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ADMINISTRATION/PROGRAM SPECIFICS

90th OG welcomes new commander

90th Missile Wing Public Affairs, June 26 | Senior Airman Braydon Williams

F.E. WARREN AIR FORCE BASE, Wyo. -- Colonel Tytonia Moore took command of the 90th Operations Group during a change of command ceremony June 26, 2020 on F. E. Warren Air Force Base, Wyoming.

Prior to his current position, Moore was the Director of Nuclear Weapons Development and Assessment in Washington, D.C.

Colonel Robert Ewers, outgoing 90th OG commander, will take the role of Capabilities Division chief at the Pentagon in Washington, D.C.

A change of command ceremony is a tradition that represents a formal transfer of authority and responsibility from the outgoing commander to the incoming commander.

Moore thanked Col. Peter Bonetti, 90th Missile Wing commander, for being the presiding officer over the ceremony and for the opportunity to command the 90th OG.

"It is truly an honor to serve as a command for the 90th Operations Group," said Moore. "This day is very special to me and I do have to acknowledge that without certain individuals in my life, this day would have never happened."

We Don't Have Enough Cash to Build New Nuclear Weapons, Says Air Force Chief

Defense One, 1 July 20 Marcus Weisgerber

The Pentagon's budget is not large enough to buy new nuclear weapons and conventional forces simultaneously, the U.S. Air Force's top general said Wednesday.

Chief of Staff Gen. Dave Goldfein gave a blunt assessment of the Pentagon's growing list of bills amid a growing US deficit, on Wednesday, suggesting nuclear expenses have grown so great they may require a separate account of their own.

"I think a debate is that this will be the first time that the nation has tried to simultaneously modernize the nuclear enterprise while it's trying to modernize an aging conventional enterprise," Goldfein said during a Brookings Institution appearance. "The current budget does not allow you to do both."

The Trump administration's \$705 billion fiscal 2021 budget request for the Pentagon — which Congress is reviewing — calls for nearly \$29 billion in nuclear weapons spending. The money would go toward new stealth bombers, intercontinental ballistic missiles, ballistic missile submarines, a new nuclear cruise missile and upgrades to the global nuclear command, control and communications network. The stealth bomber is the only weapon that could be used for nuclear or conventional strikes. The Energy Department, which oversees nuclear warheads, has requested \$15.6 billion 2

in fiscal 2021.

In January 2019, the Congressional Budget Office estimated that the Pentagon's nuclear weapons spending plan would cost \$494 billion between 2019 and 2028, an average of about \$50 billion per year.

Pentagon officials today argue they need 3 to 5 percent annual spending increases to fund weapons projects of all kinds, however defense spending is expected to flatten or slightly decline in the coming years regardless who wins November's presidential election.

"There are either going to be some significant trades made or we're going to have to find a fund for strategic nuclear deterrence, that we can use to modernize," Goldfein said.

In recent years, Pentagon officials, including former Defense Secretary Ash Carter, and lawmakers have considered creating a nuclear weapons fund separate from the military services budgets. Todd Harrison, director of defense budget analysis and the Aerospace Security Project at the Center for Strategic and International Studies, questioned the rationale for moving those funds.

"It doesn't make new money appear," he said.

During the Obama administration, the Pentagon began the decades-long process of updating its nuclear arsenal with new ICBMs, bombers, submarines and missiles. Some independent estimates say the price tag could reach nearly \$1.7 trillion over the next 30 years. How to pay for it is still debated in the Defense Department, but the need for nuclear weapons is not.

"I would just offer that in my mind, I could never advise anybody to unilaterally disarm or give up second strike capability," Goldfein said. "I do believe we have to have a debate about the way we're going to fund this essential part of our military going forward."

Tactical nuclear arms among issues discussed by Russia, US in Vienna — Pentagon official

On June 22, Russia and the United States held talks on strategic stability and arms control behind closed doors in Vienna From Russia Today (RT), Military News TASS // 24 Jun, 21:09

WASHINGTON, June 25. /TASS/. US and Russian envoys raised the issue of tactical nuclear weapons during their arms control talks in Vienna earlier this week, a senior US Department of Defense official told reporters on Wednesday.

Deputy Commander of the US Strategic Command (**USSTRATCOM**) **Lt. Gen. Thomas Bussiere** told reporters that participants of the talks discussed Russia's recently adopted state policy on nuclear deterrence. In his words, the US side sought "a greater, deeper understanding" of the matter. "We have an opportunity to briefly go through with the Russian General Staff our questions and concerns and clarifying aspects of that document," the US defense official said.

"In conjunction with that was a need and a desire to go forward and also to have a discussion not only on the greater meaning of that doctrine, to alleviate any misunderstandings or misperceptions, but to have a greater understanding and discussion on what we are terming as non-strategic nuclear weapons, also known as tactical nuclear weapons," he went on. "And so we agreed that <...> that would be a wonderful opportunity to get a greater, deeper understanding between the United States and the Russian Federation on what their doctrine means and how those non-strategic <...> nuclear weapons fit into that," Bussiere added.

On June 22, Russia and the United States held talks on strategic stability and arms control behind closed doors in Vienna. The countries' delegations were headed by Russian Deputy Foreign Minister Sergei Ryabkov and US Special Presidential Envoy for Arms Control Marshall Billingslea. The renewal of New START was also on the table of the talks. Russian President Vladimir Putin signed on June 2 a decree on approving the fundamentals of the nuclear deterrence policy. The document signed by the Russian president replaces a similar one approved 10 years ago and valid until 2020. The new strategy confirms that Russia's state policy in the sphere of nuclear deterrence is of a defensive nature. One of the document's main principles is compliance with international arms control obligations.

Pentagon releases 'initial' list of Chinese military-linked companies operating in US

by Jerry Dunleavy | June 29, 2020 05:03 PM

More than two decades after a law was passed requiring it to do so, the Defense Department released a list of companies operating in the United States that the Pentagon believes are tied to the People's Liberation Army, the armed forces of the Chinese Communist Party.

The list of 20 Chinese companies, including Huawei and Hikvision, was made public last week, and the designation by the Pentagon under the 1999 National Defense Authorization Act gives President Trump the power to invoke emergency economic powers granted to him under the International Emergency Economic Powers Act of 1977, including sanctions, against the Chinese military-linked companies.

The Pentagon was required to create the list two decades ago, but last week marked the first time that it did so. The 1999 law, passed in part to make sure that China's admission to the World Trade Organization did not give Chinese companies working for the PLA free rein in using access to the U.S. to build up China's military strength, required the defense secretary to "make a determination of those persons operating directly or indirectly in the United States or any of its territories and possessions that are Communist Chinese military companies" and to "publish a list of those persons in the Federal Register." The Pentagon must also "make additions or deletions to the list … on an ongoing basis based on the latest information available."

The IEEPA empowers Trump to employ a host of powerful financial tools "to deal with an unusual and extraordinary threat" to U.S. national security, including Treasury Department sanctions against the Chinese companies, although it is not known whether the president will invoke this power.

Republican Sen. Marco Rubio of Florida, the chairman of the Senate Intelligence Committee, told the *Washington Examiner* that "the list put out ... by the Pentagon is a start but woefully inadequate to warn the American people about the state-owned and state-directed companies that support the Chinese government and Communist Party's activities threatening U.S. economic and national security." The Florida Republican argued that "the list

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only touches the surface of the Chinese government's exploitation of U.S. capital markets" and "it's critical that American institutional and retail investors know which companies are involved not only with the Chinese Communist Party's military but also with its espionage, human rights abuses, 'Military-Civil Fusion Strategy,' and 'Made in China 2025' industrial policy."

Jonathan Hoffman, the assistant to the secretary of defense for public affairs, hinted to the *Washington Examiner* that this was just the beginning. He called it an "initial list" of "Communist Chinese military companies operating directly or indirectly in the United States," which generally means "entities owned by, controlled by, or affiliated with China's government, military, or defense industry."

"As the People's Republic of China attempts to blur the lines between civil and military sectors, 'knowing your supplier' is critical," the Pentagon officials said, adding, "We envision this list will be a useful tool for the U.S. Government, companies, investors, academic institutions, and likeminded partners to conduct due diligence with regard to partnerships with these entities, particularly as the list grows."

The Washington Examiner reached out to most of the companies on the list, and none returned a request for comment.

"Not only is Hikvision not a 'Chinese military company,' Hikvision has never participated in any R&D work for military applications," a Hikvision spokesperson told *Axios*. "Hikvision has always tried to fully and transparently cooperate with the U.S. government to answer questions and correct misunderstandings about the company. Hikvision will continue to try to work with the US government to resolve all of these matters."

Hikvision, a global surveillance equipment manufacturer, was one of 28 Chinese security bureaus and technology companies blacklisted by the Commerce Department in October for what the U.S. government said was their role in the Chinese government's oppression of Uighur Muslims.

The Permanent Subcommittee on Investigations, led by Republican Sen. Rob Portman of Ohio, released a report in June detailing how the federal government provided "little-to-no oversight" of Chinese state-owned telecoms for two decades and how China is illicitly targeting U.S. communications the same way it has targeted education, research, and personal data. That subcommittee previously released reports on China's foreign funding on U.S. campuses, theft of U.S. research, and cyberattacks against U.S. companies.

Sen. Tom Cotton, a member of the Armed Services Committee, told Fox Business anchor Maria Bartiromo on Fox News on Sunday that there had been a "longstanding bureaucratic and establishment indifference to the threat that China poses" and the Pentagon "finally" produced this list after he and other senators brought it to the Defense Department's attention. The Arkansas Republican called the Chinese military's use of companies in the U.S. "an example of what China calls civil-military fusion, where they use cutting edge civilian companies as fronts to increase their military technology, even in competitive countries like the United States." Cotton said "that needs to stop today" as he called for Trump to use his new powers to sanction the PLA-tied companies.

Chinese telecom giant Huawei also did not respond to the Washington Examiner's request for comment about being placed on the Pentagon list.

"The tide is turning against Huawei as citizens around the world are waking up to the danger of the Chinese Communist Party's surveillance state," Secretary of State Mike Pompeo said last week, adding, "Huawei's deals with telecommunications operators around the world are evaporating" 5 because, "the more countries, companies, and citizens ask whom they should trust with their most sensitive data, the more obvious the answer becomes: not the Chinese Communist Party's surveillance state."

The U.S. has engaged in an all-out effort to limit Huawei's global reach, especially in the area of fifth-generation wireless, or 5G, pushing its "Five Eyes" partners to reject Huawei technology in their communications networks. Canada is currently reconsidering its business dealings with Huawei, though it is under extreme pressure by the Chinese Communist Party. The U.S. views Huawei technology as a national security threat.

The Justice Department unveiled a superseding indictment against Huawei in February, charging the Chinese telecommunications giant with racketeering and conspiracy to steal trade secrets, including Racketeer Influenced and Corrupt Organizations violations and violations of U.S. sanctions against Iran and North Korea.

U.S. eyes nuclear tests in show of force reaction to latest Russia, China moves

Tom Cotton amendment would prepare for first test in decades By Ben Wolfgang - The Washington Times // Sunday, June 28, 2020

It has been nearly 30 years since the U.S. last tested a nuclear bomb, but the Trump administration and its allies on Capitol Hill are teasing a return while Russia conducts its own secretive underground experiments and China gives deep concerns to the national security community. The Senate's version of the massive annual National Defense Authorization Act (NDAA) being debated in Congress this month includes \$10 million to speed up nuclear weapons tests on American soil if the administration determines they are needed. Such language has met stiff resistance from Senate Democrats and is a nonstarter in the House, where lawmakers instead are seeking an outright ban and warn that any resumption of testing could spark the first post-Cold War nuclear arms race.

Top administration officials last week insisted there are no immediate plans to resume nuclear testing but pointedly would not close the door on the issue. They cited intelligence assessments that Russia had violated the terms of a multinational treaty banning such experiments and argued that the U.S. may need to respond in kind at some point. Some arms control experts say the provision could serve as a useful bargaining chip as the Trump administration seeks to keep tabs on the nuclear arsenals of Russia and, more particularly, China.

Sen. Tom Cotton, Arkansas Republican, echoed the concerns of a number of private China hawks that Beijing was expanding, upgrading and testing its nuclear weaponry without constraint. "It's foolish to trust anything the Chinese Communist Party says, especially when it comes to grave matters like nuclear testing," Mr. Cotton said in a statement as a Senate panel agreed to his amendment on a 14-13 vote this month. "Beijing is modernizing its nuclear arsenal while the United States handcuffs itself with one-sided arms-control restrictions."

By simply raising the prospect, the White House has made a dramatic break with tradition and conventional geopolitical wisdom that views nuclear testing as a provocative act that by its very nature stokes fear and increases the likelihood of military conflict. The last U.S. nuclear test was in September 1992, in the final year of the George H.W. Bush administration. Military analysts say the administration can and should develop new delivery systems for the nation's nearly 6,200 nuclear warheads, but they caution that there is no scientific justification for restarting tests.

They also argue that it's unlikely such tests would have any major sway over the behavior of Moscow, Beijing or any other likely nuclear adversary. "I think often people have this kind of arms race in mind: If we do something, then they'll do something and we'll be worse off," said Matthew Kroenig, deputy director of the Scowcroft Center for Strategy and Security at the Atlantic Council. "I think we've seen that at times during the Cold War, but I think recently that hasn't been the case. Russia and China are pushing ahead despite what we do."

Indeed, skeptics of renewed testing say that fact underscores the U.S. need for funding and development of specific technology, particularly systems able to counter Russian nuclear submarines and China's rising arsenal of intermediate nuclear-range missiles. Still, they say the U.S. should steer clear of testing new nuclear weapons. The U.S. and Russia remain by far the world's top nuclear powers, each with more than 6,000 warheads. China's quickly modernizing military is estimated to have about 300 nuclear warheads.

Treaty restraints

Treaties that established some boundaries around the countries' nuclear stockpiles have ended, leading to fears that nuclear competition could return to Cold War-era levels. The U.S. last year exited the Intermediate-Range Nuclear Forces Treaty after accusing Russia of violating the deal. The White House also argued that the pact was flawed because it didn't include China's smaller but growing arsenal. The U.S. and Russia also are barreling toward the February expiration of the New Strategic Arms Reduction Treaty. Negotiators met last week in Vienna for the first serious bargaining session.

Arms control advocates mobilized against the idea of renewed nuclear testing after reports of it broke last month. But as the NDAA and its nuclear test provision began to move through Congress, Trump administration officials made clear that the option would remain on the table. "We maintain and will maintain the ability to conduct nuclear tests if we see any reason to do so, whatever that reason may be," Marshall Billingslea, the U.S. special presidential envoy for arms control, told reporters in Vienna last week. "But that said, I am unaware of any particular reason to test at this stage. I won't shut the door on it because why would we? That said, we made clear to the Russians that we were deeply concerned about what they're doing at their test site."

Under terms of the 1996 Comprehensive Test Ban Treaty, Russia agreed "not to carry out any nuclear weapon test explosion or any other nuclear explosion." The U.S. signed the agreement but did not ratify it, though successive administrations have abided by its ban on nuclear testing. China has not formally ratified the treaty but claims to be abiding by its terms. This century, North Korea is the only country to have conducted a verified nuclear weapons test, and it has drawn global condemnation for doing so.

But U.S. officials fear that nuclear rivals have found a way to test the reliability of their nuclear weapons while hiding the evidence. Specialists say Russia likely has been conducting tests in huge underground spaces capable of concealing the seismic disturbances of a nuclear blast. In its annual summary of countries' compliance with arms treaties, the State Department this year declared that "Russia has conducted nuclear weapons experiments that have created nuclear yield and are not consistent with the U.S. 'zero-yield' standard."

The State Department raised "concerns" that China could be pursuing similar efforts but stopped short of making similar accusations as those lodged against Moscow. Administration allies seem eager to put the pieces into place to resume nuclear testing. The NDAA amendment offered by Mr.

Cotton aims to reduce the amount of time it would take to get nuclear tests up and running. Administration officials say the time frame already is short and that tests could resume within months if necessary.

House Democrats warn that even considering such a move is too risky. "It is unfathomable that the administration is considering something so shortsighted and dangerous," five House Democrats, led by House Armed Services Committee Chairman Adam Smith of Washington, wrote in a letter this month to military leaders. "The notion that resuming testing would somehow pressure Russia or China into arms control negotiations is baseless and uninformed. Resuming testing would open the door for widespread global testing, which would only serve to benefit our adversaries and make Americans less safe."

A New Superpower Competition Between Beijing and Washington: China's Nuclear Buildup

The Trump administration is portraying the small but increasingly potent Chinese arsenal — still only one-fifth the size of the United States' or Russia's — as the big new threat. New York Times Online, June $30 \mid$ David E. Sanger and William J. Broad

When negotiators from the United States and Russia met in Vienna last week to discuss renewing the last major nuclear arms control treaty that still exists between the two countries, American officials surprised their counterparts with a classified briefing on new and threatening nuclear capabilities — not Russia's, but China's.

The intelligence had not yet been made public in the United States, or even shared widely with Congress. But it was part of an effort to get the Russians on board with President Trump's determination to prod China to participate in New START, a treaty it has never joined. Along the way, the administration is portraying the small but increasingly potent Chinese nuclear arsenal — still only one-fifth the size of those fielded by the United States or Russia — as the new threat that Mr. Trump and President Vladimir V. Putin of Russia should confront together.

Marshall Billingslea, Mr. Trump's new arms control negotiator, opened his classified briefing, officials said, by describing the Chinese program as a "crash nuclear buildup," a "highly alarming effort" to gain parity with the far larger arsenals that Russia and the United States have kept for decades.

The American message was clear: Mr. Trump will not renew any major arms control treaty that China does not also join — dangling the possibility that Mr. Trump would abandon New START altogether if he did not get his way. The treaty expires in February, just weeks after the next presidential inauguration.

Many outside experts question whether China's buildup — assessed as bringing greater capability more than greater numbers — is as fast, or as threatening, as the Trump administration insists.

The intelligence on Beijing's efforts remains classified, a senior administration official said, noting that sharing such data is not unusual among the world's major nuclear weapons states. But that means it was given to an adversary with whom the United States is conducting daily, low-level conflict — including cyberattacks, military probes by warplanes and Russian aggression in Ukraine. And that was before reports surfaced that a Russian military intelligence unit had put bounties on American and allied troops in Afghanistan.

The American official said the administration would try to declassify and make public some of the assessment about China.

Nuclear weapons have suddenly become a new area of contention between Mr. Trump and President Xi Jinping of China, and there are many reasons to believe that even if the three superpowers are not yet in a full-scale arms race, what is taking place in negotiating rooms around the world may soon start one.

The Russians have publicly offered a straight, five-year extension of New START, which would not require congressional approval. But Mr. Trump is clearly betting that he can find common ground with Mr. Putin in confronting the Chinese.

Without question, the Chinese are improving their arsenal, and may be rethinking the idea of holding a "minimal deterrent" — just enough to assure that if they were ever attacked they could take out cities in Russia, Europe or the United States. But they have only 300 long-range nuclear weapons deployed, compared with 1,550 each that the other two superpowers are allowed under New START. So there is the very real possibility, experts say, that in any negotiation, Beijing will insist on quintupling its nuclear force before it agrees to any constraints. So far, China has said it is not interested in discussing any limitations.

"The notion of trying to pull the Chinese into that agreement is, in theory, a good idea. In practice? Impossible," former Defense Secretary Robert M. Gates said this month at the Center for Strategic and International Studies.

"The Chinese have no incentive whatsoever to participate," said Mr. Gates, who as the C.I.A. director confronted China over its sale to Iran of missiles designed to carry nuclear warheads. And if Mr. Trump continues on the current course, Mr. Gates said, he will end up essentially inviting "the Chinese to build dramatically more, far more, nuclear weapons than we think they have at the current time to get level with the United States."

Nuclear weapons are joining the panoply of issues — including trade deals, banning Chinese students and wiring the world for 5G networks — that Mr. Trump has put at the center of a series of U.S.-China standoffs.

Mr. Trump is no student of nuclear history, but in some ways he is replaying a moment from the 1960s, when Mao Zedong was seeking nuclear weapons. President Lyndon B. Johnson's administration briefly considered inviting the Soviets to participate in a joint strike at Lop Nor, the Chinese nuclear testing site, to prevent the country from joining the nuclear club. But the Americans abandoned the idea, determining it was simply too dangerous. A top secret State Department study, since declassified, concluded in April 1964 that the risk of a Chinese nuclear capability "is not such as to justify the undertaking of actions which would involve great political costs or high military risks."

The United States has lived with a Chinese "minimal deterrent" for 56 years.

Now Mr. Billingslea argues that new activities underway at Lop Nor, combined with China's far greater reach in space and at sea, once again put America at risk. The Chinese, not surprisingly, blame the United States, saying the American focus on missile defenses is forcing them to develop a counterforce of new nuclear weapons and missiles.

"If Beijing's concerns are left unaddressed, they will likely fuel more intensive Chinese efforts to modernize its nuclear forces and other strategic capabilities," Tong Zhao, a senior fellow at the Carnegie-Tsinghua Center for Global Policy in Beijing, wrote recently.

The roots of the revival of interest in building up nuclear arsenals go back to the passage of New START a decade ago, early in the Obama administration. As the price of getting the treaty through the Senate, President Barack Obama agreed to a multibillion-dollar upgrade of the American nuclear complex, including production facilities that had been neglected for decades. At the same time, Vice President Joseph R. Biden Jr., now Mr. Trump's presumed opponent in the presidential election, said the administration would ask the Senate to ratify the Comprehensive Nuclear Test Ban Treaty, which Bill Clinton had signed but the Senate had never acted on.

Mr. Obama and Mr. Biden never sought ratification, realizing they would lose. But the past four presidents have abided by the treaty's ban on nuclear tests. That may be coming to an end: Mr. Billingslea confirmed that the Trump administration had discussed "unsigning" the treaty and debated whether the United States should return to nuclear testing, which it has not engaged in since 1992. But he said there was no need to do so for now.

The United States conducted more nuclear tests during the Cold War than the rest of the world combined. Over decades of experimentation, and more than 1,000 tests, its bomb designers learned many tricks of extreme miniaturization as well as how to endow their creations with colossal destructive force. Compared with the atomic bomb that leveled Hiroshima, the nation's first explosive test of a hydrogen bomb, in 1954, produced a blast 1,000 times as powerful.

Because of that history, many nuclear experts now argue that if Mr. Trump begins a new wave of global testing, it would aid American rivals more than the United States.

"We lose more than we gain," Siegfried S. Hecker, a former director of the Los Alamos weapons laboratory in New Mexico and now a professor at Stanford University, said in an interview. Beijing had conducted only 45 tests, he noted, and would welcome a resumption of testing to "increase the sophistication or perhaps the diversification" of its arsenal, "and that can only come back to be a national security risk for the United States."

Activity at the desert testing site in Nevada has soared in recent years. There is new drilling, construction, equipment, employees and periodic "subcritical" tests, just below the threshold of producing a nuclear explosion.

For years, some Republicans have urged preparations for a test and poured money into the effort. One instrument now being prepared for the Nevada complex costs \$800 million; it would test the behavior of plutonium.

Today, Republicans are still urging more upgrades and speedups, including at the Nevada complex. This month, Senator Tom Cotton, Republican of Arkansas, offered an amendment to a defense bill that would add at least \$10 million to "carry out projects related to reducing the time required to execute a nuclear test."

Top Democrats in the House told the Pentagon and the Energy Department in a recent letter that the idea of a renewal in nuclear testing was "unfathomable," as well as "shortsighted and dangerous."

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But Mr. Billingslea thinks he succeeded in getting the Russians to think about what is happening in China, not in the Nevada desert. During his meeting last week, the Russians were taking copious notes on China's buildup, while reviewing classified slides. He insists they want to sit down and talk more later in the summer.

They will do so without the Chinese.

News & Opinion

China Has 'First-Strike' Capability To Melt U.S. Power Grid With Electromagnetic Pulse Weapon

By: James Conca, Contributor to FORBES Magazine // Jun 25, 2020,11:00am EDT

Last week, the Department of Homeland Security issued a scary report on China's ability to conduct an Electromagnetic Pulse attack on the United States. The key takeaway, according to **Dr. Peter Pry**, executive director of the department's EMP task force, is that China now has super-EMP weapons, knows how to protect itself against an EMP attack, and has developed protocols to conduct a first-strike attack, even as they deny they would ever do so.

According to the Center for Strategic International Studies, China has the most active <u>ballistic missile development program in the world</u>, so this is doubly troubling. China used stolen U.S. technology to develop at least three types of high-tech weapons to attack the electric grid and key technologies that could cause a surprise "Pearl Harbor" attack that could produce a deadly blackout to the entire country.

Dr. Pry outlines how China has built a network of satellites, high-speed missiles, and super-electromagnetic pulse weapons that could melt down our electric grid, fry critical communications, and even takeout the ability of our aircraft carrier groups to respond.

EMPs are one of those things that many people think is fake, or over-blown, or a conspiracy theorist's dream. But they are real. EMPs can be either natural, from things like extreme solar geomagnetic disturbances, or man-made like a large thermonuclear detonation or a cyberattack. If they are coordinated with physical attacks then things can get real dicey real fast. As the U.S. Commission to Assess the Threat to the United States from EMP Attack points out, "the physical and social fabric of the United States is sustained by a system of systems - a complex and dynamic network of interlocking and interdependent infrastructures whose harmonious functioning enables the myriad actions, transactions, and information flow that undergird the orderly conduct of civil society."

According to the Commission, EMP effects represent arguably the largest-scale common-cause failure events that could affect our electric power grid and undermine our society, leaving it vulnerable on many fronts. About the only safe systems <u>are nuclear reactors</u>, both new and old. High-voltage control cables and large transformers that control the grid are particularly vulnerable. Transformers weigh 400 tons, take two years to build, and cost \$7 million apiece. We are <u>already way behind</u> in having backup transformers ready, so if many go out at once, we have a big problem just powering our country.

The phenomenon of a large electromagnetic pulse is not new. The first human-caused EMP occurred in 1962 when the 1.4 megaton Starfish Prime thermonuclear weapon detonated 400 km above the Pacific Ocean. One hundred times bigger than what we dropped on Hiroshima, Starfish Prime resulted in an EMP which caused electrical damage nearly 900 miles away in Hawaii. It <u>knocked out</u> about 300 streetlights, set off numerous burglar alarms, and damaged a telephone company microwave link that shut down telephone calls from Kauai to the other Hawaiian islands.

And that was from 900 miles away. On the natural side, in 1989, an <u>unexpected geomagnetic storm triggered</u> an event on the Hydro-Québec power system that resulted in its complete collapse within 92 seconds, leaving six million customers without power. The storm resulted from the Sun ejecting a trillion-cubic-mile plume of superheated plasma, or ionized gas. Such storms occur every 60 years or so, and in 1989, we weren't anywhere near as electrified and electronically interconnected as we are today, or as we will be in 30 years.

Solar events were considered the most likely EMP to occur. Until now. According to Dr. Pry, a longtime expert on EMP warfare, China developed the weapons as part of its Total Information Warfare that includes hacking raids on computers, as is expected during the next presidential election. Even more troubling, Dr. Pry found that China is eager to shoot first with "high-altitude electromagnetic pulse," or HEMP, weapons launched from satellites, ships, and land.

"China's military doctrine — including numerous examples presented here of using HEMP attack to win on the battlefield, defeat U.S. aircraft carriers, and achieve against the U.S. homeland a surprise 'Pearl Harbor' writ large — is replete with technical and operational planning consistent with a nuclear first-strike," said Pry in his report.

Needless to say, we are not prepared for this.

China has the most active ballistic missile development program in the world.

Dr. Pry is trying to raise awareness of the possible threat posed by an EMP attack, either from a military foe or from a solar event. China, Russia, North Korea, and Iran are moving to build and deploy systems which can launch a nuclear weapon into the atmosphere to explode and disable electronics below, including flying aircraft. A report done while Dr. Pry was a key member of a congressional EMP commission found that an EMP attack on the East Coast electric grid could lead to a huge number of deaths.

You might think that EMP is too farfetched to worry about. But you would be wrong. We have been learning in the information age that if it can be done, someone will do it. The speed with which our information age is changing is paralleled by the speed with which our national digital organism can test and block the ever-changing gaps and vulnerabilities in our electronic shield. Like a host adapting to new parasites, this is just a normal incident for an evolving society in a rapidly-changing digital environment that selects for a digital organism that viscerally understands the whole system and can use it to its advantage.

Societies with older systems will be at a dangerous disadvantage. The Universe does this all the time. Sociologically, China seems to be moving into a more aggressive position globally, evidenced by their recent conflict with India and their aggression in the South China Sea with their east Pacific neighbors. This may have been aggravated by China's <u>1-child policy</u>. Although the policy did reign in population growth (fertility rates dropped below two by 1990 and the present population is 1.3 billion), it gave rise to another problem – too few women.

Almost all cultures prefer a male as the first child and in China, the eldest male is expected to take care of his elderly parents. Therefore, the magnitude of female infanticide in China became astonishing in the decades between 1990 and 2010, when well over ten million female infants were killed. Only a relatively few found adopted homes in other countries. China then changed to a <u>2-child policy</u>, but the damage to an entire generation will not be <u>so easily erased</u>. The result was a skewed sex ratio in the generation born since 1980.

Today, there are about 50 million more males than females. Just think of the states of Texas, New York and Ohio filled with just men. The consequences of having too many uncoupled males in a society are worse than just making it difficult to find a mate. Soon there will be a substantial deficit of younger workers to provide support to an aging population. By 2030, China will have over 400 million people over the age of 60. Maintaining sufficient economic growth under these conditions will be difficult.

Some research indicates that excess males to this degree tends to make a society <u>more aggressive and nationalistic</u>, both of which have risen dramatically in China. Not coincidentally, China has rolled out a number of other new military capabilities, designed to protect their new expansionist future. Included in their burgeoning array is a <u>new generation of nuclear submarines</u>, a <u>carrier-killing missile</u> named DF-21D, intended specifically to destroy aircraft carriers, and new rocket launch vehicles, like the <u>Long March 6 rocket</u> capable of carrying 20 warheads, that just went into space last month to deploy 20 satellites in orbit.

While everyone points out that the United States spends more on its military than the next ten countries combined, it turns out that <u>China is far and</u> <u>away number 2</u>, spending a third of what we spend in dollars, but almost the same percentage of its GDP as we do. So as the United States slips into chaos and ignores the global threats that still face us, China moves steadily forward with its plan to become the greatest nation on Earth.

CHINA STRATEGIC PERSPECTIVES (PDF Attch'd above, 66 pgs)

<u>System Overload: Can China's Military Be Distracted in a War over Taiwan?</u> Center for the Study of Chinese Military Affairs Institute for National Strategic Studies, National Defense University by Joel Wuthnow for INSS // June 2020

System Overload - Executive Summary

• A war with **Taiwan** remains the primary contingency of the People's Liberation Army (PLA). While the near-term prospects of China initiating a war are low due to the enormous economic costs and military risks, the PLA must still prepare to compel Taiwan's leaders to accept unification or, barring that, to seize and occupy the island.

■ At the same time, the PLA has been tasked with an array of additional missions, including deterring other regional rivals, enforcing China's territorial claims, protecting China's overseas interests, and serving as the ultimate guarantor of Chinese Communist Party (CCP) survival in the face of domestic challenges. Those missions reduce PLA resources and attention devoted to Taiwan and result in capabilities that are less relevant to cross- Strait scenarios.

• Chinese strategists have long worried that China's rivals—including domestic secessionists, regional powers, or the United States—could exploit a Taiwan conflict to press their own agendas, such as launching border wars to solidify their territorial claims or even stoking a "color revolution" to overthrow the CCP. PLA analysts refer to this as "chain reaction" warfare.

• Navigating these dilemmas requires the PLA to be able to concentrate warfighting capabilities across the Taiwan Strait while simultaneously maintaining readiness in other regions, shift resources among theaters when required, and coordinate multi-theater operations. These demands have led to a number of changes in PLA force development, force distribution, command and control, logistics, and human capital.

■ However, handling multiple problems remains a weakness for the PLA. Specific deficiencies include difficulties setting priorities due to interservice bargaining, a weak force posture beyond the First Island Chain, a convoluted command structure for multi-theater operations, and the lack of a rotational assignment system that would give officers exposure to multiple problem sets. Latent civil-military distrust could also reduce the confidence of civilian leaders that the system will work as intended in a war.

■ U.S. discussions on improving Taiwan's defenses tend to focus on selling defense articles to Taipei and enabling U.S. operations in an antiaccess/area-denial environment.

U.S. debates resuming nuclear tests on American soil

Tom Cotton amendment would prepare for first test in decades By <u>Ben Wolfgang</u> - The Washington Times June 28, 2020

It has been nearly 30 years since the U.S. last tested a nuclear bomb, but the Trump administration and its allies on Capitol Hill are teasing a return while <u>Russia</u> conducts its own secretive underground experiments and <u>China</u> gives deep concerns to the national security community.

The Senate's version of the massive annual National Defense Authorization Act (NDAA) being debated in Congress this month includes \$10 million to speed up nuclear weapons tests on American soil if the administration determines they are needed. Such language has met stiff resistance from Senate Democrats and is a nonstarter in the House, where lawmakers instead are seeking an outright ban and warn that any resumption of testing could spark the first post-Cold War nuclear arms race.

Top administration officials last week insisted there are no immediate plans to resume nuclear testing but pointedly would not close the door on the issue. They cited intelligence assessments that <u>Russia</u> had violated the terms of a multinational treaty banning such experiments and argued that the U.S. may need to respond in kind at some point. Some arms control experts say the provision could serve as a useful bargaining chip as the Trump administration seeks to keep tabs on the nuclear arsenals of <u>Russia</u> and, more particularly, <u>China</u>.

Sen. Tom Cotton, Arkansas Republican, echoed the concerns of a number of private <u>China</u> hawks that Beijing was expanding, upgrading and testing its nuclear weaponry without constraint. "It's foolish to trust anything the Chinese Communist Party says, especially when it comes to grave matters like nuclear testing," Mr. Cotton said in a statement as a Senate panel agreed to his amendment on a 14-13 vote this month. "Beijing is modernizing its nuclear arsenal while the United States handcuffs itself with one-sided arms-control restrictions."

By simply raising the prospect, the White House has made a dramatic break with tradition and conventional geopolitical wisdom that views nuclear testing as a provocative act that by its very nature stokes fear and increases the likelihood of military conflict. The last U.S. nuclear test was in

September 1992, in the final year of the <u>George H.W. Bush administration</u>. Military analysts say the <u>administration</u> can and should develop new delivery systems for the nation's nearly 6,200 nuclear warheads, but they caution that there is no scientific justification for restarting tests.

They also argue that it's unlikely such tests would have any major sway over the behavior of Moscow, Beijing or any other likely nuclear adversary. "I think often people have this kind of arms race in mind: If we do something, then they'll do something and we'll be worse off," said Matthew Kroenig, deputy director of the Scowcroft Center for Strategy and Security at the Atlantic Council. "I think we've seen that at times during the Cold War, but I think recently that hasn't been the case. <u>Russia</u> and <u>China</u> are pushing ahead despite what we do."

Indeed, skeptics of renewed testing say that fact underscores the U.S. need for funding and development of specific technology, particularly systems able to counter Russian nuclear submarines and <u>China</u>'s rising arsenal of intermediate nuclear-range missiles. Still, they say the U.S. should steer clear of testing new nuclear weapons. The U.S. and <u>Russia</u> remain by far the world's top nuclear powers, each with more than 6,000 warheads. <u>China</u>'s quickly modernizing military is estimated to have about 300 nuclear warheads.

Treaty restraints

Treaties that established some boundaries around the countries' nuclear stockpiles have ended, leading to fears that nuclear competition could return to Cold War-era levels. The U.S. last year exited the Intermediate-Range Nuclear Forces Treaty after accusing <u>Russia</u> of violating the deal. The White House also argued that the pact was flawed because it didn't include <u>China</u>'s smaller but growing arsenal.

The U.S. and <u>Russia</u> also are barreling toward the February expiration of the New Strategic Arms Reduction Treaty. Negotiators met last week in Vienna for the first serious bargaining session. Arms control advocates mobilized against the idea of renewed nuclear testing after reports of it broke last month. But as the NDAA and its nuclear test provision began to move through Congress, Trump administration officials made clear that the option would remain on the table.

"We maintain and will maintain the ability to conduct nuclear tests if we see any reason to do so, whatever that reason may be," Marshall Billingslea, the U.S. special presidential envoy for arms control, told reporters in Vienna last week. "But that said, I am unaware of any particular reason to test at this stage. I won't shut the door on it because why would we? That said, we made clear to the Russians that we were deeply concerned about what they're doing at their test site."

Under terms of the 1996 Comprehensive Test Ban Treaty, <u>Russia</u> agreed "not to carry out any nuclear weapon test explosion or any other nuclear explosion." The U.S. signed the agreement but did not ratify it, though successive administrations have abided by its ban on nuclear testing. <u>China</u> has not formally ratified the treaty but claims to be abiding by its terms. This century, North Korea is the only country to have conducted a verified nuclear weapons test, and it has drawn global condemnation for doing so.

But U.S. officials fear that nuclear rivals have found a way to test the reliability of their nuclear weapons while hiding the evidence. Specialists say Russia likely has been conducting tests in huge underground spaces capable of concealing the seismic disturbances of a nuclear blast. In its annual summary of countries' compliance with arms treaties, the State Department this year declared that "Russia has conducted nuclear weapons experiments that have created nuclear yield and are not consistent with the U.S. 'zero-yield' standard."

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The State Department raised "concerns" that <u>China</u> could be pursuing similar efforts but stopped short of making similar accusations as those lodged against Moscow. Administration allies seem eager to put the pieces into place to resume nuclear testing. The NDAA amendment offered by Mr. Cotton aims to reduce the amount of time it would take to get nuclear tests up and running. Administration officials say the time frame already is short and that tests could resume within months if necessary.

House Democrats warn that even considering such a move is too risky. --- "It is unfathomable that the <u>administration</u> is considering something so short-sighted and dangerous," five House Democrats, led by House Armed Services Committee Chairman Adam Smith of Washington, wrote in a letter this month to military leaders. "The notion that resuming testing would somehow pressure <u>Russia</u> or <u>China</u> into arms control negotiations is baseless and uninformed. Resuming testing would open the door for widespread global testing, which would only serve to benefit our adversaries and make Americans less safe."

WW3: China and India tensions 'volatile' - Fears grow over nuclear security after clash

<u>China: Expert warns of escalation leading to conflict with India -- SOARING tensions between China and India at the disputed border have sparked</u> <u>fears over the world's nuclear security amid growing threats of further violence between the two Asian powers.</u> By <u>Luke Hawker</u> for the UK Express // PUBLISHED: PUBLISHED: 07:00, Sat, Jun 27, 2020

Chinese and Indian officials have continued to exchange a war of words following the brutal dispute at the border last week which left more than 50 soldiers dead.

At the site of the bloody battle in Galwan Valley, Chinese authorities have since added new military structures on what Indian officials have called its side of the Line of Actual Control (LAC) – the de facto border. The use of camouflaged tents and a new camp with walls and barricades are thought to be among the new additions to strengthen China's claim to the territory. Dr Jack Holland, Professor of International Relations and Security at the University of Leeds, has warned the breakdown in relations between China and India could undermine global nuclear security.

The foreign policy expert has highlighted the "key relationship" Beijing and India has in maintaining peace in relation to nuclear weapons and insisted the current situation remains "very volatile". On the threat of more violence, Dr Holland told Express.co.uk: "Yes, there is a risk although both sides will obviously be keen to avoid significant escalation. "This is a key relationship for the world's nuclear security and this part of the border remains a very volatile space due to the politics, geography and history of the region."

According to the Arms Control Association China has amassed a total of 290 nuclear warheads with India having an arsenal of 130-140 plutoniumbased nuclear weapons. China, unlike India, has signed the Strategic Arms Reduction Treaty (START) which limits the ability to develop nuclear weapons and has since put further limitations on ballistic missiles. On June 15, Indian and Chinese troops brawled without firearms for several hours at the Himalayan border.

In the horrific clashes hundreds soldiers were involved and clubbed each other to death using stones, sticks with nail rods – leaving 20 Indian soldiers for dead and killing at least 40 other Chinese personnel. Military sources compared the clashes to a brutal 'Game of Thrones' style combat. Dr

Holland added: "After the event, I spoke with some military contacts. "They described what had taken place as two nuclear superpowers whose armies have engaged in 'Game of Thrones' style combat - really horrific violence that we simply are not accustomed to seeing in modern inter-state conflict.

"So de-escalation efforts will be vital and that is has been reflected in the words of India's leaders, in particular." India's foreign ministry has maintained China is at fault for the conflict – something Beijing denies. Foreign ministry spokesman Anurag Srivastava has accused China of breaking the 1993 treaty which dictates that both sides will maintain limited border deployment. On Thursday, he told a press briefing: "At the heart of the matter is that since early May the Chinese side had been amassing a large contingent of troops and armaments along the LAC.

"This is not in accordance with the provisions of our various bilateral agreements." Chinese officials reject this and blame India for the deadliest clash between the two nations in five decades. China and India last engaged in a brief war over the border in 1962 resulting in more than 2,000 deaths.

The Military We Have Vs. The Military We Need

BY GREGORY D. FOSTER PROFESSOR, NATIONAL DEFENSE UNIVERSITY JUNE 28, 2020

We only pretend to build armed forces to confront the threats we face.

"Disruptive change" is probably the most rhetorically popular, yet intellectually vacuous, turn of phrase now in use throughout the U.S. defense establishment. For an inherently conservative, parochial institution whose conception of the future is dominated by its preference for a canonical past, disruptive change is an attractive meme meant to convey progressive imagery to audiences inside and outside who might otherwise be inclined to expose the institution's well-established lack of imagination and originality.

What is seen as the blueprint for disruptive change is the National Defense Strategy, or NDS, promulgated by the Trump administration's first Defense Secretary, James Mattis, and his Marine brother in arms, then-Chairman of the Joint Chiefs of Staff Joseph Dunford. Together, they passed this ideological tract off as a legitimate strategy based on bona fide strategic thinking to indoctrinate the defense establishment and its bureaucratic and political disciples. Their successors and their successors' subordinates have unquestioningly and unthinkingly endorsed the stultifying received truths of the document, so much so that any thought of meaningful transformative change within the institution, however much needed, seems frustratingly out of the question in the absence of some jolt to the system.

The NDS — here's the unclassified summary — epitomizes the intellectual stagnation that pervades the military. It is predicated on the asserted "truths" that:

The U.S. military, in the years preceding the Trump administration, was emasculated and rendered largely impotent by forcing it to focus on frivolous, tangential threats and missions such as countering violent extremism.

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The United States has been disadvantaged and is in danger of being unseated from its rightful position of primacy in all domains of warfare – land, sea, air, space, and cyberspace – by reformist powers bent on challenging U.S. global supremacy.

The world we face today and in the years ahead is defined by great-power competition (presumably involving the use of traditional, military-centered great-power means to achieve traditional great-power ends of superiority and dominance).

To properly compete in this great-power arena, our organizational, doctrinal, and technological emphases must be based, above all else, on "lethality" (meaning, by implication, killing power and destructive capacity fed by large-scale industrial innovation and sustained by big-war mobilization measures).

How woefully and dangerously outmoded, outdated, self-serving, self-deluding, and self-perpetuating such received truths are. This is Cold War redivivus; Old War become New War. One need only compare the rhetoric of misuse associated with the wars we conduct that don't coincide with our idealized conception of war – be it Vietnam or the Global War on Terrorism – with the reality of the methods we use and the defense posture we maintain to prosecute such wars. And one need only compare great-power, big-war rhetoric with the realities today of pandemic disease, cyberattacks, climate-induced natural disasters, and violent, rogue-actor extremism.

We live today in a postmodern age defined, as with all conceptions of postmodernism, by irony and the need for fundamental redefinition of hallowed concepts and terms. Ironically speaking, old strengths (such as wealth, size, and population) have become new weaknesses; old advantages (such as technological superiority or expansive overseas presence) have become new disadvantages; old successes (like the end of the Cold War) have become new failures; old friends have become new enemies; and old forms of plenty (e.g., nuclear supremacy) have become new forms of scarcity (e.g., nuclear peace). Terms of reference once considered clear, immutable, and sacrosanct – war, peace, security, aggression, intervention, sovereignty, power – now beg for redefinition.

In the grand evolution of war in which we are unsuspectingly involved, we have passed from a deep historical period of "Hot War" dating to antiquity, in which the use of military force was the central element in the conduct of statecraft; to the prolonged period of Cold War familiar to us all, in which the non-use of force (at least against our principal adversary, the Soviet Union), and the attendant avoidance of large-scale war, was the defining element; to the present period of "New War," in which the use of non-military power and non-traditional uses of the military are – or, to be more accurate, should be – at the heart of statecraft; to a yet-to-be-recognized, much less realized, period of "No War," the normative strategic end-state we should be seeking, in which militaries as we have known them become essentially irrelevant. To reach such an idealized – many would say unrealistic and unrealizable – end-state, arguably will require as preconditions the attainment of denuclearization, delethalization, and ultimately demilitarization. Demilitarization can be brought about only by the military: not a militaristic military committed to the supernal mission of warfighting, but a military organized, equipped, trained, and deployed in dramatically new ways that redefine what militaries properly do.

If we were to have a truly healthy state of civil-military relations, which we don't, two of its cardinal defining elements would be a strategically effective (not just a militarily effective) military and a properly subordinated military-industrial complex that supports rather than dictates our military posture. In fact, in the cosmic international pecking order that differentiates superpowers from great powers, great powers from major powers, and major powers from minor powers, the possession of a strategically effective military is one of the principal indicators of standing and 19

status. By any measure, the military we have today not only isn't strategically effective, it isn't even militarily effective. We don't win wars. We don't prevent wars. We certainly don't eliminate wars. But we do feed escalation, provocation, and mirror imaging. Even if we were to claim a militarily effective military, we would have no choice but to admit that its defining features are all the things a truly strategically effective military wouldn't be: disproportionately destructive, indiscriminately lethal, exorbitantly expensive, overly provocative and escalatory, unduly consumptive, largely alienated from society, and environmentally damaging.

At root, our problem derives from our prevailing frame of reference: Defense, narrowly conceived, dominates security, broadly conceived. Military power dominates non-military power. Wars of choice dominate wars of necessity, rhetoric to the contrary notwithstanding. Tactics dominates strategy. Unilateralism (and the attendant felt need for self-sufficiency) dominates multilateralism (with the attendant imperative for collective decision-making and action). Conventional, high-intensity capabilities dominate unconventional, low-intensity capabilities. Technology dominates doctrine and force structure, and high technology dominates appropriate technology. Means dominate ends. And, finally, logistics dominates operations, after all is said and done.

Although we pretend to orient and structure our military around the threats we face, in point of fact our approach is very much capabilities-based; we have the military we want, and we insist on imposing that preferred force on the situations we face, invariably with unsatisfactory results. The ideal would be a state of affairs in which recognized vulnerabilities determine what our interests are; interests would determine what circumstances and actors constitute threats; those threats would be the basis for determining requirements; and those requirements would dictate the capabilities we seek to have on hand. In practice, the reality is just the opposite; our preferred capabilities determine everything else.

While we persist in the pursuit of capabilities for competing in a great-power world that satisfies our hunger for the heaviest, most expensive, most destructive and lethal armaments in the world, and that mollifies industrial actors that provide jobs and contribute big bucks to politicians, the threats we actually face today demand something quite different. The wars we face today are entirely wars of choice. No existing conflict, nor any reasonably to be anticipated, demands our involvement. And the wars we face are far removed from the total wars of the distant past and even farther removed from an idealized state of stable peace we have yet to seriously pursue, much less achieve. No, our wars occupy the space between limited war and violent peace; and the prime defining characteristics of these wars are twofold: they are asymmetric, hybrid wars; and, as such, they are inherently unwinnable.

So, pandemics, natural disasters, cyberattacks, and random acts of violent extremism are very real, very serious, very deadly, and very demanding. They are the threats we face and will continue to face in perpetuity. Traditional wars against China and Russia are unrealistic, highly unlikely fantasy. China and Russia, if they are to oppose us, will do so asymmetrically, as they already are; not symmetrically in a manner that would justify and legitimize our misplaced preparations and capabilities. Do we prepare for the most serious wars we won't face or the most likely "wars" we will face? The answer should be more obvious than it is: not the former, but the latter.

To cope effectively with the actual threats that confront us, we must decide, for starters, what the military's role properly ought to be: to serve itself (in the manner of a self-interested interest group); to serve the regime in power; to serve the state; or to serve society and even humanity (as grandiose as that might sound)? And no less must we decide what the military's proper function ought to be: to prepare for and wage war; to secure and preserve peace; or something in between, like providing for the common defense, or preventing war, or providing for security? "All of the

above" is too vague an answer, and "they're all the same" is too simplistic. A military whose raison d'être is preparing for and waging war – the military we have – is demonstrably different from one that seeks to secure and preserve peace – the one we need.

The military we have is heavy, destructive, lethal, blunt, combat-oriented, technology-dominant, general purpose, unilaterally capable, provocative, escalatory, expensive (gluttonously so), and unsustainable. It is basically a hard-power warfighting machine, totally captive of and obsessed with its own warfighting/warfighter verbiage, useful primarily for tacit threatmaking based on ostensibly superior capabilities, and prepared – arguably – only for traditional, conventional war (even though deployed for a variety of missions).

The military we need would be quite the opposite: light, constructive, predominantly nonlethal, precise, noncombat-oriented, manpower-dominant, tailored, multilaterally-capable/-dependent, reassuring, de-escalatory, affordable, and sustainable. It would be a strategically effective force, designed to respond to a robust array of complex, most-frequently-occurring emergencies – peacekeeping, nation-building, humanitarian assistance, disaster response – that ultimately contribute most demonstrably to the overarching normative strategic aim of enduring global peace.

Should such sweeping, transformative overhaul ever become a reality? Yes – if peace is actually our ultimate aim. Could it take place? Unlikely – given the intellectual shortcomings of the defense establishment in particular, and the national security community in general. These are heretical, heterodox ideas that can take root and be acted upon only as an outgrowth of new thinking that is in inexcusably short supply in government and think tank thought factories. In the final analysis, though, the military will have to take the lead – and want to take the lead – in dramatically reforming itself because politicians have major vested interests, political and economic, in preserving the status quo and in letting the military dictate its own fate. Whether the military has the intellectual wherewithal to measure up to such a challenge is a matter for high hopes, but measured expectations. But if we are to produce a future that is better than the past, we shouldn't give up on hope. Gregory D. Foster is a professor at the National Defense University, a West Point graduate, and a decorated Vietnam War veteran. The views expressed here are his own.

The Retrenchment Syndrome

A Response to "Come Home, America?" By H. R. McMaster July/August 2020

In the decades after the U.S. withdrawal from Vietnam, the simplistic but widely held belief that the war had been unjustified and unwinnable gave way to "the Vietnam syndrome"—a conviction that the United States should avoid all military interventions abroad. The mantra of "no more Vietnams" dominated foreign policy, muting more concrete discussions of what should be learned from that experience. Instead, the analogy was applied indiscriminately; U.S. military operations in the Balkans, the Horn of Africa, Latin America, and the Middle East prompted assertions that the use of force would lead to "another Vietnam." It was not until the United States won a lopsided victory over the military of Iraqi President Saddam Hussein in the 1990–91 Gulf War that President George H. W. Bush could declare that the United States had finally "kicked the Vietnam syndrome."

Nearly three decades later, however, a new mantra of "ending endless wars" has emerged from frustrations over indecisive, protracted, and costly military interventions abroad. These frustrations have reproduced the Vietnam syndrome in a new guise: the Afghanistan-Iraq syndrome. Across the political spectrum, many Americans have come to believe that retrenchment would not only avoid the costs of military operations overseas but also

improve U.S. security. They have found support for this belief in analyses like those that appeared in this magazine's lead package for its March/April 2020 issue, titled "Come Home, America?"

The authors of the articles in that package offered different variations on the retrenchment theme. But what some of the articles have in common is an appeal that reflects strong emotions rather than an accurate understanding of what went wrong in the wars that followed the 9/11 terrorist attacks. Proponents of a U.S. withdrawal from its military commitments play to visceral feelings of war weariness and argue that the difficulties of those wars were the inevitable consequence of the United States' misguided pursuit of armed domination. Some retrenchers depict U.S. foreign policy since the end of the Cold War as a fool's errand, impelled by a naive crusade to remake the world in the United States' image. And although advocates of retrenchment often identify as realists, they subscribe to the romantic view that restraint abroad is almost always an unmitigated good. In fact, disengagement from competitions overseas would increase dangers to the United States; the paltry savings realized would be dwarfed by the eventual cost of responding to unchecked and undeterred threats to American security, prosperity, and influence.

ALTERNATIVE HISTORY

In their critiques of the post-9/11 wars, retrenchers fail to acknowledge the hidden costs of their recommendations. Although a majority of Americans now agree that the decision to invade Iraq in 2003 was a mistake, retrenchment advocates ignore the consequences of the withdrawal of U.S. forces from Iraq in 2011 and of the broader disengagement from the Middle East that accompanied it. Those steps ceded space to jihadi terrorists and Iranian proxies, thereby creating an ideal environment for the return of sectarian violence and the establishment of the self-declared caliphate of the Islamic State (or ISIS). The Obama administration made similar mistakes in Libya earlier in 2011, after pushing for a NATO air campaign that helped depose the dictator Muammar al-Qaddafi. Although it was determined to avoid the mistakes of the George W. Bush administration's war in Iraq, the Obama administration paradoxically exceeded them, failing to shape Libya's political environment in the wake of Qaddafi's demise; nearly a decade later, the Libyan civil war rages on, and the country remains a source and a transit point for millions seeking escape from turmoil in northern Africa and the Sahel.

Retrenchers ignore the fact that the risks and costs of inaction are sometimes higher than those of engagement. In August 2013, the Syrian regime used poison gas to kill more than 1,400 innocent civilians, including hundreds of children. Despite U.S. President Barack Obama's declaration in 2012 that the use of these heinous weapons to murder civilians would cross a redline, the United States did not respond with military force. U.S. inaction enabled the regime's brutality, emboldening Syrian President Bashar al-Assad and his Iranian and Russian supporters to intensify their mass homicide. In 2017–18, U.S. President Donald Trump finally enforced the Obama administration's redline, retaliating against the use of chemical weapons by Assad with strikes against the Syrian military. But Trump's decision in 2019 to withdraw U.S. forces from eastern Syria complicated efforts to eliminate ISIS and bolstered the influence of Assad and his sponsors in an area whose control would give them a significant advantage in the war. Almost nine years since the Syrian civil war began, a humanitarian catastrophe continues in Idlib Province, which, at the end of 2019, generated over a million more refugees, many of whom succumbed to extreme cold or the novel coronavirus.

Retrenchers ignore the fact that the risks and costs of inaction are sometimes higher than those of engagement.

Despite evidence that U.S. disengagement can make a bad situation worse, retrenchers have pushed for a withdrawal of U.S. forces from Afghanistan. The agreement signed between the United States and the Taliban in February 2020 will allow the Taliban, al Qaeda, and various other jihadi terrorists to claim victory, recruit more young people to their cause, gain control of more territory, and inflict suffering through the imposition

of draconian sharia. Just as the Syrian civil war and the rise of ISIS generated a refugee crisis that reached into Europe, the establishment of an Islamic emirate in a large portion of Afghanistan would generate another wave of refugees and further destabilize Pakistan, a nuclear-armed nation of over 220 million people. Terrorist organizations that already enjoy safe haven in the Afghan-Pakistani border region will increase their profits from illicit activities such as the narcotics trade and apply those resources to intensify and expand their murderous campaigns. Retrenchers do not acknowledge that U.S. withdrawal often leaves a vacuum that enemies and adversaries are eager to fill.

Retrenchment advocates are relatively unconcerned about enemies gaining strength overseas because they assume that the United States' geographic blessings—including its natural resources and the vast oceans that separate it from the rest of the world—will keep Americans safe. But in today's interconnected world, threats from transnational terrorists (or viruses, for that matter) do not remain confined to particular regions. The humanitarian, security, and political consequences of the conflicts in Afghanistan, Iraq, Libya, Syria, and Yemen have reached well beyond the Middle East and South Asia. Just as China's concealment of the coronavirus forestalled actions that might have prevented a global catastrophe, the United States' withdrawal of support for its partners on the frontlines against jihadi terrorists could generate staggering costs if the terrorists succeed in penetrating U.S. borders as they did on September 11, 2001. And a reduction of U.S. support for allies and partners along the frontiers of hostile states, such as Iran and North Korea, or revisionist powers, such as China and Russia, could result in a shift in the balance of power and influence away from the United States. Retrenchment could also result in a failure to deter aggression and prevent a disastrous war.

Retrenchers also overlook the trend that the security associated with the United States' geographic advantages has been diminishing. In 1960, the historian C. Vann Woodward observed that technologies such as the conventional aircraft, jet propulsion, the ballistic missile, and the atomic-powered submarine marked "the end of the era of free security." Those technologies overtook "Americans so suddenly and swiftly that they have not brought themselves to face its practical implications." Retrenchers are out of step with history and way behind the times.

FALSE PROPHECIES

Even the most compelling arguments for sustained engagement overseas are unlikely to convince hardcore retrenchers, because they believe that an overly powerful United States is the principal cause of the world's problems. Their pleas for disengagement are profoundly narcissistic, as they perceive geopolitical actors only in relation to the United States. In their view, other actors—whether friends or foes—possess no aspirations and no agency, except in reaction to U.S. policies and actions. Retrenchers ignore the fact that sometimes wars choose you rather than the other way around: only after the most devastating terrorist attack in history did the United States invade Afghanistan.

In the "Come Home, America?" package, Jennifer Lind and Daryl Press argue in "Reality Check" that abandoning what they describe as Washington's pursuit of primacy would quell China and Russia while providing opportunities for cooperation on issues of climate change, terrorism, and nuclear proliferation. And in "The Price of Primacy," Stephen Wertheim asserts that a less threatening United States could "transform globalization into a governable and sustainable force" and bring about a reduction in jihadi terrorism, a less aggressive China, a curtailment of Russian interference, the cessation of Iran's proxy wars, the termination of North Korea's threat to U.S. and regional security and human rights, and even progress against the threat from climate change.

If these promises seem too good to be true, it's because they are. Retrenchment hard-liners are confident in such claims because they assume that the United States has preponderant control over future global security and prosperity. In reality, adversaries have the power to act based on their own

aspirations and goals: American behavior did not cause jihadi terrorism, Chinese economic aggression, Russian political subversion, or the hostility of Iran and North Korea. And U.S. disengagement would not attenuate those challenges or make them easier to overcome.

STRATEGIC EMPATHY

The movement in favor of retrenchment is in part a reaction to the overoptimism that animated U.S. foreign policy in the 1990s. When the Soviet Union collapsed and the Cold War ended, some thinkers and policymakers assumed that the process of democratization that was unfolding in eastern Europe would be replicable in Africa, Asia, and the Middle East. But they failed to give due consideration to local contexts and to political, social, cultural, and religious dynamics that make liberal democracy and the rule of law hard to reach. Similarly, after the United States' lopsided military victory in the Gulf War, some assumed that future wars could be won quickly and decisively because U.S. technology had produced a "revolution in military affairs." But this presumption ignored continuities in the nature of war, such as the enemy's say in a war's course of events and its political, human, and psychological complexities. Excessive optimism soon grew into hubris, setting the United States up for unanticipated difficulties in Afghanistan and Iraq.

The best antidote to such overconfidence, however, is not the excessive pessimism offered by retrenchers. Policymakers should instead adopt what the historian Zachary Shore calls "strategic empathy": an understanding of the ideology, emotions, and aspirations that drive and constrain other actors. Strategic empathy might help at least some advocates of retrenchment qualify their adamant opposition to democracy promotion and human rights advocacy abroad and might allow them to accept that the United States cannot determine, but can influence, the evolution of a world in which free and open societies flourish. In recent years, protests against authoritarian rule and corruption have flared up all over the world. In Baghdad, Beirut, Caracas, Hong Kong, Khartoum, Moscow, and Tehran, people have made clear that they want a say in how they are governed. Support for those who strive for freedom is in the United States' interest, because a world in which liberty, democracy, and the rule of law are strengthened will be safer and more prosperous. Disengagement from competitions overseas would cede influence to others, such as the Chinese Communist Party, which is already redoubling efforts to promote its authoritarian model. Retrenchment may hold emotional appeal for Americans tired of protracted military commitments abroad, but blind adherence to an orthodoxy based on emotion rather than reason would make Americans less safe and put the United States further in the red.

H. R. MCMASTER is Fouad and Michelle Ajami Senior Fellow at the Hoover Institution and the author of Battlegrounds: The Fight to Defend the Free World. From 2017 to 2018, he served as U.S. National Security Adviser.

At moment of crisis, far left threatens to slash Defense budget

Independence Day is a time to affirm that America must stay strong to preserve peace By Kay C. James for the Washington Times // 30 June 2020

As Independence Day approaches and Americans look forward to celebrating the unparalleled peace, prosperity and freedom that this nation has provided, many in Congress don't seem to understand that we have these gifts because we maintain a powerful and ready military that prevents our adversaries — from communist dictatorships to terrorist states — from destroying what so many lives and so much treasure have been sacrificed to preserve.

President Reagan aptly called it "peace through strength."

Yet, precisely at a time when the nation is reeling from a deadly disease outbreak, racial unrest and economic upheaval, lawmakers in the House of Representatives are proposing to weaken this country even further. They have leveraged the tragedy of the global COVID-19 pandemic to renew their quest to slash our defense budget. They argue that America should turn inward and ignore the many looming outside threats to our security.

It's not surprising that the far left is trying to push its agenda during a time of crisis when Americans are distracted. After all, we've heard politicians on the left openly say before that they shouldn't let "a serious crisis go to waste" and that the pandemic is "a tremendous opportunity to restructure things to fit our vision." Members of Congress have already held up desperately-needed pandemic relief for hundreds of millions of Americans because they demanded that relief bills include unrelated items like solar and wind tax credits, collective bargaining power for unions, stricter emissions standards for airlines and sameday voter registration.

As if holding relief for ransom wasn't despicable enough, now they want to pursue an agenda that would once again dangerously compromise the safety of every single American: significantly reducing military funding at a time when those who want to do us harm are increasing theirs. The Russian and the Chinese communist governments are openly hostile to the United States and have attempted to influence our elections, invaded our allies, and spread propaganda through our media. The Chinese government lied about the coronavirus and the fact that it could be transmitted to humans, causing a disastrous delay in the U.S. response that likely cost thousands more lives. Russia and China also continue to build up their militaries, including their nuclear capabilities, which they use for aggression, not for maintaining peace.

For the time being, America maintains the military advantage, but if we don't invest in upgrading decades-old ships, planes, tanks and other equipment, we will soon fall behind. In its quest to dominate the world, China is growing military spending by over 6% a year, while the U.S. defense budget is not even keeping up with inflation. With a weaker and less capable American military, our adversaries would feel even more emboldened to act aggressively toward us and our allies.

If they ever gained the upper hand against us militarily, it would take years for us to catch up, and by that time, it may be too late. When they've had the upper hand with other nations, they've shown their propensity to use it. The United States has maintained military superiority for so long that many take it for granted, but it's far from guaranteed. We must ensure that the bad actors who desire to dominate and destroy other nations — including our own — never win this competition. The United States will only be able to do that if we have a defense budget that is sufficient to support our current troops and equip them for the future.

Reagan, when addressing West Point graduates in 1981, stated, "A truly successful army is one that — because of its strength and ability and dedication — will not be called upon to fight, for no one will dare to provoke it." No one wants war, but slashing our defense budget and reducing our troops' ability to do their jobs when our adversaries are becoming more aggressive would create a situation that could more easily lead to one. Those in Congress who don't understand these threats are unwittingly putting our entire nation at risk.

As we prepare to celebrate the independence of our nation and its founding promises of peace, prosperity and freedom for all people, it's important that we never take those precious gifts for granted. We must cherish them and pass them onto our children and grandchildren. We must also be prepared to fight for them, or else we will surely lose them. Independence Day isn't only about celebrating that moment in 1776 when we declared

our independence and our freedom. It's about reminding ourselves what we must do each and every day to preserve that freedom for this and future generations.

Kay C. James is president of The Heritage Foundation

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Kay C. James is president of The Heritage Foundation

CONGRESSIONAL

By Susan Cornwell

HASC

July 1: HASC Completed Markup of FY21 HASC Bill (SEE UPDATED FUNDING CHART IN SEPARATE ATTACHMENT)

- ALL ICBM PEs at PB
- Total of \$731.6 B
 - Base Budget of \$662.6B
 - OCO Budget of \$69B

<u>SASC</u>

June 11: SASC completed markup of FY21 SASC Bill

• ALL ICBM PEs at PB

Total of \$740.5 Billion.

- Includes a base defense budget of \$636.4 billion for the Department of Defense and \$25.9 billion for national security programs within the Department of Energy.
- It also authorizes \$69 billion for Overseas Contingency Operations and \$8.15 billion for military construction

Pentagon to increase control over nuclear weapons funding under Senate proposal

By: <u>Aaron Mehta</u> for Defense News // 19 hours ago

WASHINGTON — The Senate Armed Services Committee has proposed a radical change to how the nuclear weapons budget is formed every year, one which would give the Department of Defense a far stronger hand in crafting the funding for nuclear issues.

The language, contained in section 3111 of the SASC's proposed National Defense Authorization Act, would insert the Pentagon-led Nuclear Weapons Council into the budget development of the <u>National Nuclear Security Administration</u>, a semi-autonomous agency within the Department of Energy that has oversight of America's nuclear warheads. The move follows a contentious budget fight between DOE and Congressional supporters of the Pentagon earlier this year, which ultimately resulted in NNSA <u>receiving a significant budget increase</u> over what Secretary of Energy Dan Brouillette requested. During that situation, <u>Brouillette clashed with</u> Sen. Jim Inhofe, R-Okla, the SASC chairman who crafted the newest budget proposal.

The January flare up over NNSA's budget was "certainly the driving factor" in SASC's push to modify how the budget process works, according to a SASC aide, speaking on background ahead of NDAA negotiations. But the aide added that it has been "fairly clear" for a while that "the system as 28

it's set up right now, in law and by practice, is not functioning very efficiently." Under the proposal, NNSA's budget request would still be built within the DoE. But instead of the request then going to the Office of Management and Budget, which oversees the whole government budget process, NNSA's portion would be sent first to the Nuclear Weapons Council.

The council would assess and make changes to the request in order to better align it with the Pentagon's views of what is needed, and send the document back to DoE. The energy department would then be required to submit the language as marked up by the council to OMB. The SASC aide told Defense News that the request that arrives at OMB would be clearly marked as to what changes the DoD had requested, in order to have transparency on how the process shaped up.

The language would not change the OMB and the president ultimately have final say on funding levels for the agencies. But it would give the Nuclear Weapons Council — chaired by the <u>undersecretary of defense for acquisition and sustainment</u>, and made up of five other top Pentagon officials and the NNSA administrator — a newly enlarged voice on formulating the budget, one that critics worry would focus on weapon modernization over all other matters.

"If these provisions were to become law, other Energy Department national security missions, such as defense environmental cleanup, would be at greater risk from the budget axe," said Kingston Reif of the Arms Control Association. "Instead of giving the Council even freer rein, Congress should be seeking more transparency from the Council about its deliberations and how it goes about generating requirements for the nuclear arsenal."

The SASC aide countered that the language of section 3112, which would require NNSA's budget be submitted as its own entity, separate from other nuclear weapon related activities, was written with that issue in mind. The intent, per the aide, is to specifically avoid a situation where the Nuclear Weapons Council request higher funding for NNSA's weapons programs, which in turn could come out of defense cleanup efforts elsewhere at DoE.

Jurisdictionally, the development of nuclear weapons falls under armed services committee and so should not require approval from the energy committees in Congress, the aide said. The aide also stated that the language for the provision was based on language in place for years that allows the director of the Office of National Drug Control Policy to modify the budgets of programs within other government agencies related to drug policies.

Opposition lines up

None of that is making the proposal popular with energy department officials. Roll Call <u>reported Tuesday</u> that Brouillette, the energy secretary, wrote a letter to Inhofe flatly opposing the move on the grounds it "leaves the Secretary with responsibility for the program, while removing his or her ability to effectively manage it." NNSA spokeswoman Ana Gamonal de Navarro said in a statement that the agency "strongly objects" to the language in the NDAA.

"Granting the Department of Defense authority over the Department of Energy's annual budget undermines DOE's position as a separate and equal Cabinet-level agency," Navarro said. "It also subjects the priorities of NNSA to DoD's discretion, potentially causing setbacks and underfunding of other critically important missions of the DOE's NNSA and Environmental Management programs. We urge Congress to allow DOE and NNSA to continue to work together to deliver a budget that will support our mission and commitment to the American people." As the language heads to the full senate for a debate, supporters of the DoE are lining up to try and block the SASC language from moving forward. Sen. Lisa Murkowski, R-Alaska, the chairwoman of the Energy and Natural Resources Committee, has teamed with the committee's ranking member, Sen. Joe Manchin, D-WV,. to oppose the language, according to Roll Call. And on Monday evening, energy committee member Sen. Maria Cantwell, D-Wash., blasted the proposed legislation as "really egregious" language that would "wrestle away control of our nuclear arsenal and give it to the military."

As of now, there is no corresponding language in the House Armed Services Committee, which heads for markup on Wednesday. It seems unlikely the House, controlled by Democrats who have expressed skepticism about Pentagon nuclear modernization efforts in recent years, would mirror the SASC language. The SASC aide said Inhofe had reached out to all the relevant players to try and preempt opposition, but "generally, the Department of Energy was unwilling to acknowledge that there had been any issue in the process," the aide said. "In this case we believe it was necessary because otherwise nothing was happening."

Next-gen ICBM program nukes defunding attempt in House panel

Defense News Online, 2 July 20 Joe Gould

WASHINGTON — The House Armed Services Committee on Wednesday shot down a plan to slash funding for the Air Force's Ground Based Strategic Deterrent program. The vote was a bipartisan 44-12.

The proposal was to transfer \$1 billion to the pandemic preparedness from the next-generation intercontinental ballistic missile, for which Northrop Grumman is the sole competitor. Rep. Ro Khanna, D-Calif., sponsored it, and while HASC Chair Adam Smith, D-Wash., supported it, most HASC Democrats did not.

"The United States does not need to be modernizing the ICBMs," Khanna said, citing experts who see the sea- and air-based legs of the nuclear triad as sufficient. "If there is an accidental launch of an ICBM, you can't take it back. On the other hand, you can call a submarine back, you can call an aerial bomber back."

The language would likely have been a sticking point in negotiations with the GOP-controlled Senate Armed Services Committee. The president requested \$1.5 billion for the GBSD program for fiscal 2021.

For the most part, fights over nuclear weapons reductions were left out by Democratic leaders anxious to avoid last year's bruising partian fights. Those fights may yet surface when members offer amendments on the House floor.

"I've disagreed with it, but I'm putting all of that aside for the moment," Smith said of the president's nuclear plans. "We had that debate last year. It came out the way it came out. It's not going to change this year."

HASC Republicans argued that cutting the GBSD program would undermine America's nuclear deterrent as Russia and China beef up their arsenals 30

and that the nation has dedicated sufficient resources to respond to COVID-19.

"This amendment helps America's adversaries," said Liz Cheney, R-Wyo.

The Air Force is set to grant an award for the GBSD by the end of September, or earlier. Northrop is expected to win an estimated \$85 billion to design and build the missile — after Boeing declined to move forward following Northrop's acquisition of solid-fuel rocket motor maker Orbital ATK.

GBSD is set to replace the Minuteman III ICBMs in the mid 2020s. The Pentagon's top acquisition official, Ellen Lord, has said there is "no margin" to do another service life extension for the Minuteman III, which was fielded in the 1960s and has gone through only minimal upgrades over its 50 years of use.

Earlier in the markup, the Democratic majority bucked Republicans to approve a study of whether the Minuteman III's lifespan can be extended to 2050.

A proposal to delay the president's exit from the Intermediate Nuclear Forces Treaty, from Rep. Tulsi Gabbard, D-Hawaii, was defeated by voice vote.

HASC Funds Nuclear Modernization, With a Few Questions

Air Force Magazine Online, June 26 | Rachel S. Cohen

Nuclear modernization concerns are again on the table for fiscal 2021 defense policy negotiations, as House lawmakers raise issues about the path forward.

The Air Force's three major nuclear weapon upgrade programs—the Ground-Based Strategic Deterrent, the Long-Range Standoff Weapon, and the B61-12 bomb—all received the funding they requested in the House Armed Services Committee's version of the fiscal 2021 defense policy bill. Those programs total \$2.9 billion for the upcoming year, split between the Defense and Energy Departments.

That contrasts with last year's process, when Democrats tried to shrink GBSD funding in a move that irked Republicans and contributed to a broader clash over nuclear issues. Keeping nuclear modernization fully funded and on track is typically an area of bipartisan agreement. Still, some members of Congress last year sought an independent study on whether the Air Force could keep its current Minuteman III missiles around longer, an idea the service opposes because it says refurbishment costs would outweigh the benefits.

Developing more than 600 new land-launched missiles is slated to cost nearly \$22 billion, and \$4.5 billion for about 1,000 new air-launched missiles. The revamped B61 bomb could cost about \$12 billion between DOD and DOE, while the future B-21 bomber's price tag is classified.

Now that House lawmakers seem to have reached an agreement about the need to fully fund nuclear weapons development (as the Senate Armed Services Committee also wants), they want assurance that the Air Force can pull it off. That has spurred some worry in the arms control arena that Democrats are stepping back from meaningful oversight.

House legislation "raises zero questions about the value of the modernization plan, only its achievability. Deeply troubling," Stephen Young, a senior analyst at the Union of Concerned Scientists, wrote on Twitter.

The strategic forces subcommittee pointed to a 2019 RAND Corp. report that warned of the difficulties Air Force Global Strike Command, a relatively new organization with a small, young workforce, will have in replacing all of its major systems around the same time. That also includes the B-21, which HASC is offering the full request of \$2.8 billion in unclassified money for 2021.

Because of that looming workload, lawmakers want a report from the Air Force by Dec. 1 on how Global Strike is addressing the issues RAND raised.

"The report should also provide the number of unfilled personnel manning positions at the command and the GBSD program office, and the number of and type of personnel required to reduce schedule and technical risks to the major programs that the command and the program office are managing," lawmakers wrote.

Air Force Magazine reported in February that the service is waiting on Northrop Grumman, the missile's designer, to decide how many people would need to run the system before reviewing manpower needs.

GBSD won't be ready to use until 2029 at the earliest, three years after the U.S. comptroller general found that the existing Minuteman III nuclear missiles will no longer be fully capable. That concerns lawmakers whom the Air Force has repeatedly told there is no room for error in the land-launched missile's development schedule. The House wants a report from U.S. Strategic Command, which oversees the nuclear enterprise, and the Air Force on how the two are planning for a GBSD fielding delay of two years or more, and how to address the risks that slowdown would pose to Minuteman III.

"By 2030, the Department of Defense will develop and deploy a range of new, long-range conventional strike systems, of which some will be under the operational control of [the] commander of [STRATCOM]," the subcommittee added. "Given the strategic implications of these systems, the committee encourages the department to take additional consideration with regard to the strategic and legal implications of such systems."

HASC also calls for a report on the use of artificial intelligence in the nuclear enterprise.

The strategic forces subcommittee approved its bill June 22; the full committee will begin debating its legislation July

US Can't Be Negligent or Irresponsible in Military Funding Decisions

The Daily Signal, 30 June 20 Vicky Hartzler

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This piece is part of a series on the importance of achieving peace through strength and a strong national security for the United States. Both have long been Heritage Foundation principles and a great foundation for American national power. Some voices are calling for a reduction in defense spending in order to focus on the national response to COVID-19, but the need to fully fund our military has never been greater. You can read the first piece in this series here, and learn more about the current state of our military in the 2020 Index of Military Strength.

Less than three years ago, the Trump administration announced to the world the reemergence of long-term, strategic competition. The administration asserted that the return to an era of great power competition is the central challenge to the future of American prosperity and security.

As a nation, we have allowed our competitive advantage to erode. We must reframe our perspective of national security.

China and Russia continue to challenge the United States and are exploiting what they perceive as American vulnerabilities. In the past, America has been able to project power and advance our interests globally, and we have been able to do so largely unchecked.

Today, that is an ability we can no longer take for granted.

In order to maintain our competitive advantage in the era of great power competition, we must modernize our forces. The need to recapitalize and modernize exists across all the services and in all military domains.

From nuclear to conventional, and from land to sea, we are relying on legacy platforms and weapons that must be updated to meet current and future threats.

Years of continuous combat operations and deferred modernization has created a significant crisis in military readiness in both capability and capacity.

Congress has worked diligently over the last several years to provide the funding required for modernization and to stop the downward trend in overall military readiness. We must continue this path forward in order to equip the services with the resources necessary to fight and win in their respective mission areas.

If we look at the Army, we can see how a renewed focus on modernization can drive the overall culture. The Army has taken great strides to update, modernize, and reform.

However, this has not always been the case. Army modernization funding declined by well over 50% from 2008 through 2018 as a result of the drawdown from two wars and the imposition of budget caps created by the Budget Control Act.

Across all the services, we must modernize key capabilities, recognizing we cannot expect success fighting tomorrow's conflicts with yesterday's weapons. Investments in space, cyberspace, missile defense, advanced autonomous systems, next generation air dominance, and hypersonics will

provide our troops with what they need to win.

This investment in the future must also include funding to maintain a credible and reliable nuclear deterrent force. Our U.S. nuclear triad—bombers, submarine-launched missiles, and intercontinental ballistic missiles—are critical for our national defense. Together, they offer a flexible, visible, and, most importantly, credible deterrent to Russia and China.

The triad must be modernized. Our Ohio-class submarines and air-launched cruise missiles date back to the early 1980s, the Minuteman III intercontinental ballistic missile was first deployed in 1973, and our oldest bombers are 1960s platforms.

Even our newest component, the B-2 stealth bomber, requires attention. There are only 20 B-2 stealth bombers in our inventory. Congress must continue to support investments into the new B-21 bomber to ensure we have both capability and capacity to deter both nations.

While undergoing a complete modernization of all three legs of the triad is expensive, it is a bargain for what we get in return. China and Russia are watching what we are doing with our nuclear deterrent force and are reevaluating their war plans accordingly.

For too long, we have asked our military services to do more without providing them with the timely resources they need. Our services need to be able to buy the tools necessary to readily address the evolving security needs of our nation.

Take, for example, the F-15 C/D fleet. The health of this fleet is deteriorating at a rapid pace, and is well past its certified service life. The F-15Cs continue to fly despite serious mechanical and electrical issues. The Air Force has had to accept significant risk with this fleet as a result of the decision more than 10 years ago to cap the F-22 procurement at 187 aircraft instead of procuring the required 381.

This was a budgetary-driven decision that has had long-term strategic and operational consequences. Fortunately, Congress took steps last year to authorize the start of the F-15EX program to replace the F-15 C/D fleet as quickly as possible. It also provided additional funding to procure more F-35 Joint Strike Fighters to help improve our fifth generation fighter inventory.

There are members of Congress who have called for cutting defense spending in the wake of the COVID-19 pandemic. There is no question the pandemic has impacted the health and economic well-being of many Americans. Congress has provided more than \$3 trillion to address this pandemic and is looking at future aid packages as our nation continues the road to recovery.

However, calls for cutting defense spending are not the answer. It is irresponsible, negligent, and puts the security of all Americans at risk.

China and Russia have continued their military activities and have used this pandemic to their advantage. Our enemies get a vote, and if we cut defense spending after barely swimming out of a major military readiness crisis, Congress will be failing its fundamental constitutional responsibility to provide for the common defense.

Gen. John Murray, commanding general of Army Futures Command, stated, "No service is able to go it alone, and as history has shown, joint teams 34

win, and modernization is no exception. I'd say winning matters, but winning together matters most."

We should not repeat the mistakes of the past. We must continue the path forward by investing in capabilities needed to ensure a credible deterrent posture now and into the future.

Congress, the military, and industry must all work together to make sure our adversaries think twice before attacking, because they know the United States has the strongest military in the world.

-- Rep. Vicky Hartzler. R-Mo, is a senior member on the House Armed Services Committee, and serves as the ranking member on the Tactical Air and Land Forces Subcommittee.

Senate nixes proposal limiting Energy Department's control on nuclear agency budget

By Rachel Frazin for THE HILL // 07/02/20 02:29 PM EDT

The Senate on Thursday nixed a provision in the National Defense Authorization Act (NDAA) that would have limited the Department of Energy's (DOE) control over a nuclear security agency's budget.

The upper chamber had proposed including in the must-pass legislation a stipulation that would have given the Nuclear Weapons Council, which includes personnel from both the Defense and Energy departments, review power over the Energy secretary's proposed budget for the National Nuclear Security Administration (NNSA). However, the chamber unanimously adopted an amendment from Sens. Joe Manchin (D-WVa.) and Senators Maria Cantwell (D-Wash.) that gives the DOE final say.

"We're so glad that we were able to stop efforts to usurp civilian control of nuclear weapons spending and protect the Department of Energy's funding for critical nuclear waste cleanup programs," Cantwell said in a statement. Previously, the amendment had met opposition from both the Trump administration and a group of bipartisan senators. Energy Secretary <u>Dan Brouillette wrote to lawmakers</u> this week to argue that the provision risks underfunding the NNSA.

"Granting the Department of Defense (DoD) the role of final arbiter of DOE's annual budget violates DOE's position as a distinct and equal Cabinetlevel agency," Brouillette wrote. "Such authority, providing DoD broad control over the NNSA's budget, restricts the President's capacity in exercising his responsibility to set budget levels, and subjects the priorities of NNSA to DoD's discretion, potentially causing setbacks and underfunding of other critically important missions of the NNSA," he added.

Similarly, Cantwell and Sen. Lamar Alexander (R-Tenn.) led a bipartisan group in penning opposition to the measure. "As currently written, the Senate NDAA bill would strip the Secretary of Energy of the ability to manage some of the most sensitive national security programs that account for almost half of the Department's budget," the nine senators wrote. "Such changes could impede accountability and Congressional oversight, as well as imperil future funding for other critical DOE responsibilities such as promoting scientific and technological innovation, managing our National Laboratories, sponsoring basic research in the physical sciences, and ensuring cleanup of the nation's nuclear weapons complex," they added.

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Senate Armed Services Committee spokeswoman Marta Hernandez defended the provision in an email to The Hill. "What the NDAA does is clarify and strengthen existing law that requires coordination between the Department of Defense and the NNSA on its budget development," Hernandez said. "The existing mechanisms have not been effective, and in recent years, DOD has functionally not even seen the NNSA budget until after it is finalized and ready to transmit to Congress," she added.

"The Senate NDAA tries to address those problems by clarifying the process for the future — making it more specific on how the interagency coordinates and approves the NNSA budget." Currently, the Energy Department oversees the NNSA budgeting process. The NNSA is an agency within the Energy Department that uses nuclear science for military purposes. It is charged with maintaining the nuclear weapons stockpile and responding to nuclear emergencies, among other duties. Updated 5:43 p.m.

AROUND THE WORLD

RUSSIA:

Russia's opposition flounders as Putin changes constitution

By: Anna SMOLCHENKO for Yahoo News by AFP // June 29, 2020

Moscow (AFP) - Russia's opposition is denouncing this week's vote on President Vladimir Putin's constitutional reforms as a joke, pointing out that copies of the amended basic law are already on sale in Moscow bookshops.

From liberal reformers to Communists, Kremlin critics say the vote -- which started last week and ends on Wednesday -- is a thinly veiled attempt to keep Putin, 67, in power for life. But other than tepid calls to boycott or vote "No", the opposition has done little to actively fight the changes. Russia's top opposition figure Alexei Navalny, who last summer rallied thousands against suspected voter fraud in Moscow, has also shown little interest in combating the reforms.

Experts say deep divisions and shrewd moves by the Kremlin are keeping opponents from mounting any serious opposition to Putin's plans. "A lack of resources, a lack of new faces, a lack of excitement, inspiration and faith -- that's what I think are the main reason for the problems," said Vitali Shkliarov, a Harvard University fellow and political adviser who has worked with the Russian opposition.

"There have been a million opportunities to prove yourself" since Putin announced the reforms, he said. But after years of repression, Kremlin critics feel dispirited. "The Russian opposition does not believe in itself." Putin proposed amending the constitution in January and later approved a last-minute addition that would reset presidential term limits to zero, potentially allowing him to serve two more six-year terms after his mandate expires in 2024.

They also include political changes like strengthening the role of parliament and a series of populist measures such as a requirement to adjust state pensions for inflation and an effective ban on gay marriage. Opinion polls show a majority of Russians support the social amendments but there is less enthusiasm for the political reforms.

- 'Opposition in a bind' -

The amendments have already been approved by parliament but Putin called the public vote in an effort to boost their legitimacy. Initially planned for April 22, the ballot was postponed by the coronavirus epidemic and analysts say its quick scheduling and then rescheduling is part of the reason the opposition has been unable to mount a strong campaign. Tatyana Stanovaya, founder of analysis firm R. Politik, said the Kremlin also pulled the rug

from under its opponents when it gave Russians the choice to vote only "yes" or "no" on the entire package of changes, instead of individual amendments.

Opposing popular measures such as better pensions and minimum wages could leave Kremlin opponents vulnerable, she said. "In such a situation it's hard to argue against the amendments," she told AFP. "The opposition is in a bind." Liberal party Yabloko has urged Russians to stay away from the "illegal, anti-constitutional and fake vote". The Communist Party is calling on its supporters to vote "No", an unusual move for a party that often toes the Kremlin line.

- 'A circus with balloons' -

Navalny, a 44-year-old anti-corruption campaigner who has organised the biggest anti-Kremlin demonstrations in recent years, has slammed the reforms as a "constitutional coup" but has done little to forcefully oppose them. He has said debate about whether to participate in the plebiscite is pointless because lawmakers have already backed the amendments and the vote will be a fraud. "What we are left with is a circus with balloons," he wrote on Telegram.

While many opposition supporters have been frustrated by its inability to offer a more decisive plan of action, some said change will come sooner or later. Mikhail Samin, a 20-year-old programmer who took part in anti-government protests in Moscow last summer, pointed to Putin's approval ratings, which fell to a historic low of 59 percent in April, according to a poll by the Levada Centre.

"The opposition is moving in the right direction," Samin said. "Society is moving in the right direction." Navalny has said that, instead of focusing on Putin's constitutional changes, Russians should prepare for regional elections in September and parliamentary polls due in 2021. Last year pro-Kremlin candidates suffered losses in Moscow city polls after Navalny called for tactical voting to oppose Putin loyalists. Analyst Stanovaya said it was time for Navalny to save his strength for another battle. --- "Now is not his time."

Russia's Newest Submarine Spotted Heading Out for 'Combat Training'

The Knyaz Vladimir was seen leaving the harbor where it was built. by <u>Caleb Larson</u> for The National Interest // July 1, 2020

Russia's newest improved Borei-class submarine, the **Knyaz Vladimir**, was seen in <u>open source satellite photos</u> leaving a Russian naval base at Severodvinsk along Russia's White Sea where it was built.

What was so unusual about the satellite photographs was the clearly visible wake that trailed behind the Knyaz Vladimir. The wake, over five miles, or about eight kilometers long, could be traced all the way back to the harbor where it entered the White Sea. The naval expert H I Sutton <u>speculated</u> that the long trailing wake was due to a combination of calm surface conditions as the submarine left the harbor, combined with the sub's large-diameter pumpjet being relatively close to the surface.

According to the <u>Russian Ministry of Defense</u>, the Knyaz Vladimir left Severodvinsk for the White and Barents Seas to do combat training and to test the ship's systems. Improved Borei-class The Knyaz Vladimir is the first of the <u>new-and-improved Borei-II class</u> (alternatively called the Borei-38

A class or Improved-Borei class depending on the source) and was commissioned during a risky <u>flag-raising ceremony</u> on July 12th in Severodvinsk that ignored social distancing restrictions.

The Knyaz Vladimir took nearly eight years to build from when it was first laid down to completion. The improved Boreis are a true original build. Their predecessor, the <u>original Borei-class</u> were a mishmash of classes, made up of leftover hull sections from Oscar- and Akula-class submarines. In addition to the original hull design, the improved Boreis opted for a more Western-style sail and tail assembly.

The class is also equipped with a pumpjet propulsor, similar to what the American Seawolf- and <u>Virginia-class</u> are equipped with. Pumpjets benefit from greater efficiency at low and sometimes high speeds. A well-designed pumpjet can also be much quieter than a traditional submarine propeller—of crucial importance for secretive underwater operations. The Borei-II class can pack up to **sixteen Bulava nuclear-capable ballistic missiles** into its hull, with each individual missile holding **six to ten warheads**.

Each missile has an estimated range of 8,300 kilometers, or over 5,100 miles, which is significantly less than the United Kingdom's and United States' <u>Trident D-5 submarine launched ballistic missile</u>, though accuracy is thought to be comparable. Though the Knyaz Vladimir is currently the only Borei-II class currently in service with the Russian Navy, a total of eight hulls are slated for construction. The Borei-II class is expected to be the backbone of Russia's sea-going nuclear triad for many years to come.

Postscript

The Knyaz Vladimir's commission with Russia's Northern Fleet is a testament to both the class' capabilities—and mission. A cleaner, more streamlined hull and sail design combined with a nuclear-powered pumpjet propulsion system mean that the class might be the quietest submarines in Russia's arsenal. Placement with the Northern Fleet is a nod to the Arctic's outsize importance to Russian national interests. As global warming progresses, the Arctic region will become more accessible—easing access to the resource-rich region and potentially creating new maritime trade routes. Countries with an interest in the Arctic beware.

Caleb Larson holds a Master of Public Policy degree from the Willy Brandt School of Public Policy. He lives in Berlin and writes on U.S. and Russian foreign and defense policy, German politics, and culture.

Russia's priority is to involve UK, France in future nuclear arms control talks - diplomat

The two states are the US closest NATO allies that possess nuclear weapons, the senior diplomat explained TASS (Russia), June 26 | Not Attributed

MOSCOW -- Russia thinks it necessary that the United Kingdom and France join the strategic nuclear arms control process as the United States' closest NATO allies, Russian Deputy Foreign Minister Sergei Ryabkov said in an interview with TASS First Deputy Director General Mikhail Gusman on Friday.

"As an essential element of our position on the future of nuclear arms control we insist that the United States' closest NATO allies possessing nuclear weapons should join these hypothetical talks. They are France and the United Kingdom," he said. "We make no secret that this is our priority. As far

as the United States is focusing on the necessity to go beyond the frame of the traditional Russian-US dialogue in this sphere [insisting that China join it — TASS] and make it multilateral, our priority is to have the above mentioned states join this process."

The senior Russian diplomat recalled that Russia had long been saying that "after the signing of the current Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms and its implementation by Moscow and Washington, it will be necessary to think about a multilateral nature of the nuclear arms control process."

"The upper limits set by the Treaty for each of the sides is 1,550 warheads," he explained. "Further hypothetical reductions in this sphere are possible only if the corresponding arsenals of other countries are duly taken into account in this process. There are no gaps between any of the elements of our position. On the contrary, it is a coherent and very logical, long-standing position."

According to the Russian senior diplomat, the lineup of the future multilateral process is a "separate big topic to be discussed." "Our logic and methodology are applicable to this sphere too," he went on to say. "We respect positions of the corresponding countries on what they will do in this context. We understand that these are very serious matters that cannot be resolved immediately."

"This is another reason why it would be right to extend the existing New START Treaty after February 5, 2021 to win time to continue the discussion about who will be involved in the future talks, what these talks will focus on, how to organize them and more," Ryabkov said. "It takes time. It cannot be resolved overnight, or even in a month. It takes much more efforts, both intellectual and political, and sophisticated solutions. So, let us discuss what is to be done and how it is to be done while the existing treaty stays in place."

US refuses to ratify CTBT, lays groundwork for resuming nuclear tests, Russia says

Moscow calls on states which did not ratify or sign the Comprehensive Nuclear-Test-Ban Treaty to reconsider their stance From Russia RT military news service TASS // 30 Jun, 05:00

MOSCOW, June 30. /TASS/. The United States, which has taken up a destructive position on the Comprehensive Nuclear-Test-Ban Treaty (CTBT), is laying groundwork for a potential resumption of nuclear tests, the Russian Foreign Ministry said in a statement on occasion of the 20th anniversary of the treaty ratification by Moscow.

The document has not entered into force so far because eight countries have either not signed or not ratified the treaty. "The US holds the most destructive position in this regard by officially declaring that it is not planning to ratify the CTBT, laying groundwork for a potential resumption of nuclear tests," the Foreign Ministry stressed. Moscow calls on states which did not ratify or sign the Comprehensive Nuclear-Test-Ban Treaty to reconsider their stance. "The non-proliferation and arms control regime is facing serious challenges.

We must do everything possible to overcome the negative trends. Russia is calling on the above mentioned eight states and first and foremost the US to reconsider their stance and to greenlight the ratification of this key treaty in the sphere of global security, making it a fully functioning international legal instrument," the statement published on the Russian Foreign Ministry's website said.

The Foreign Ministry emphasized that the CTBT's entry into force could create a "shield against developing nuclear weapons, preventing their proliferation." Since the ratification of the treaty, Moscow has been meeting its commitments, while contributing to its entry into force remains one of Russia's foreign policy priorities, the ministry stated. Russia has been actively involved in the activity of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), including the creation of a verification mechanism.

In Russia, the second largest national segment of the International Monitoring System (IMS) is being created, which is one of key elements of the treaty's verification mechanisms. Some 28 out of 32 monitoring stations planned in Russia have been put into operation. The CTBT outlaws the explosions of nuclear warheads and nuclear explosions for peaceful purposes. The ban applies to testing in all environments (underwater, underground, in the atmosphere, and in the outer space) and is of an absolute and comprehensive nature.

The UN General Assembly session adopted the CTBT on September 24, 1996. By now the agreement has been signed by 183 countries, including Russia, but has not taken effect because eight countries, including the United States, have not yet ratified it.

Russia Denies Nuclear Incident After International Body Detects Isotopes

By Anastasia Teterevleva and Anna Ringstrom // Reuters, Wire Service Content June 29, 2020, at 6:15 a.m.

MOSCOW/STOCKHOLM (Reuters) - Russia said on Monday it had detected no sign of a radiation emergency, after an international body reported last week that sensors in Stockholm had picked up unusually high levels of radioactive isotopes produced by nuclear fission.

The Comprehensive Nuclear Test Ban Treaty Organization (CTBTO), which monitors the world for evidence of nuclear weapons tests, said last week one of its stations scanning the air for radioactive particles had found unusual, although harmless, levels of caesium-134, caesium-137 and ruthenium-103. The isotopes were "certainly nuclear fission products, most likely from a civil source", it said.

It tweeted a map showing where the material was likely to have originated, which included parts of several Baltic and Scandinavian countries as well as a swathe of western Russia.

Asked on Monday about reports that Russia could have been the source of a leak, Kremlin spokesman Dmitry Peskov said: "We have an absolutely advanced radiation levels safety monitoring system and there are no any emergency alarms."

"We do not know the source of this information."

The International Atomic Energy Agency asked member states over the weekend whether they had detected the isotopes, and "if any event may have been associated with this". On Monday the IAEA said in a statement <u>https://www.iaea.org/newscenter/pressreleases/iaea-receives-member-state-data-on-radioisotopes-detected-in-the-air-sees-no-human-health-risk</u> that roughly 30 countries - including Finland, Sweden, Norway, the Baltic states, Britain, France and Germany - had informed it "that there were no events on their territories that may have caused the observed air concentrations". Russia was not one of them.

Finnish nuclear safety authority STUK said on Monday it had also found tiny amounts of nuclear particles in samples collected on its southern coast. But the concentrations were small enough that they could have been "derived from the normal operation or maintenance of nuclear reactors", it said.

Radiation protection expert Jan Johansson at the Swedish Radiation Safety Authority said the variations were extremely low and had no impact on radiation protection.

"What stands out here is the combination of these substances. That's not something we usually see," he told Reuters. The TASS news agency, citing Rosenergoatom, a unit of the state nuclear company Rosatom, said over the weekend that Russia's two northwest nuclear power plants, in Leningrad and Kola, were working normally and radiation levels were unchanged.

(Reporting by Anastasia Teterevleva in MOSCOW, Francois Murphy in VIENNA, Anna Ringstrom in STOCKHOLM and Tarmo Virki in TALLINN; Writing by Katya Golubkova; Editing by Peter Graff and Giles Elgood)



<u>CHINA</u>:

China Threatens In Paracels

Three American carrier strike groups are moving in the Philippine Sea while China shuts down sea traffic in the South China Sea By Paul McLeary for Breaking Defense // on June 29, 2020 at 4:34 PM

WASHINGTON: The Chinese government warned ships away from the Paracel Islands in the South China Sea today as the PLA Navy prepares to conduct four days of military exercises there, making the announcement one day after the US Navy sent two aircraft carriers into the Philippine Sea, and regional governments criticized Beijing's island grab.

It's not clear what the size of the Chinese exercise will be, but the government said from July 1 to 5, "no vessel shall be allowed to navigate" near the islands, "and all vessels have to follow the guidance of the commanding ship on site." The Chinese have no legal claim to the area they are warning other nations from since a UN tribunal ruled that China's claims are without legal merit and violate international law.

China has long laid claim to the islands off the coast of Vietnam. Over the past several years, Beijing has constructed 20 outposts in the Paracels, complete with man-made protected harbors, helipads, and, on Woody Island they've built an airstrip, hangars, and HQ-9 surface-to-air missile batteries.

The warning comes as Southeast Asian leaders repudiate Beijing for laying claim to areas of the South China Sea outside recognized international law. Countries in the region usually avoid drawing the ire of Beijing, which as the economic superpower in the region, is capable of hurting the smaller economies in the Pacific area. But on Sunday, regional leaders backed up complaints by Vietnam that China has encroached on areas within its influence, issuing a statement saying they "reaffirmed that the 1982 [United Nations Convention for the Law of the Sea] is the basis for determining maritime entitlements, sovereign rights, jurisdiction and legitimate interests over maritime zones," an ASEAN statement said.

No proposed action came along with the statement, but from a group who normally remains mum on such topics, the decision to speak up can be seen as significant in itself. As the Chinese bullied their neighbors on the other side of the Luzon Strait, two American aircraft carriers arrived in the Philippine Sea for the first time since 2018, kicking off days of joint operations in the waterway.

The USS Nimitz and USS Ronald Reagan Carrier Strike Groups came together over the weekend in show of American firepower, following months of increasing naval activity in the region, including several FONOPS which sent American destroyers through the Taiwan Strait between Taiwan and mainland China. Rear Adm. George Wikoff, commander of Carrier Strike Group 5, said in a statement that the "dual carrier operations demonstrate our commitment to regional allies, our ability to rapidly mass combat power in the Indo-Pacific, and our readiness to confront all those who challenge international norms that support regional stability."

The USS Roosevelt, back at sea after a COVID-19 outbreak confined it to port in Guam for two months also conducted dual-carrier operations with the Nimitz in the area last week, and remains in the region. The three carriers gives Washington a significant boost in presence and firepower in the region after going months without a carrier presence in the western Pacific. China has also stepped up its game, with the Chinese Air Force sending warplanes near Taiwan at least nine times in recent weeks, including two bombers on Sunday.



NORTH KOREA:

North Korea says only option is to 'counter nuclear with nuclear' against US

By Mark Moore for the NY Post // June 25, 2020 | 1:07pm | Updated June 25, 2020 | 1:50pm

Anti-war activists shout slogans during a press conference to demand peace on the Korean peninsula on the eve of the 70th anniversary of the outbreak of the Korean War.

North Korea claimed Thursday that, in the face of "hostile policy" by the US, it had no choice but to counter "nuclear with nuclear" — an announcement that came on the 70th anniversary of the <u>start of the Korean War</u>.

"In order to eliminate the nuclear threats from the U.S., the DPRK government made all possible efforts either through dialogue or in resort to the international law, but all ended in vain," according to a 5,500-word report issued by the Ministry of Foreign Affairs Institute for Disarmament and Peace, which refers to North Korea by its official name, the Democratic People's Republic of Korea.

"The option left was only one, and that was to counter nuclear with nuclear," it said, adding that a "strong war deterrent for national defense came to stand out as an indispensable strategic option." Noting the US' "pathological and inveterate hostile policy," the report, released on state-run media, said the hermit kingdom will continue to bolster its strength "to contain the persistent nuclear threats from the US."

The Trump administration and Kim Jong Un's regime embarked on a series of talks to curb North Korea's nuclear ambitions, but they failed to reach a binding agreement. North Korea has responded by firing off short-range missile tests, blowing up a <u>liaison office</u> and cutting communication lines with South Korea. Pyongyang said Wednesday it had <u>suspended unspecified military action</u> against Seoul.

North Korea announced Wednesday that it was suspending its planned... South Korean President Moon Jae-in, speaking at a ceremony to honor the war dead, urged North Korea to finally seek peace and said he has no intention of forcing his political or economic systems on Pyongyang. "We will continuously search for routes that are mutually beneficial for both Koreas through peace," he said. "Before speaking of unification, I hope that we can become friendly neighbors first."

The 1950-1953 war ended in an armistice rather than a peace treaty, meaning the conflict technically continues. South Korea did not sign the armistice. A war veteran from South Korea was pessimistic about the prospects for peace. "The war isn't really over and I don't think peace will come while I'm still alive," said Kim Yeong-ho, 89. "The nightmares just keep coming back to me every day.

North Korea Threatens U.S.: Nuclear Attack 'The Only Option Left'

N. Korea Threatens U.S. With Nuclear Attack. -- A collapse in negotiations between the Trump administration and Kim Jong Un has left Pyongyang with one option, it says: 'To counter nuke with nuke.'

By Paul D. Shinkman, Senior Writer, National Security June 26, 2020, at 10:14 a.m.

North Korea on Friday threatened to employ nuclear weapons against the United States, saying such drastic action represents the only remaining way to counter the threat it perceives from the Trump administration.

"In order to eliminate the nuclear threats from the U.S., the DPRK government has made all possible efforts either through dialogue or in resort to the international law, but all ended in a vain effort," North Korean state news wrote in an essay Friday morning about future prospects for peace, using an abbreviation for the country's official name. "The only option left was to counter nuke with nuke."

The troubling language from its state news service follows a steady escalation in North Korean provocations in recent weeks, including blowing up the liaison office earlier this month that it had established with South Korea two years ago. Analysts saw the move as part of an attempt by North Korean leader Kim Jong Un to reassert his control after disappearing for two weeks earlier this year.

The 5,000-word article on Friday documents the history of North Korea's grievances with the U.S., South Korea and its allies and comes a day after all of these countries marked the 70th anniversary of the beginning of the Korean War. But it draws particular attention to the Trump administration, which raised international expectations for a breakthrough with the Hermit Kingdom following a series of high-profile summits between the two leaders in 2017 and 2018.

That progress stalled over disagreements regarding international sanctions against North Korea. And subsequent pledges from President Donald Trump to cancel U.S. military exercises with South Korea – which both Kim and Trump labeled "war games" – have only further provoked North Korean aggression after the U.S. military continued with a pared down version of the drills late last year and this spring.

"No other nation on this planet than the Korean nation has so directly suffered from nuclear threats for so long," North Korea's state news said in the article on Friday. "To our people, nuclear threat is not at all an abstract concept but actual and concrete experience." The tone of the article also follows new, harsh rhetoric from Kim's sister, Kim Yo Jong, a hardliner who has become the most powerful woman in North Korea and reportedly among the most influential officials within her brother's inner circle.

She reportedly ordered the demolition of the liaison office, and labeled South Korea as an "enemy." North Korea under Kim has accelerated its nuclear weapons testing, both for warheads and the ballistic missiles that would deliver them. And analysts believe the country increasingly sees those technologies as its only way to "level the playing field" given America's immense military arsenal.

"Demanding North Korea surrender its nuclear weapons first before it gets any sort of benefit is just plain naive," says Harry Kazianis, senior director of Korean Studies at the Center for the National Interest. "If you want to get North Korea to come to the bargaining table Washington must offer an action for action approach where both sides get benefits simultaneously, tackling the smallest issues first. That is the only way we will ever get to stability on the Korean Peninsula. "Anything else guarantees we go from crisis to crisis for decades to come."

Paul D. Shinkman, Senior Writer, National Security - Paul Shinkman is a national security correspondent.



Tehran (AFP) - Tehran on Thursday reported an "accident" at Natanz nuclear complex in central Iran, saying there were no casualties or radioactive pollution, and warned foes -- especially Israel -- against hostile actions.

There was "no nuclear material (at the damaged warehouse) and no potential of pollution," the spokesman for Iran's Atomic Energy Organisation Behrouz Kamalvandi told state television. Kamalvandi said no radioactive material or personnel were present at the warehouse within the Natanz site in central Iran, one of the country's main uranium enrichment plants. He noted that the cause was being investigated, and said it had caused "some structural damage" without specifying the nature of the accident.

There was "no interruption to the work of the enrichment site itself", which "is working at the pace it used to," Kamalvandi said. Hours after the announcement, Iran's state news agency IRNA published an editorial warning that "if there are signs of hostile countries crossing Iran's red lines in any way, especially the Zionist regime (Israel) and the United States, Iran's strategy to confront the new situation must be fundamentally reconsidered."

The Iranian Atomic Energy Organisation released a photo purportedly from the site, showing a one-storey building with a damaged roof, walls apparently blackened by fire and doors hanging off their hinges as if blown out from the inside. State TV later showed a different angle of the building with minor damage to its walls and some of its fans still working. According to a statement released by the nuclear body, the warehouse was under construction and the accident caused no casualties. Natanz governor Ramezan-Ali Ferdowsi told the Tasnim news agency that a fire had broken out at the warehouse.

- Cause unknown -

IRNA reported that unnamed Israeli social media accounts had claimed the Jewish state was responsible for the "sabotage attempts". It stressed that Iran had tried "to prevent escalations and unpredictable situations while defending its position and national interests". The BBC's Persian service, which Iranian authorities consider hostile, said it received a statement "hours before" the accident from a group called the "Homeland Cheetahs" who claimed responsibility for the accident.

They claimed to be "dissidents present in Iran's security apparatuses" and said the location was targeted as it was not "underground" and therefore the alleged attack could not be denied. Iran's nuclear body has yet to provide an explanation for the cause of the accident. Tehran-based analyst Mohammad Marandi ridiculed claims of responsibility for the accident on Twitter. "If there's a fire anywhere, Iran's foes claim a military strike," said Marandi, who heads the American studies department at Tehran University.

"BBC Persian claims sabotage by a secret organisation, while their brethren in Israeli propaganda claim a drone strike! Poor coordination." The accident comes six days after an explosion near a military complex rocked the Iranian capital. The blast in the Parchin area in the southeast of Tehran was due to "leaking gas tanks", Iran's defence ministry said on Friday. Parchin is suspected of having hosted conventional explosion tests with nuclear applications, which the Islamic republic denies.

Tehran announced in May last year it would progressively suspend certain commitments under a 2015 nuclear deal with major powers, unilaterally abandoned by the United States in 2018. Iran restarted enriching uranium at Natanz last September after having agreed under the accord to put such

activities there on hold. The UN nuclear watchdog said last month that Tehran was continuing to produce enriched uranium in Natanz using "no more than 5,060 (so called first-generation) centrifuges installed in 30 cascades".

Tehran has always denied its nuclear programme has any military dimension. The 2015 deal promised Iran sanctions relief in exchange for limiting its atomic activities. US President Donald Trump's withdrawal from the deal was followed by Washington reimposing biting unilateral sanctions

Iran issues arrest warrant for President Trump

Tehran vows Trump will be prosecuted for ordering killing of Iranian Gen. Qassem Soleimani By Ben Wolfgang - The Washington Times - Updated: 7:19 p.m. on Monday, June 29, 2020

An increasingly restive <u>Iran</u> vowed Monday to arrest and prosecute President <u>Trump</u> for taking out one of the country's top generals, even as the beleaguered regime in <u>Tehran</u> battled economic and health woes and mounting questions over a massive but still murky explosion near a key nuclear weapons research site.

There was virtually no chance that the arrest warrant for Mr. <u>Trump</u> and 35 other foreign officials to <u>Interpol</u> would ever be enforced outside <u>Iran</u>'s borders, and <u>Interpol</u> officials said they would not act on <u>Iran</u>'s request. But the move, a direct but belated response to a U.S. airstrike in January that killed Iranian Maj. Gen. <u>Qassem Soleimani</u>, shows that <u>Iran</u> is once again stoking tensions with the U.S. and feeling the heat from a U.S. pressure campaign on its military and economy.

The <u>Trump administration</u> is facing its own challenges in trying to get reluctant allies to step up pressure on <u>Tehran</u>. Both sides are plotting their moves as time winds down before the U.S. election in November. A a top adviser to Secretary of State Mike Pompeo visited Saudi Arabia and Bahrain to warn of catastrophic consequences for the region if a United Nations arms embargo on <u>Iran</u> is allowed to expire in October, as called for in the 2015 <u>Iran</u> nuclear deal that President <u>Trump</u> repudiated two years ago.

<u>Iran</u> announced the arrest warrant for Mr. <u>Trump</u> just hours before the <u>administration</u>'s special representative for <u>Iran</u>, Brian Hook, suggested at a news conference in Saudi Arabia that Iranian leaders wanted to capture headlines and direct attention away from what he said was mounting support for an arms embargo extension. Mr. Hook carried the same message on a subsequent stop in Bahrain, where he warned of a "destabilizing arms race" in the region if <u>Iran</u>'s arms embargo is lifted.

At the press conference with Saudi officials, Mr. Hook pointed to missiles and weapons manufactured in <u>Iran</u> and recently captured in Yemen, where Iran-backed Houthi rebels have been locked in a bloody fight with a Saudi-led coalition. Mr. Hook said such weapons, along with tanks, attack helicopters, drones and warships, would flow throughout the region if the arms embargo expires in October.

"Imagine the new security challenges Saudi Arabia and other countries in the region will face if the arms embargo expires," he said. "Iran will upgrade its legacy weapons systems. It will acquire new and sensitive technologies that it could either reexport to its proxies in the region or use to increase the range and lethality of its current stockpile of missiles and rockets." Saudi Foreign Minister Adel al-Jubeir said his country is working hand-in-hand with the U.S. to extend the ban and warned that Iran "will become more ferocious and aggressive" if the embargo is lifted.

<u>Iran</u> was sounding increasingly confident that the major powers on the U.N. Security Council, including <u>Iran</u> deal signatories Russia, China, Britain and France, remain committed to the deal and opposed to U.S. efforts to extend the embargo. "The U.S. isn't merely violating [the nuclear deal] and bullying others to do so, too. It also has dishonor of being first in U.N. history to punish law-abiding countries for NOT violating a Security Council [resolution]," Iranian Foreign Minister Javad Zarif said in a Twitter post.

Mystery blast

Meanwhile, there are fresh questions surrounding just what happened to <u>Iran</u>'s nuclear weapons program after a huge explosion lit up the night sky at a military facility outside <u>Tehran</u> last week. Iranian officials have maintained that it was the result of a gas tank malfunction, but widespread speculation in Israeli media centered on whether there had been a major weapons accident at the site or whether it had been the target of an airstrike by a foreign military.

Sources with knowledge of the incident told The Washington Times on Monday that evidence suggests it was an accident. Still, the blast put a spotlight on secretive Iranian military sites that U.S. officials believe could be the home of illegal testing and may not be entirely open to regular inspections. Administration officials in recent weeks have criticized Iran for refusing to fully cooperate with international inspectors.

The U.S. and its allies fear that <u>Tehran</u> could respond to an extension of the U.N. arms embargo by restricting inspectors' access further or perhaps by kicking them out of the country altogether.

Inspections were a key piece of the Obama administration's 2015 nuclear deal with <u>Iran</u>. Mr. <u>Trump</u> withdrew from that agreement in May 2018, though the U.S. insists <u>Iran</u> must live up to key commitments under the pact, such as allowing outside inspections and observing limits on uranium enrichment.

U.N. monitors have confirmed that <u>Iran</u> has steadily exceeded its enrichment pledges under the deal but has yet to fully abandon its constraints as it pressures European allies of the U.S. to stick with the agreement. Analysts warn that the prospect of undeclared nuclear material in <u>Iran</u> or secretive testing sites should be a cause of grave concern for the U.S. and its allies. "On the one hand, in its declared nuclear program, while by no means racing toward a bomb, <u>Iran</u> is systematically reducing its breakout time," John Hannah, senior counselor at the Washington think tank Foundation for Defense of Democracies and former national security adviser to Vice President Dick Cheney, wrote in a piece for Real Clear Defense on Monday.

"On the other hand, there are growing concerns that <u>Iran</u> may be concealing both undeclared nuclear material and nuclear-related activities," he said. "Put them together, and it's an especially troubling combination that inevitability raises the uncomfortable question: What happens if the situation continues to worsen?" Along with those concerns was the dramatic public arrest warrant. Iranian officials said "red alerts" had been issued for Mr. <u>Trump</u> and 35 other officials and that <u>Tehran</u> is seeking the help of <u>Interpol</u> to apprehend them.

<u>Iran</u> did not name the other officials but said Mr. <u>Trump</u> "stands at the top of the list and will be prosecuted" as soon as he leaves office. "Thirty-six individuals who have been involved or ordered the assassination of [Soleimani], including the political and military officials of the U.S. and other governments, have been identified and arrest warrants have been issued for them by the judiciary officials and red alerts have also been issued for them via the <u>Interpol</u>," Prosecutor-General Ali Alqasi Meh told Iran's Fars News Agency.

The arrest warrant is <u>Iran</u>'s latest response to the Jan. 3 U.S. airstrike near Baghdad International Airport that killed <u>Soleimani</u>, the leader of <u>Iran</u>'s powerful Quds Force, a unit of the Islamic Revolutionary Guard Corps. The <u>Trump administration</u> blamed <u>Soleimani</u> for coordinating attacks by Iranian-backed militias in Iraq against American troops and <u>U.S. contractors</u>, and coordinating anti-U.S. proxy forces throughout the Middle East.

The airstrike nearly sparked an all-out war between the U.S. and <u>Iran</u>. Days after the incident, <u>Iran</u> sought to avenge the <u>Soleimani</u>'s killing by launching missiles at U.S. forces stationed at Iraq's Al-Asad air base. Dozens of American service members suffered traumatic brain injuries during the assault, but none was killed. Mr. <u>Trump</u> decided against direct retaliation for that attack. • Guy Taylor contributed to this report.

Iranian Missile Facility Blows Up, Conspiracy Theories in Tehran

Satellite photographs show the explosion happened at a missile production facility. Iran said the episode was a gas explosion at a different military base. By <u>David E. Sanger</u>, <u>Ronen Bergman</u> and Farnaz Fassihi // June 29, 2020

When a major explosion lit the skies on the edge of Tehran last week, the Iranian government was quick to dismiss the episode as a gas explosion at the Parchin military base, which was once the focus of international nuclear inspectors.

It turned out that was false: Satellite photographs show the explosion happened at a missile production facility not far from Parchin, a base laced with underground tunnels and long suspected to be a major site for Iran's growing arsenal. But beyond Tehran's effort at misdirection — commercial satellite photographs showed the telltale burn marks of the explosion and the location — it is unclear whether the cause was an accident, sabotage or something else.

American and Israeli intelligence officials insist they had nothing to do with it. But in Iran, where curating conspiracy theories is a national pastime, the sight of a huge explosion in eastern Tehran quickly merged on social media with news of a power outage in Shiraz, nearly 600 miles to the south. Shiraz also has major military facilities, and the explosion and the outage happened within the same hour on Friday.

There is no evidence the incidents were related. Nuclear inspectors visited the Parchin military facility five years ago after years of standoffs with the Iranian authorities. Renovations at the facility had been so extensive that it led to suspicions that the government might have been trying to hide past work on nuclear detonation technologies. After the episode last week, Iranian news organizations were shown a small hole in an otherwise intact gas tank, which seemed an improbable explanation for an explosion so large that pictures of the flames, taken miles from the site, showed up on Twitter.

By the end of the weekend, overhead commercial photographs showed a scorched hillside at the Khojir missile production complex in eastern Tehran, where both liquid and solid propellants are made for Iran's missile fleets. "It seems likely that some sort of gas or liquid storage tank blew up," said Fabian Hinz, an expert on Iran's military at the James Martin Center for Nonproliferation Studies at the Middlebury Institute of International Studies in Monterey, Calif. "Probably industrial gas that's needed for missile production," he said, but it was unclear from the photos. The main buildings at the missile production center appeared undamaged. Iran's missile program has long been a target of Israeli intelligence agencies. A large explosion in 2011, which killed a key architect of Iran's missile program, is widely viewed as an act of sabotage. But this explosion may have been different.

Two Israeli intelligence services that operate outside Israel's borders, the Mossad and the Israel Defense Forces intelligence unit, said they were investigating the episode and had not yet reached a final conclusion on whether it was an accident or sabotage. But several officials insisted that Israel was not involved. American officials also said they doubted it was a sabotage operation. Usually, Israel and the United States act in coordination in such covert missions, as they did with the cyberattack on Iran's nuclear centrifuge facility at Natanz a decade ago.

A spokeswoman for the Israeli prime minister's office declined to comment on whether Israel was involved in the explosion, a standard response to such questions. A spokesperson for the I.D.F. also declined to comment. Ronen Solomon of IntelliTimes, an intelligence blog, who was among the first to identify the Khojir missile facility as the site of the explosion, noted that it did "little damage." But he noted it was "a vast facility," and as part of the Shahid Hemmat Industrial Group, it has been the target of American economic sanctions.

If the explosion was an act of sabotage, some analysts noted, it was carefully designed to not invite retaliation because damage was so minimal. But in the past, there have been small attacks designed to create fear among Iranians that foreign powers had insiders in the country's sensitive military programs. Iran's news media tried to counter reports about the missile site, saying those were generated by "enemy media" eager to portray Iran's missile bases as vulnerable to attack.

New Iranian Missile Could Strike Central Europe

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By Ralph Savelsberg for Breaking Defense // on June 29, 2020 at 12:09 PM

On the 22nd of April, Iran surprised the world by successfully launching the Noor satellite, using a previously unknown Satellite Launch Vehicle (SLV) which they call Qased.

The US Space Force confirmed that Noor reached orbit, together with a second object, assessed as the spent upper stage. A detailed analysis of the Qased, based on open sources and using computer simulations to calculate trajectories, shows it has a strong relationship to the Shahab-3 ballistic missile Qasedand the Safir SLV, together with a number of unusual features for an SLV. If SLV compromises were removed, restoring the design optimization for use as a ballistic missile, the Qased can reach Central Europe and parts of Northern Europe, depending on its payload mass.

Iran's previous satellite launch attempts have been notoriously unreliable. Last year a Safir SLV exploded on its launch pad and the much larger Simorgh SLV has never successfully placed a payload in orbit. So far, Iran says it officially limits the maximum range of its ballistic missiles to 2,000 km; sufficient to reach Israel and Saudi Arabia, the stated foes of the Iranian regime. The US government maintains that Iran's SLV development is a cover for building long-range ballistic missiles and this analysis does not contradict that assertion.

Table 1 lists payloads and ranges for Iran's ballistic missile arsenal, as displayed in a recent Iranian TV documentary. A booster optimized for launching satellites differs from a ballistic missile intended to deliver a warhead to a ground target, but much of the technology is similar. If it can

accelerate a small satellite to orbital velocity (roughly 7.8 km/s for low-Earth orbit), it can also accelerate a heavier payload to the velocity necessary for sub-orbital trajectories to distances of more than 2,000 km (above 4 km/s).

Iran first orbited a micro-satellite using an indigenously developed launch vehicle in 2009, with its Safir SLV. The larger Simorgh SLV was unveiled in 2010. Iran has followed the original model of the Soviet Union and the United States, by exploiting its ballistic missiles as a starting point for SLVs. Due to this close ancestry, restoring the Qased or Safir to their roots as ballistic missiles is a much easier path than continuing to a 'pure' SLV optimization.

The Safir and Qased use storable liquid propellants for their first stage (all stages for the Safir). The Safir and Simorgh upper stages use N2O4 oxidizer, which constrains storage and operations environments. Any military application would have to address the same issues that the US and Soviets encountered in the 1950s and 1960s. That's what led to the use of silos. Iran apparently has stated that the Qased application of the Shahab-3 first stage is temporary and that they plan to introduce a solid rocket motor to replace it.

Notable developments that would signal a 'peaceful' SLV effort would include the application of LOX cryogenic oxidizer with kerosene fuel (as done by SpaceX, for instance) for the upper stages, as this would offer significantly more thrust and overall power for the weight than the propellants now used. An SLV optimization would also include long burn times and the ability to stop and restart engines to apply thrust at the optimum position to maximize the mass delivered to orbit.

The Qased, is smaller than the Safir and Simorgh and was transported and erected using a trailer practically identical to those used for Shahab-3 variants. The trailer's obvious modification removes a bracket, because the Qased is longer than a regular Shahab-3. The Safir and Simorgh SLVs were developed under Iran's (nominally) civilian space agency. However, the Qased, like the Shahab-3 that it is derived from, is the responsibility of Iran's Islamic Republican Guard Corps, thus firmly establishing the link with Iran's military ballistic missile program. This raises the question how the Qased could perform if it were restored to its roots as a ballistic missile.

Iran's media have released a wealth of photographs and video material of the missile and its launch. Figure 2 shows displays in a ground station. One of the displays shows a plot as a function of time (corrected for perspective and enlarged in inset a) that indicates that the missile has three stages and that, after burnout of each of the first two, the missile has coast phases. Another screen (inset b) shows trajectory parameters at 392.3 s into the flight.

Trajectory simulations were run against reverse-engineered data and releases using a medium-fidelity trajectory model to establish internally consistent values for unknown/uncertain missile parameters. This model was previously validated using publicly available information (the Atlas-F ICBM for sub-orbital trajectories and the US Minotaur I and the Chinese LM-3A for trajectories to orbit), which I've discussed in prior articles. Some of the missile's parameters can be derived with reasonable accuracy from a closer look at the missile. After tuning the unknowns against the published material, well constrained values were obtained for the stages of the Qased, such that the simulation results in the correct satellite orbit, with parameters at 392.3 s that match the values visible on the screen. A reconstruction of the missile is shown.

Iran has developed advanced Shahab-3 variants that use smaller and lighter tri-conic re-entry vehicles, smaller stabilising fins and lighter airframes. The Qased shares the small fins. At least two advanced versions of the Shahab-3, with placards denoting them as the Ghadr-F or Ghadr-H have the 51

same overall length, but different tank lengths. This is clear from a difference in the lengths of cable raceways on the outside of the propellant tanks and seams in the outer skin, where the tank bulkheads are attached. The Iranian documentary that is the source for the information in Table 1 suggests that the Ghadr-H boasts a 1,750 km range and the Ghadr-F has a range of 1,950 km, which would indicate that the latter has the long tanks.

In any case, the cable raceway in Figure 3, scaled such that the first stage diameter matches the 1.25 m diameter of the Ghadr, matches the cable raceway of the version with long tanks. The 1st stage parameters for the Qased simulation are derived from this tank size and Shahab-3 engine data from open sources. The tank volume is consistent with the mass flow and the first stage burn time from the screenshot in Figure 2. Unlike the original Shahab-3, at least one of the advanced variants with long tanks has its oxidizer tank mounted in front of the propellant tank, as drawn in Figure 3, but Qased imagery is not clear enough to make sure it shares this arrangement.

Visible differences between the Qased first stage and the Ghadr are limited to the paint scheme and to the top. The ballistic missile has a conical section that houses guidance equipment and serves as an adaptor for the re-entry vehicle. The Qased's guidance system is likely placed in its upper stage and its conical section is longer and hollow. In the simulation, its mass and the mass of the payload fairing are included in the first stage deadweight, on the assumption that the fairing is discarded between stage 1 burnout and stage 2 ignition.

Unlike its first stage, the Qased second stage is very different from that of the Safir. The Safir's has the same 1.25 m diameter as its first stage and it uses liquid propellant, while the diameter of the Qased second stage is approximately 1 m (0.96 m). Video footage from an on-board camera that shows the stage separation also shows a fairly large nozzle, which protrudes into the conical section at the top of the booster. The shape of this second stage and its nozzle seem to match the Salman solid-propellant engine, which Iran unveiled earlier this year.

With a fairly typical density for solid-propellant, its size suggests a propellant mass of about 1000 kg. It steers through 'thrust vector control' accomplished by deflecting its nozzle with actuators.

There is less information on the third stage/ satellite kick engine, because it is hidden under a large payload cover. Due to glare on the screen in Figure 2, its burn time is also unclear. The only option for the simulations is to iteratively change the 3rd stage parameters such that the simulated trajectory matches the actual trajectory. The complete parameter set is listed in table 2.

A specific impulse (Isp) of 270 s for the propellant is a moderate value for a solid propellant with a suitable vacuum expansion nozzle. The deadweight mass fraction (the mass of the stage at burnout as a percentage of the stage at lift-off) for the second stage is fairly typical for a relatively small solid-propellant engine. For the third stage it is significantly higher, because it probably houses the guidance equipment and thrusters for final course adjustments. The simulations do not allow a distinction between the dead-weight mass of the third stage and the payload mass, so the 10 kg satellite mass is an estimate. According to Gen. Jay Raymond, commander of the Space Force, Noor is a 3u cubesat, which would limit its mass to 4 kg.

The computer program iteratively estimated the flight path angle as a function of flight time, such that the resulting satellite orbit matched the reported 444 km apogee and 425 km perigee altitudes. The simulated launch direction was chosen such that the inclination of the orbit matches the reported value of 59.8° . The ground track of the first eight simulated orbits is shown in Figure 5. Figure 5: Simulated ground tracks of the Noor satellite. The red + shows the launch site near Shahroud (Visualization using the m_map software package and the Natural Earth database.)

A comparison between parameters on the simulated flight and those on the screen, in Figure 2, is shown in Table 3. The velocity and altitude are in exceptional agreement (less than 1 percent difference). The screen also displayed the apogee and perigee of the then-current trajectory. These can be calculated for the simulated ascent as well; the resulting values differ by only 1.3%. These results are quite sensitive to changes in the third-stage parameters. However, given engineering constraints, including "Occam's Razor", no other realistic parameter combination gave smaller residual differences with the reported parameters.

With these model parameters, we can now assess how this hardware would perform in a ballistic missile role. The clean modifications remove all mass above stage two, remove coast phases and emplace the warhead. The first-stage deadweight has been reduced, because the payload fairing is removed. The second-stage deadweight has been increased, to account for the addition of guidance equipment. On simulated maximum-range trajectories, with a payload of 650 kg, the range without Earth rotation is 3,337 km. This is reduced to 2,564 km with a 950 kg payload. The simulated maximum ranges on trajectories towards Europe, with a launch site in Northwest Iran and including Earth rotation, are shown in Figure 6.

With the heavier payload, much of Central and Eastern Europe is in range. With the smaller payload, the range is extended to include locations further to the west, including much of Germany and Italy, as well as parts of Northern Europe. While it is by no means certain that the Qased is indeed intended as step towards a ballistic missile with a longer range than Iran's current arsenal, these results show that it could be.

Ralph Savelsberg is an associate professor at the Netherlands Defence Academy, specializing in missile defense. This article does not reflect any official position or policy of the Government of the Netherlands. The author would like to thank James Kiessling for his valuable comments and suggestions.



INDIA:

India will 'never compromise' on its strategic interests, minister says Saheli Roy Choudhury@sahelirc // Published Wed, Jul 1 20203:29 AM EDT -- Updated 3 Hours Ago

Key Points

- India will not compromise on its strategic interest even as New Delhi and Beijing seek to defuse tensions after last month's border clash, said India's minister for coal, mines, and parliamentary affairs.
- Top military commanders from India and China started a third round of talks to ease tensions along the Line of Actual Control the de facto border this week while Indian forces have stepped up deployment along the border, local media reports said.

India will not compromise on its strategic interest, a cabinet minister said on Wednesday, even as New Delhi and Beijing seek to defuse tensions after last month's border clash in the Himalayas.

A "violent face-off" in the Galwan Valley in Ladakh left 20 Indian soldiers dead. While India said both sides suffered casualties after troops reportedly fought with improvised weapons — firearms are limited in the border areas under a <u>previous agreement</u>. China did not disclose if any of its soldiers died in the clash. It was the first time in more than 40 years that a border stand-off between the two nuclear powers resulted in casualties.

"India wants peace," Pralhad Joshi, India's minister for coal, mines, and parliamentary affairs, told CNBC's Tanvir Gill. "At the same time, as already prime minister (Narendra Modi) has said, that there is no compromise as far as Indian border is concerned," he said. "India will never lose any land and we will never compromise on our strategic interest." Still, the South Asian country wants peace but its border and territories are also "very important," Joshi added.

Top military commanders from India and China this week started a third round of talks to ease tensions along their de facto border — also known as the Line of Actual Control, <u>local media reports said</u>. Indian forces have also stepped up deployment along the border, they said. Former diplomats and political commentators have said the altercation in June was a "<u>turning point</u>" in one of Asia's most important bilateral relationships.

There is a growing anti-China sentiment in India, with many calling for a boycott of Chinese brands. Citing security concerns, New Delhi this week <u>banned dozens of Chinese mobile apps</u>, including the highly popular short video creation app TikTok.

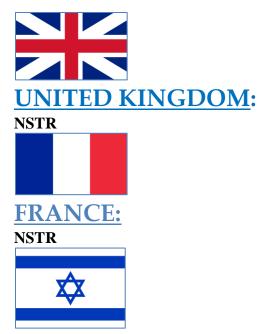
Coal auctions

As the minister in charge of India's coal ministry, Joshi also talked about the government's move last month to open up commercial coal mining to the private sector, ending decades of restrictions. <u>A total of 41 coal mines will be put up for auction</u>, allowing companies to bid for commercial mining permits. The reforms could theoretically reduce India's dependence on imports to meet its energy needs and will likely create jobs.

<u>Reports said India's top coal-producing state sought to delay</u> the auction of coal blocks for commercial mining for six to nine months, fearing weak participation from both domestic players and foreign firms due to the coronavirus pandemic. The state's chief minister reportedly said <u>he didn't</u> <u>understand why the Modi government rushed its decision</u> to go ahead with the auctions last month.

Joshi said as many as 1,140 people participated in an information and clarification session where 50 to 60 of them were foreign players. Around 329 registrations have been made for the auction, according to the minister, who added that he was "quite confident" that foreign firms will also participate in the auction





ISRAEL:

Netanyahu: 'Iran continues secret program to develop nuclear weapons'

Netanyahu says Iran mislead the world on its nuclear ambitions, commends US for pressuring Tehran i24NEWS (Israel), June 30 | Not Attributed

Tehran is continuing its secret program to develop nuclear weapons, Israel's Prime Minister Benjamin Netanyahu said Tuesday.

The Israeli PM added that Iran has been deliberately misleading the international community in regards to its nuclear ambitions.

The international community largely stood idle in the face of Iranian deceit and aggression, the PM asserted, saying that a number of nations even colluded with Tehran.

He praised the US for its "maximum pressure" policy on Iran, saying that while Tehran tried to intimidate Washington, the US resolve left its efforts in shattered.

He also commended the United States for the January drone strike that killed Quds force leader, "arch-terrorist" Qasem Soleimani and warned that Israel will do everything necessary to make sure that Iran does not expand its foothold in Syria.

The comments were made during a joint press briefing with Brian Hook, US Special Representative on Iran, who visited Israel as part of his larger official Middle East trip.

Hook, in his turn, said that Israel and the US "see eye to eye" on the need to extend the UN conventional arms embargo, warning that its expiration would allow it to export more arms to its regional proxies.

Hook also warned that Iran was the world's largest sponsor of anti-Semitism and terrorism, not just in the Middle East, but all across the globe.

On Monday, Hook visited Saudi Arabia, where Saudi Foreign Minister Adel al-Jubeir joined the US call for extending the international embargo on conventional arms trade targeting Iran.

Bahrain also backed the US initiative during Hook's visit to the country.



