pacific, it has announced measures to draw down some forces in Europe following Trump's pronouncements that the U.S. military will withdraw troops from Germany. Thornberry said he and other members of the Armed Services Committee have questions about how this was rolled out, because "the way it was announced sounded like a personal kind of retribution."

The White House announced the moves in July, saying Germany was "delinquent" and not spending enough to keep U.S. forces in the country. There can be a discussion about moving forces out of Germany and repositioning them to other regions, Thornberry said—"Yeah, you can make that case, but it needs to be made on a strategic basis in consultation, not some announcement by some unnamed White House staffer that looks to be a personal sort of issue."

13 billion contract awarded to Northrop Grumman reignites triad debate

Daily on Defense Newsletter (Washington Examiner), Sept. 9 | Jamie McIntyre

NORTHROP GRUMMAN TO BUILD NEW ICBM: As Pentagon contracts go, this is a big one. The Air Force has picked Northrop Grumman to be the lead contractor to develop a new intercontinental ballistic missile to replace the aging Minuteman III by 2029, part of an ambitious plan to upgrade and modernize all three legs of America's nuclear triad.

The \$13 billion contract is for the engineering and manufacturing development phase of what's been dubbed the Ground Based Strategic Deterrent program, or GBSD. The decadeslong program is estimated to be worth at least \$85 billion over its life and will involve hundreds of companies, including Aerojet Rocketdyne, Bechtel, Clark Construction, Collins Aerospace, General Dynamics, HDT Global, Honeywell, Kratos Defense and Security Solutions, L3Harris, Lockheed Martin, Textron Systems — essentially every major U.S. defense contractor except Boeing.

BIPARTISAN SUPPORT, FOR NOW: The \$1.2 billion plan to rebuild the Cold War-era nuclear triad, which consists of land-based ICBMs, bombers, and submarines, enjoys bipartisan support in Congress and is fully funded in both the House and Senate versions of the National Defense Authorization Act.

But the land-based leg, which consists of some 400 ICBMs in silos spread across five western states, has long been in the crosshairs of arms control advocates, who argue that having three different ways to wage nuclear war is expensive overkill.

"Our nation faces major security challenges, including a global pandemic that has killed almost 200,000 Americans, and we shouldn't spend our limited resources on new nuclear weapons that we don't need and make us less safe," said former Secretary of Defense William Perry, who has written a book, The Button, with fellow arms control advocate Tom Collina.

"The highest probability of starting a nuclear war is a mistaken launch caused by a false alarm and a rushed decision to launch nuclear-armed ICBMs," Perry argues. "Instead of spending billions of dollars on new nuclear missiles we don't need, we must focus on preventing accidental nuclear war."

SMITH VERSUS THORNBERRY: The future of U.S. nuclear deterrence policy, and the fate of the triad, may rest on a fundamental divide exemplified by the thinking of Rep. Adam Smith, the Democratic chairman of the House Armed Services Committee, and his Republican counterpart, ranking Republican Rep. Mac Thornberry, according to Robert Soofer, deputy assistant secretary of defense for nuclear and missile defense policy.

At a forum sponsored by the Air Force Association's Mitchell Institute last week, Soofer said the two House members represent the basic schools of thought on nuclear deterrence, which he called "simple and complex."

Smith, he argued, falls into the first category, believing that deterrence can be achieved with a smaller number of nuclear weapons, while Thornberry believes that deterring Russia requires a more complex set of options.

For Smith, "nuclear deterrence and strategic stability are derived from mutual vulnerability and that for deterrence to be effective, one must make nuclear use as abhorrent as possible." For Thornberry, "deterrence threats to be credible must take into account the views and capabilities of the adversary. And he sees a Russia that is expanding its tactical nuclear weapons capabilities, exercising a doctrine for limited first use, and is upon occasion threatening our allies with nuclear strike."

ELECTIONS HAVE CONSEQUENCES: Soofer does not anticipate any change in America's commitment to the three-legged triad unless there is a significant shift in Congress after the November election, especially as the cost of modernization goes up.

"There's more opportunity for those that take a more simple approach to deterrence, as opposed to complex, to argue, 'Well, we can't afford this. We don't need the ICBM leg, you know, we're going to modernize. ... Let's take care of the submarine first, maybe do the bomber, and then push the ground-based system out to the side."

"I don't foresee that occurring under a Trump administration over the next four years, but if there were to be a new administration, depending on who is appointed in a position of authority to make these decisions, you may have these types of discussions," Soofer said.

--Jamie McIntyre is a national security senior writer for the Washington Examiner

REP. TITUS, HOUSE COLLEAGUES CALL FOR BAN ON EXPLOSIVE NUCLEAR TESTING IN FINAL NDAA

Press Release September 10, 2020

Washington, D.C. – Today Representative Dina Titus of Nevada's First Congressional District led an effort with 35 of her House colleagues to call for a ban on explosive nuclear weapons testing in the finalized Fiscal Year 2021 National Defense Authorization Act. The House of Representatives passed the FY 2021 NDAA by a veto-proof majority with <u>language authored by Congresswoman Titus</u> to prevent the Trump Administration from 56

conducting an explosive nuclear weapons test. The Senate version of the NDAA makes at least \$10 million available for the United States to conduct an explosive nuclear weapons test.

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

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

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

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

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

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

AROUND THE WORLD



US Senators Call on Trump to Extend New START Treaty

Sputnik News (Russia), Sept. 8 | Not Attributed

WASHINGTON -- Four Democratic and Republican Senators on Tuesday sent a letter to President Donald Trump urging him to extend the New Strategic Arms Reduction Treaty (New START) that is set to expire early next year.

"We write to urge you to immediately extend our New START arms control agreement with Russia for another five years," Senators Dianne Feinstein, Rand Paul, Chris Van Hollen and Susan Collins said in the letter.

The senators said the New START has pivotal importance in reducing the chances of nuclear confrontation between the United States and Russia.

They warned about the dangerous and destabilizing effect if the treaty is allowed to expire as it remains the last existing arms control agreement between the two countries.

"Losing New START's extensive and effective verification regime would create greater uncertainties about Russia's current and future nuclear plans, intentions and capabilities," the senators said. "As transparency between our mutual nuclear force structures decreases, it could undermine fundamental prerequisites of mutual deterrence and increase the risks of nuclear crises similar to those we experienced during the Cold War, like the Cuban Missile Crisis."

The New START will expires on 5 February if it is not extended. Russian President Vladimir Putin previously proposed extending the treaty for five years without any preconditions.

However, the Trump administration has emphasized the need to include China in the arms control negotiations so as a new trilateral nuclear deal can be reached. China has repeatedly rejected the idea.

Russian Embassy Proposes Constructive Dialogue on Arms Control to Pentagon – Ambassador

Sputnik News (Russia), Sept. 5 | Not Attributed

WASHINGTON – The Russian Embassy in the United States proposes a constructive face-to-face dialogue on the strategic stability and arms control to the Pentagon, Russian Ambassador to the US Anatoly Antonov told Sputnik.

Several days ago, US Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy Robert Soofer said that Russia was initiating an arms race in the sphere of non-strategic weapons. Antonov believes that these accusations are aimed at lowering the barrier of using nuclear weapons by the United States.

"We would be ready to accept Mr. Soofer to have a discussion in the Embassy or meet him at any other US platform comfortable for him. This would be a good demonstration of our responsive approach to maintaining the strategic stability and arms control," Antonov said.

He stressed that the deployment of low-yield nuclear warheads by the United States – not Russian moves – were destabilizing the global system of nuclear deterrence. He cited the deployment of W76-2 low-yield nuclear warheads to Trident II submarines as an example.

The ambassador said that the Pentagon should read the Russian document on nuclear deterrence published on June 2.

"The document reaffirms the exclusively defensive nature of our nuclear policy as well as contains clear conditions for the possible shift to using nuclear weapons," Antonov said.

According to the ambassador, the constructive dialogue between Russia and the United States was launched in June-August with meetings between Russian Deputy Foreign Minister Sergey Ryabkov and US Special Envoy for Arms Control Marshall Billingslea.

Irkutsk missile division fully reequipped with Yars missile systems

Interfax (Russia), Sept. 9 | Not Attributed

MOSCOW -- The Irkutsk missile division has been fully reequipped with new Yars intercontinental ballistic missile systems, the Russian Defense Ministry information department said.

"The delegation of the Russian Defense Ministry's Public Council went on a working visit to the Irkutsk missile division, which is the easternmost combined-arms formation of the Russian Strategic Missile Forces (RVSN). This combined-arms formation is fully reequipped with Yars mobile missile systems," the department said.

The council members had a meeting with the command and servicemen of the division and familiarized themselves with the living conditions of the personnel and with military service, the statement said.

"The Public Council's activities in RVSN's military units are aimed at studying military service conditions of servicemen, the specifics of combat duty, and the most significant social issues and are scheduled," the statement said.

Two RVSN regiments are expected to be reequipped with Yars missile systems in 2020, head of the RVSN combat training department Viktor Fotyuk said in May.

Ryabkov Discussed Strategic Stability With Italian Ambassador – Russian Foreign Ministry

Sputnik News (Russia), Sept. 9 | Not Attributed

MOSCOW -- Russian Deputy Foreign Minister Sergey Ryabkov has discussed the issues of strategic stability and arms control with Italian Ambassador to Russia Pasquale Terracciano, the Russian Foreign Ministry said.

The negotiations were held in Moscow on Wednesday.

"During the conversation, the parties discussed the situation around the strategic stability and arms control," the Foreign Ministry said in a statement.

The strategic stability and arms control issues are currently topical due to the upcoming expiration of the New Strategic Arms Reduction Treaty (New START) agreement between the United States and Russia in February. The talks on possible prolongation of the treaty are underway, but no deal has been reached so far.

PLA to join Russian strategic drills, highlighting bilateral military ties

Global Times Online (China), Sept. 10 | Liu Xuanzun

China will participate in the Kavkaz-2020 strategic military drills to be held later this month in Russia, with troops attached to the Chinese People's Liberation Army (PLA) Western Theater Command joining militaries from Russia and other participating countries in elimination, joint strike and battlefield control exercises, the Chinese Defense Ministry announced on Thursday.

The PLA's participation in the drills highlights the military ties between China and Russia, Chinese experts said on Thursday, as China has had frequent interactions with the Russian military in recent years, including in multiple large-scale drills, a joint strategic bomber patrol, and Russian military parades.

India, which also has close military ties with Russia, has withdrawn from the upcoming drills amid border tensions with China, a move that showed its childishness, experts said.

According to the consensus reached by China and Russia, the Chinese military will send troops to Russia's Astrakhan Region and participate in the Kavkaz-2020 strategic military drills from September 21 to 26, said a statement released by China's Ministry of National Defense on Thursday.

The Chinese forces will mainly consist of troops from the PLA Western Theater Command, which will carry wheeled equipment and light arms and arrive in Russia via China's latest transport aircraft, the Defense Ministry said.

They will join exercises including mobilized defensive elimination, joint live-fire strike, multidimensional assault elimination and battlefield situation control, and militaries from countries including Armenia, Belarus, Iran, Myanmar and Pakistan will also participate, the statement said.

At a crucial time when the whole world is fighting the COVID-19 pandemic together, China's participation in the Russian drills aims to further develop the two countries' comprehensive strategic partnership of coordination for a new era, deepen the pragmatic cooperation in the two militaries' training, and boost the capability of the participating countries' troops in jointly dealing with security threats and safeguarding regional peace and stability, the Chinese Defense Ministry said.

The Kavkaz-2020 will be Russia's largest training event this year, the Xinhua News Agency reported on Tuesday, citing the Russian Defense Ministry.

Beijing-based military expert Li Jie told the Global Times on Thursday that China's participation in the Russian drills will highlight not only diplomatic, but also strategic cooperation between the two countries.

China and Russia have had several military interactions in various forms in recent years including various drills and the International Army Games organized by Russia, Li said, noting that the two countries will continue to enhance their strategic military cooperation.

China has joined Russia's large-scale strategic drills, the Tsentr-2019 and Vostok-2018, in the past two years. In July 2019, China and Russia conducted their first joint strategic patrol in Northeast Asia, with the Chinese side dispatching two H-6K bombers and the Russian side dispatching two Tu-95 bombers. In November and December 2019, the two countries also conducted naval drills in South Africa and the Gulf of Oman with South Africa and Iran respectively. In June, PLA honor guards participated in Russia's Victory Day military parade in Moscow's Red Square.

India has decided not to take part in the Kavkaz-2020 drills due to "COVID-19 and consequent difficulties in the exercise," Indian news outlet NDTV reported on August 30.

Quoting sources in the Indian Defense Ministry, India's news agency ANI said China's participation was a reason India had pulled out of the Russian drills amid border tensions.

Li said that India showed its childishness in quitting because of China, and that it feared China's presence could eclipse its role, adding that India is narrow-minded and always seeks to prevail over others.

The Kavkaz-2020 drills are not aimed at any third party, and are not related to the regional situation, according to the Chinese Defense Ministry statement.



China's New H-20 And JH-XX Stealth Bombers Were Made To Fight Different Wars

https://nationalinterest.org/blog/reboot/chinas-new-h-20-and-jh-xx-stealth-bombers-were-made-fight-different-wars-168315
Why would PLA even order two types of stealth bombers?
by Sebastien Roblin for the National Interest // September 3, 2020

Here's What You Need To Remember: Unlike the H-20, the JH-XX's high speed would make it viable for carrying air-to-air missiles, not only for self-defense, but for hit-and-run attacks on vulnerable support planes, or to rapidly intercept incoming bombers.

While the JH-XX likely wouldn't be optimized for short-range aerial dogfights against highly maneuverable fighters, its stealth, speed and large payload could still make it a deadly delivery platform for beyond-visual range air-to-air missiles. In January 2018, two sentences in an annual report by the DIA on Chinese military power sent a minor shockwave rippling across the defense-related internet:

"The PLAAF is developing new medium- and long-range stealth bombers to strike regional and global targets. Stealth technology continues to play a key role in the development of these new bombers, which probably will reach initial operational capability no sooner than 2025." Bombers, plural. In a separate chart, an un-designated next-generation "Tactical Bomber" is listed, denoted as being equipped with a high-resolution Active Electronically Scanned Array radar, precision-guided bombs and long-range air-to-air missiles.

In the last few years, China's development of what appears to be a subsonic long-range heavy <u>strategic bomber</u> called the H-20 has become increasingly evident—especially in 2018, when the Chinese government began <u>teasing</u> a public unveiling to take place in 2019. The flying wing bomber, which apparently resembles the U.S. B-2 Spirit in form and function, is to be produced by Xi'an Aircraft Corporation, which already manufactures older H-6 strategic bombers and the chubby Y-20 transport plane.

However, the stealth "tactical" or "medium" bomber was news—sort of. The fighter-bomber in question is believed to refer to the JH-XX, a rival stealth bomber concept proposed by Shenyang Aircraft Corporation believed to have been passed over in favor of the longer-range H-20. Shenyang is better known for producing fighters, including <u>Chinese derivatives</u> of the Russian Flanker jet and a J-31 stealth fighter which may be exported or serve on Chinese aircraft carriers.

The first <u>image</u> of this JH-XX concept was leaked at a convention in 2013. Then in May 2018, the prestigious Chinese magazine Aviation Knowledge flashed concept art on its cover of a futuristic-looking stealth jet measuring roughly thirty meters in length, with two huge turbofan engines atop the rear fuselage, canted tail-stabilizers near identical to Northrop's YF-23 Black Widow <u>stealth prototype</u>, a big bomb bay in the belly and side weapon-bays for carrying long-range air-to-air missiles.

This image has since inspired model kits and online fan-art. (One should bear in mind that speculative artwork of the "F-19 stealth fighter" in the 1980s ended up bearing little resemblance to the actual F-117 stealth jet.) It's not clear why the DIA believes the JH-XX is actively under development. Rick Joe of The Diplomat, who has written arguably the most detailed English-language profile of the JH-XX prior to the DIA report, expressed his skepticism in a series of tweets:

"Regarding the DIA report 'confirming' a PLA stealthy medium bomber; the info hasn't changed since last year when I wrote this piece: 'To the best of our knowledge the JH-XX does not seem to be actively pursued..." "Now, maybe the DIA report was based on classified intel the public is not privy to, but from the quality of the rest of the report I doubt it," he said in a separate tweet. "Chances are they relied on some open source/public articles about JH-XX and interpreted them a bit over zealously."

Thus, it may be prudent to wait for further evidence to emerge before taking the JH-XX's active development as a given. Why would PLA even order two types of stealth bombers? Effectively, the JH-XX would represent a different set of design compromises. The H-20 trades speed in exchange for greater payload, range and stealth. The 'game plan' is for such a bomber is to penetrate enemy airspace without being detected at all, as it doesn't have the agility to evade enemy fighters or missiles.

It's projected range of five thousand miles would allow it strike targets across the Pacific, especially if combined with aerial refueling and long-range missiles. The JH-XX would likely have shorter range (900-1500 miles) and a smaller payload than the H-20, but would be much faster at speeds up to twice the speed of sound. (Note, however, that friction generate at Mach 2 may erode the expensive coatings of radar-absorbent materials on stealth aircraft.)

Thus, while an JH-XX might eventually be detected as it sprints towards its target, the combination of speed and reduced detection range would theoretically give interceptors and air defenses too little time to react. Overall, the H-20's long range and heavier payload is more useful to the PLA. However, the JH-XX would bring a different mix of capabilities and might be better for penetrating certain very dense air-defense networks where evading detection may not be possible even for a stealthy H-20.

The United States and the Australian Air Force formerly operated supersonic <u>F-111 Aardvark</u> regional bombers that had a similar mission profile, though lacking in stealth characteristics. Furthermore, in the early 2000s, the Pentagon considered procuring <u>bomber variants of the Raptor stealth</u> <u>fighter</u> and the <u>YF-23</u> before passing on that idea in favor of the B-21 Raider strategic stealth bomber. In fact, Tyler Rogoway and Joseph Trevithick at The Drive <u>speculate</u> that the JH-XX concept may have been informed in part by technical documents possibly acquired by Chinese hackers for these aircraft.

Unlike the H-20, the JH-XX's high speed would make it viable for carrying air-to-air missiles, not only for self-defense, but for hit-and-run attacks on vulnerable support planes, or to rapidly intercept incoming bombers. While the JH-XX likely wouldn't be optimized for short-range aerial dogfights against highly maneuverable fighters, its stealth, speed and large payload could still make it a deadly delivery platform for beyond-visual range air-to-air missiles.

One last intriguing application of the JH-XX concept could be naval strike. The PLA Naval Air Force currently operates 250 JH-7 'Flying Leopard' supersonic naval strike bomber. These non-stealthy planes depend on long-range anti-ship missiles and electronic warfare to overcome the formidable air defenses of modern surface warships. A stealth fighter bomber could conceivably get much closer to, say, an opposing carrier-task force, before being detected—giving the targeted vessels a much smaller window to engage their defenses.

Of course, stealth capabilities might also make the JH-XX an especially survivable electronic warfare and spy plane in its own right. Naval analyst Robert Farley has <u>speculated</u> that the JH-XX might even be intended for carrier deployment. If the JH-XX is truly under active development, then additional rumors and photos may eventually surface. Until then, the supersonic stealth-bomber's development status must come with an asterisk, even if that won't dissuade model-makers and defense writers alike from speculation.

Sébastien Roblin holds a master's degree in conflict resolution from Georgetown University and served as a university instructor for the Peace Corps in China. He has also worked in education, editing, and refugee resettlement in France and the United States.

China's aggressive submarine buildup

https://www.washingtontimes.com/news/2020/sep/2/inside-the-ring-chinas-aggressive-submarine-buildu/
Submarine modernization remains a high priority within the overall nuclear and conventional forces build-up that has been under way in China for the past four decades.
By Bill Gertz - The Washington Times - Wednesday, September 2, 2020

The People's Liberation Army Navy (PLAN) is continuing an aggressive build-up of its nuclear submarine forces, according to the Pentagon's latest annual report on Chinese military power.

According to the report, made public Tuesday, submarine modernization remains a high priority within the overall nuclear and conventional forces build-up that has been underway for the past four decades. Beijing is adding two more ballistic missile submarines to its current force of four Jinclass "boomers," as missile submarines are called. Six nuclear-powered attack submarines have also been built to complement 50 diesel power attack submarines.

"The PLAN will likely maintain between 65 and 70 submarines through the 2020s, replacing older units with more capable units on a near one-to-one basis," the report said. The Chinese navy also is building new conventional submarines that will be armed with advanced anti-ship cruise missiles. Since the mid-1990s, China purchased 12 Russian-made Kilo submarines armed with anti-ship cruise missiles and produced domestically 13 Song-class and 17 Yuan-class submarines.

The Yuan uses a diesel-electric engine and is equipped with air independent propulsion — a system that allows for stealthier operations without surfacing. A total of 25 more Yuan submarines are being built in the next five years. Nuclear missile submarine forces include 12 submarines built in the past 15 years — two Shang I class and four Shang II class boats and the six Jin-class submarines, two of which were awaiting entry into service in 2019.

"Equipped with the [JL-2] submarine-launched ballistic missile (SLBM), the PLAN's four operational Jin-class [submarines] represent the PRC's first credible sea-based nuclear deterrent," the report said. But that's not all. A new missile submarine is under development, known as the Type 096.

Construction on that submarine is expected to begin in the next few years and will be outfitted with a new submarine-launched ballistic missile that was not identified in the report but is believed to be the JL-3.

Both types of missile submarines will operate together and by 2030 the Pentagon estimates the PLAN will have up to eight missile submarines. "This would align with [Chinese President Xi Jinping's] 2018 directive for the SSBN force to achieve 'stronger growth,'" the report said, using the naval code for missile submarines. The Pentagon has not said whether China's nuclear missile submarines have conducted at-sea patrols with nuclear-tipped missiles. Beijing in the past separated nuclear warheads from all its strategic missiles.

Chad Sbragia, U.S. deputy assistant defense secretary for China, declined to comment on whether China's Jin-class ballistic missile submarines are conducting armed patrols. "Certainly the Jin is a submarine that does goes to sea from time to time," Mr. Sbragia said at a forum hosted by the American Enterprise Institute. "And what their capacities are and how they're loaded out and what their readiness is just not something I can dive into too deeply."

A nuclear submarine patrol without warheads would not be a real deterrent, analysts say. By the mid-decade, China also will have a new guided missile nuclear-powered attack submarine called the Type 093B, a variant of the Shang-class submarine. "This new Shang-class variant will enhance the PLAN's anti-surface warfare capability and could provide a clandestine land-attack option if equipped with land-attack cruise missiles," the report said. To counter U.S. submarine forces, the Chinese military is also bolstering its anti-submarine warfare capabilities with new warships and special mission aircraft.

PLA 'nonwar' operations

The PLA is engaged in two types of military operations — war and "nonwar" — activities that can involve the suppression of domestic unrest and the enforcement of maritime rights, according the latest China military power report from the Pentagon. Nonwar operations concepts have been discussed in Chinese military writings, and can also include humanitarian and disaster relief. The idea is that army's nonwar military activities serve political purposes for the ruling Chinese Communist Party.

These can include "the threat of violence or the use of violence from low levels to levels approaching war," the report said. These nonwar activities are used as strategic tools for the PLA military and are intended to serve Chinese interests and bolster Beijing's effort to expand global interests. Nonwar operations "can notably include operations in which the PLA uses coercive threats and/or violence below the level of armed conflict against states and other actors to safeguard the PRC's sovereignty and national interests," the report said.

The operations also blend military and law enforcement functions as part of China's efforts to take control over the disputed South China Sea, where China is claiming 90% of the waterway that the United States and other regional powers regards as open international waters. The Pentagon report said that the Chinese military is developing what President Xi Jinping calls an "informatized" military that will dominate all networks. "The PLA considers information operations (IO) as a means of achieving information dominance early in a conflict, and continues to expand the scope and frequency of IO in military exercises," the report said. "The PRC presents a significant, persistent cyber espionage and attack threat to an adversary's military and critical infrastructure systems."



North Korea satellite imagery 'suggests Kim is preparing submarine missile launch'

https://www.mirror.co.uk/news/world-news/north-korea-satellite-imagery-suggests-22632501

The Center for Strategic and International Studies said the activity was 'suggestive, but not conclusive, of preparations for an upcoming test of a Pukguksong-3 submarine launched ballistic missile' By: Chiara Fiorillo for the UK Mirror // 03:43, 5 SEP 2020

Kim Jong Un could be preparing the launch of a submarine ballistic missile, a US think tank has warned.

The Center for Strategic and International Studies said satellite images it published on its website of North Korea's Sinpo shipyard showed several vessels within a secure boat basin. It said one of the boats resembled vessels previously used to tow a submersible test stand barge out to sea. The think tank said the activity was "suggestive, but not conclusive, of preparations for an upcoming test of a Pukguksong-3 submarine launched ballistic missile from the submersible test stand barge."

The images also show some activity around the static test stand on the south side of the Sinpo South Shipyard. This has been seen in the past both for maintenance and prior to ejections tests. The images published on the website also show two ROMEO-class submarines (SS) anchored within the bay of the submarine base on Mayang-do. While one submarine is occasionally seen in the area, it is unusual that two are anchored there at the same time.

The think tank said the most likely reason for their presence is that they are exercising as part of the annual summer training cycle. However, they noted preparations for a forthcoming SLBM test should not be ruled out. North Korea said last October it had successfully test-fired a Pukguksong-3, a new submarine-launched ballistic missile (SLBM), from the sea as part of efforts to contain external threats and bolster self-defense.

That launch was seen by analysts as the most provocative by North Korea since it entered dialogue with the United States over its nuclear weapons and missile programs in 2018. North Korea has suspended long-range missile and nuclear tests since 2017, but efforts led by US President Donald Trump to persuade it to give up its nuclear and missile programs have achieved little. Trump is seeking re-election in November and a North Korean missile test before that would highlight the lack of progress despite Trump's unprecedented meetings with North Korean leader Kim Jong Un.

South Korea's military said the Pukguksong-3 tested last year flew 450 km (280 miles) and reached an altitude of 910 km (565 miles) and would have had a range of about 1,300 km (800 miles) on a standard trajectory. There are no visible indications in the imagery that the highly anticipated "newly built submarine" - North Korea's first true ballistic missile submarine - has been launched, according to the think tank.

North Korea issues shoot-to-kill orders to prevent virus – US

Agence France-Presse, Sept. 11 | Not Attributed

North Korean authorities have issued shoot-to-kill orders to prevent the coronavirus entering the country from China, according to the commander of US forces in the South.

The impoverished North -- whose crumbling health system would struggle to cope with a major virus outbreak -- has not confirmed a single case of the disease that has swept the world since first emerging in China, the North's key ally.

Pyongyang closed its border with China in January to try to prevent contamination, and in July state media said it had raised its state of emergency to the maximum level.

US Forces Korea (USFK) commander Robert Abrams said that the border shutdown had increased demand for smuggled goods, prompting authorities to intervene.

The North introduced a new "buffer zone, one or two kilometers up on the Chinese border," Abrams told an online conference organized by the Center for Strategic and International Studies (CSIS) in Washington on Thursday.

"They've got North Korean SOF (Special Operations Forces) out there. ... Strike forces, they've got shoot-to-kill orders in place."

The border closure had effectively "accelerated the effects" of economic sanctions imposed on the North over its nuclear programs, he added, with imports from China plunging 85 percent.

The isolated country is also grappling with the aftermath of Typhoon Maysak, with its state media reporting more than 2,000 houses have been destroyed or inundated.

As a result, Abrams did not expect to see any major provocations from Pyongyang in the near future, although he said it might show off a new weapons system at next month's celebrations of the 75th anniversary of the founding of Kim Jong Un's ruling party.

"The regime right now -- the military -- is focused principally on getting their country recovered and to help mitigate the risk of Covid-19," he said.

"We're not seeing any indications right now of any sort of lashing out."

But CSIS published on its website a satellite image of North Korea's Sinpo South naval shipyard, which its experts believe shows activity that could indicate preparations for a test of a submarine-launched ballistic missile.

A new North Korean missile test would be yet another sign of the lack of progress in denuclearization talks between the US and Pyongyang, which have been stalled despite multiple meetings between Kim and US President Donald Trump.

Trump, who is seeking reelection in November, was the first sitting US leader to meet a member of the Kim dynasty, which has ruled North Korea since its founding.

On Thursday, Trump tweeted, without further explanation: "Kim Jong Un is in good health. Never underestimate him!"



Iran Caught Stockpiling Enriched Uranium Needed for Bomb

https://freebeacon.com/national-security/iran-caught-stockpiling-enriched-uranium-needed-for-bomb/?utm_source=actengage&utm_campaign=FreedomMail&utm_medium=email Nuclear watchdog: Tehran 3.5 months away from weapon

By: Adam Kredo for the WFB // SEPTEMBER 4, 2020 8:00 PM

The United States has evidence that Iran is stockpiling enriched uranium, the key component in a nuclear weapon, in direct violation of international restrictions on Tehran's use of the fissile material.

Nuclear experts predict that Iran is now just 3.5 months away from the "breakout time," a measurement of how close the country is to having the technology and materials to construct a nuclear weapon. It also now has the fuel to potentially construct two separate bombs. The International Atomic Energy Agency (IAEA) disclosed on Friday that Iran has nearly doubled its stockpiles of enriched uranium, generating concerns about the country's continued progress on a nuclear weapon.

Iran granted the IAEA access to several contested nuclear sites that had previously been off limits. A report on Tehran's nuclear activities was shared with the United States and other United Nations members. It is just the latest attempt by Iran to breach restrictions written into the original nuclear agreement governing the amount of uranium it can enrich and keep in the country. Iran has also been building advanced ballistic missiles, contrary to U.N. regulations.

The revelations about its uranium enrichment are likely to provide fresh grist for the Trump administration as it seeks to reimpose a set of international sanctions on Iran. A State Department official, speaking to the Washington Free Beacon only on background, said the IAEA's report "highlights Iran's 'significant nonperformance' of its commitments under the Iran deal that led the United States to take decisive action to restore U.N. sanctions on Iran."

The official would not comment on specific claims in the report until it is made public by the IAEA. However, the official said there is conclusive proof that Iran is violating its commitments under the nuclear deal. Iran's enriched uranium store "now exceeds by 10-fold the limit set in the [nuclear deal]," according to the Institute for Science and International Security, a nuclear watchdog group that has closely tracked the IAEA's inspections. The group said "Iran's estimated breakout time as of September 2020 is as short as 3.5 months."

"A new development is that Iran may have enough low enriched uranium to produce enough weapon-grade uranium for a second nuclear weapon, where the second one could be produced more quickly than the first, requiring in total as little as 5.5 months to produce enough weapon-grade uranium for two nuclear weapons," the group said Friday. The State Department official said the administration will keep increasing pressure on Iran until it backs away from the pursuit of a nuclear weapon.

"There is no reason for Iran to expand its nuclear program other than to engage in continued brinkmanship," the official said. "We will continue imposing maximum pressure on the Iranian regime until it ceases its destabilizing activities and negotiates a comprehensive deal. That is why we took decisive action last month to initiate the 'snapback' of U.N. sanctions on Iran." As part of its pressure campaign at the U.N., the Trump administration has sought to reimpose international sanctions on Iran that were lifted as part of the 2015 nuclear agreement. The success of this effort remains unclear in light of opposition by European powers, as well as Russia and China.



INDIA:

India tests scramjet tech for hypersonic missiles, is 4th in club

Times of India (India), Sept. 8, Pg. 1 | Rajat Pandit

India on Monday successfully tested an indigenously developed hypersonic technology demonstrator vehicle powered by a scramjet engine, which will serve as a critical building block for the next-generation hypersonic cruise missiles capable of flying at speeds above Mach 5.

The HSTDV test, conducted from the Dr Abdul Kalam Island off the Odisha coast at 11.03 am to demonstrate the autonomous flight of a scramjet integrated vehicle, propelled India right into an extremely exclusive hypersonic club consisting of the US, Russia and China. Besides the velocity of

over five times the speed of sound (Mach 5), the manoeuvring capability of hypersonic missiles makes them very effective offensive weapons capable of defeating enemy missile defence and tracking systems.

The US, Russia and China are leagues ahead in the race to develop aerodynamically manoeuverable hypersonic weapons. China flaunted its DF-17 missile with a hypersonic glide vehicle at its military parade last year. In the test on Monday, the hypersonic 'cruise vehicle sustained its scramjet-powered flight path at a velocity of six times the speed of sound (Mach 6 or 2 km/sec) for 22-24 seconds.

The hypersonic cruise vehicle auto-ignited to fly on its own after separating from the 'launch vehicle', which took it to an altitude of 30 km. The launch vehicle, in turn, was powered by the proven solid-propellant rocket motor of an Agni ballistic missile. "It's a major technological breakthrough. The air-breathing scramjet engine was successfully flight tested at hypersonic speed within the atmosphere, meeting all technical parameters. The test paves the way for development of many more critical technologies, materials and hypersonic vehicles," DRDO chairman G Satheesh Reddy told TOI.

Congratulating DRDO, PM Narendra Modi tweeted, "The scramjet engine developed by our scientists helped achieve a speed of 6 times the speed of sound. Very few countries have such capability today."Defence minister Rajnath Singh said it was a "landmark achievement" towards 'Atmanirbhar Bharat'. It was now time to progress to the next phase with all "critical technologies" being established by the successful HSTDV flight test, using the indigenously developed scramjet propulsion system, he added.

The next phase will be to develop long-range hypersonic cruise missiles, which DRDO scientists said would be possible in five to six years. The complex technology behind the HSTDV, the maiden launch of which had failed in June last year, also has civilian applications like low-cost launch of small satellites. India still has to achieve sustained scramjet-powered hypersonic flight for a few minutes, which has been repeatedly demonstrated by the US, Russia and China.

The Indian armed forces already have the ramjet-powered BrahMos supersonic cruise missiles, which fly at Mach 2.8 speed, developed jointly with Russia. Their strike range is being enhanced from the original 290km to well over 400km.



Pakistan lawmaker warns of nuclear war over Kashmir

https://www.aa.com.tr/en/asia-pacific/pakistan-lawmaker-warns-of-nuclear-war-over-kashmir/1966285

Pakistan would not let India mislead world on ongoing 'genocide' in Kashmir, says head of parliament's Kashmir committee

By: Aamir Latif for AA News // |08.09.2020

KARACHI, Pakistan -- A Pakistani lawmaker on Monday urged the international community, including the UN, to swiftly act to sop "genocide" of Kashmiris by Indian security forces, warning the world against a "brewing" nuclear conflict on the long-smoldering Kashmir dispute.

Addressing a seminar in the capital Islamabad, Shehryar Khan Afridi, chairman of the parliament's Kashmir committee, claimed New Delhi was using backdoor channels to resume talks to Pakistan. However, he said his country would not talk to India unless Kashmir issue was on the agenda. Kashmir, he further said, became a key issue in the global digital space and that Pakistan would not allow India to mislead the world on the ongoing "genocide" there.

"We are reaching out to all the global platforms to raise Kashmir [issue]," he said adding that the parliament's committee was engaging with 22 global forums to sensitize the world on the lingering dispute. Sardar Masood Khan, president of Pakistani-administered Kashmir, also known as Azad Kashmir, charged that extrajudicial killings have become a norm in disputed Jammu and Kashmir.

Indian forces, Khan went on to argue, arrest youth and later gun them down in fake police "encounters." "The world knows well about the Indian atrocities being committed by the occupational forces in occupied Kashmir but commercial interests are major hurdle in taking action against India," he added. Apart from issuing half a million domiciles to non-Kashmiris, he said, India was planning to award citizenship rights to 1.7 million migrant workers as well.

Disputed region

Kashmir, a Muslim-majority Himalayan region, is held by India and Pakistan in parts and claimed by both in full. A small sliver of Kashmir is also held by China. Since they were partitioned in 1947, the two countries have fought three wars -- in 1948, 1965 and 1971 -- two of them over Kashmir. Also, in Siachen glacier in northern Kashmir, Indian and Pakistani troops have fought intermittently since 1984. A cease-fire came into effect in 2003.

Some Kashmiri groups in Jammu and Kashmir have been fighting against Indian rule for independence, or for unification with neighboring Pakistan. According to several human rights organizations, thousands of people have reportedly been killed in the conflict in the region since 1989.





Serbia and Kosovo Increase Normalization With Israel In Trump-Brokered Deal

https://freebeacon.com/national-security/serbia-and-kosovo-increase-normalization-with-israel-in-trump-brokered-deal/?utm_source=actengage&utm_campaign=FreedomMail&utm_medium=email Bt: Jack Beyrer for the WFB // SEPTEMBER 4, 2020 3:45 PM

Serbia and Kosovo are in the process of normalizing ties with Israel, thanks to agreements arbitrated by Washington, the Times of Israel <u>reported</u> Friday.

Serbia is set to move its embassy to Jerusalem, following in the footsteps of the United Arab Emirates last month—while the majority-Muslim Kosovo moves to fully recognize Israel's sovereignty. Both agreements were secured at a summit between Kosovo, Serbia, and Israel overseen by American diplomats. Importantly, the agreement also secured more amiable terms between the two Balkan countries, historic rivals dating far past the Yugoslav wars of the 1990s.

The Trump administration hailed the agreement—only the latest in a flurry of new agreements normalizing ties with Israel—as another big win delivered by the White House. "Truly, it is historic," Trump said, standing alongside the leaders of Serbia and Kosovo in the Oval Office. "I look forward to going to both countries in the not-too-distant future." Israeli prime minister Benjamin Netanyahu echoed Trump's praises.

"I thank my friend President Vucic of Serbia for his decision to recognize Jerusalem as Israel's capital and move their embassy," Netanyahu said. "I also want to thank my friend Donald Trump for his contribution to this achievement." Asked about the Trump-brokered deal during a Friday press conference, Democratic presidential nominee Joe Biden declined to judge the deal without knowing all the details but said normalization with Israel "seems positive to me."

"I think that normalization of relations among countries is by and large a good thing," Biden said. "To have a Muslim-majority country normalize relations with Israel, in a generic sense, seems positive to me." Serbia's decision to move the embassy to Jerusalem mirrors a similar decision made by President Trump in 2017 to move the U.S. embassy to Jerusalem, one that was maligned by Obama officials and Biden advisers as a potentially disastrous move.

"Please ignore the reality of strength and success you see in front of your own eyes and instead keep reading tweets from Peter Beinart, Matt Duss, Ben Rhodes, J Street, and Democrats about how time is running out for Israel," <u>said</u> Washington Free Beacon contributor Noah Pollak on Friday, in

reference to prominent Democratic staffers and left-wing intellectuals who have <u>consistently criticized</u> the Trump foreign policy regime in the Middle East and elsewhere.

While the agreement fell short of securing recognition from Serbia of Kosovo's sovereignty—a feat few expect is feasible, especially as countries such as Russia and China do not recognize Kosovo's independence—it secured monumental economic and transportation agreements between the two countries. The first flight from Serbia to Kosovo is expected to follow in the near future.

The brokerage is only the most recent in the Trump administration's peacemaking portfolio in this year alone. Washington delivered a historic deal between Israel and the United Arab Emirates last month, opening the door to a domino effect among the Gulf States. Administration officials hope to target Oman, Bahrain, and ultimately Saudi Arabia in future negotiations as Washington builds a coalition of states across religions and ideologies to combat Iran. Bahrain appears well on its way, as Washington officials hint at a formal peace deal before Rosh Hashanah.



JAPAN:

Japan eyes offshore options to replace Aegis defense system

Asahi Shimbun Online (Japan), Sept. 10 | Not Attributed

Japan is considering an offshore missile interception system to replace the land-based Aegis Ashore plan, but some defense officials have voiced opposition because a sea-based alternative may not provide around-the-clock protection, sources said.

The government has already concluded that it would be "impossible" to deploy the U.S.-made Aegis Ashore system to protect the nation against incoming missiles.

The Defense Ministry presented three options to the ruling Liberal Democratic Party: construction of a mega-float to host the missile detection and radar tracking system as well as a missile interception system; construction of additional Aegis destroyers; and deployment of the radar system on land and deployment of the missile launcher on a vessel.

The government is expected to choose an option by the end of this year.

According to the sources, the idea of constructing a vessel purely dedicated to missile defense has been floated within the government.

The government has already started discussions with the U.S. side on the feasibility of installing the Aegis Ashore system on a vessel.

One benefit of deploying such a vessel is that fewer crew members would be needed compared with the number aboard an Aegis destroyer.

The Defense Ministry had planned to set up the Aegis system at Self-Defense Forces facilities in Akita and Yamaguchi prefectures to protect the entire country from incoming projectiles.

But the plan was met with fierce opposition from residents around the candidate sites. The ministry's explanations to the residents about the safety of the project proved unconvincing, its surveys were conducted in a slipshod manner, and it was hit with huge unforeseen costs.

As a result, the ministry in June announced the suspension of the process to introduce the Aegis Ashore system.

However, the suggested mega-float and additional Aegis destroyers have a drawback: their operations could be affected by bad weather.

Some in the ministry are concerned that the offshore systems may be unable to defend Japan "24 hours a day for 365 days," the government's goal for the deployment of the Aegis Ashore system.

There is also opposition to the offshore options because they would add to the burden of the Maritime Self-Defense Force, which already has a heavy workload and is suffering from low recruitment.

Prime Minister Shinzo Abe is expected to release a statement concerning new guidelines for Japan's defense policy before he leaves office this month.

The statement will likely say the government should pick an alternative to the Aegis Ashore missile system by year-end and decide whether Japan should have the capability to pre-emptively strike an enemy's missile and other bases.

The succeeding administration is expected to make a final decision over the options.



SAUDI ARABIA:



Turkey Warns West It Will Continue to Shop Around for Missiles

Bloomberg News, Sept. 4 | Onur Ant, Firat Kozok and Selcan Hacaoglu

Turkey said it would continue to turn to other providers of air-defense weapons if traditional western allies fail to deliver, suggesting the rancor prompted by Ankara's decision to buy Russian missiles may be repeated.

The Turkish military needs upgrades far beyond the scope of its current purchase of an advanced S-400 system from Moscow, Foreign Minister Mevlut Cavusoglu said in an interview on Thursday.

"If you don't want me to buy it from elsewhere, then you need to sell it," Cavusoglu said. "If you don't, we'll continue to buy from elsewhere. Today, this can be the S-400. Tomorrow, there will be another system. It doesn't matter."

The comments are the most forthright statement so far of Ankara's intention to substantially upgrade its air-defense capabilities, even at the cost of further inflaming ties with its partners in the North Atlantic Treaty Organization. While there's already an outline deal with Russia for a second S-400 battery that would be jointly produced, the minister signaled Turkey won't stop there.

"We need more than two batteries. Two, three, five [batteries] until we produce this ourselves," Cavusoglu said, citing possible threats Turkey faces in a volatile part of the world, especially from the decade-long civil war in neighboring Syria.

Patriot Alternative

Turkey has wrangled with the U.S. over its Patriot missile system for years, with Washington unwilling to concede to demands for the transfer of technology. The decision to procure the S-400s inflamed a relationship with Washington that had soured over other issues, and the Trump administration ended up suspending Ankara from development of the advanced F-35 fighter jet.

The U.S. says the Russian system can gather critical information on NATO operations, including the stealthy F-35s.

The U.S. has recently proposed Patriots as part of a solution to the impasse which includes Turkey abandoning the S-400s. Ankara has so far refused to go along, stating the threat of American sanctions won't change its mind on a critical defense issue.

Election Fight

Cavusoglu said American-made missiles are still an alternative for Turkey but such a procurement can't be "imposed" on Ankara.

Turkey hasn't yet activated the S-400s it took delivery of last year, leading some observers to conclude that Turkish President Recep Tayyip Erdogan wants to avoid planting Turkey into the raw politics of President Donald Trump's re-election fight in the hope of a solution later on.

Erdogan and Russian leader Vladimir Putin have cooperated in some Middle Eastern flashpoints but have backed opposing sides in others, including Syria and the conflict in Libya.

The White House has resisted growing pressure from both parties in Congress to exact retribution on Turkey, which hosts key NATO installations, over the S-400 purchase. But bipartisan legislation approved by the House of Representatives calls for sanctions.

Erdogan's spokesman said last month that the process to activate the missiles was still underway.

--With assistance from Simin Demokan