

Feature Report

"BIODEFENSE: The Nation Faces Long-Standing Challenges Related to Defending Against Biological Threats". Published by U.S. Government Accountability Office; June 26, 2019

https://www.gao.gov/products/GAO-19-635T

Why GAO Did This Study

Catastrophic biological events have the potential to cause loss of life, and sustained damage to the economy, societal stability, and global security. The biodefense enterprise is the whole combination of systems at every level of government and the private sector that contribute to protecting the nation and its citizens from potentially catastrophic effects of a biological event. Since 2009, GAO has identified cross-cutting issues in federal leadership, coordination, and collaboration that arise from working across the complex interagency, intergovernmental, and intersectoral biodefense enterprise. In 2011, GAO reported that there was no broad, integrated national strategy that encompassed all stakeholders with biodefense responsibilities and called for the development of a national biodefense strategy. In September 2018, the White House released a National Biodefense Strategy.

This statement discusses GAO reports issued from December 2009 through March 2019 on various biological threats and biodefense efforts, and selected updates to BioWatch recommendations made in 2015. To conduct prior work, GAO reviewed biodefense reports, relevant presidential directives, laws, regulations, policies, strategic plans; surveyed states; and interviewed federal, state, and industry officials, among others.

TABLE OF CONTENTS

NUCLEAR WEAPONS

- <u>Nuclear Monitor Confirms Iran Exceeds Uranium Stockpile Limit</u> (The Hill)

 The verification that Iran has breached the nuclear deal for the first time adds even greater uncertainty to an already volatile situation between the United States and Iran.
- The U.S. Requires an Updated Nuclear Triad and Advanced Communication Systems (SIGNAL) [Gen. David Goldfein] confirmed the necessity of the United States' nuclear deterrence triad, the combination of intercontinental ballistic missiles (ICBMs), ballistic missile submarines and the aircraft bomber fleet, which serve as the backbone of our national security.
- <u>Nuclear Arsenal Must Be on Australia's Agenda, Argues Defence Expert</u> (Sydney Morning Herald)
 Professor White said Australia should only consider defensive weapons such as submarine-launched
 ballistic missiles.

US COUNTER-WMD

- Experts Warn of Antimicrobial Resistance, Additional Threats to National Biosecurity (Homeland Preparedness News)
 - "In short, the nation is not prepared for biological outbreaks, acts of bioterrorism, biological warfare of accidental releases with catastrophic consequences," [Dr. Asha] George said.
- <u>US, Allies Warn Russia That Missile Defenses Will Be Bolstered to Counter New Threat</u> (Stars and Stripes)
 - "An arms control agreement doesn't work if it is only respected by one side," NATO Secretary-General Jens Stoltenberg said Wednesday. "This is extremely serious."
- Fort Drum in New York Gets Missile Defense Site Designation from DoD (Homeland Preparedness News)
 - The Department of Defense points out that there is no current need for this type of missile defense system and they have no current plans to build one.

US ARMS CONTROL

- <u>Iran Nuclear Deal: Why Does the Enriched Uranium Stockpile Matter?</u> (BBC News) Enriched uranium is widely used for peaceful purposes, such as medical research and producing electricity. But if it is highly purified it can also be used to make a nuclear bomb.
- Trump Enters North Korea, Announces Nuclear Talks Will Resume (The Hill) "Speed is not the object. We want to see if we can do a really comprehensive, good deal," Trump told reporters. "This was a great day. This was a very legendary, very historic day."
- With Treaty Set to Expire, NATO Scrambles to Counter Russian Missile Threat (Defense One) ... the Trump administration declared that because Russia had for years violated the Intermediate-Range Nuclear Forces Treaty, or INF Treaty, in part by developing and fielding the SSC-8, the treaty was in fact dead.

COMMENTARY

- A Not So Modest Proposal: Maintain the INF, Extend New START, and Involve New Actors in Arms Control (Bulletin of the Atomic Scientists)
 - A path forward might begin with Presidents Trump and Putin suspending the August 2 withdrawal and pursuing discussions to agree to on-site inspections of both the 9M729 cruise missile and the Aegis Ashore installations.
- <u>Commentary: With U.S.-Iran Tensions Rising, Is Diplomacy Still Even an Option?</u> (Chicago Tribune)
 - While it continued to scrupulously abide by the terms of the nuclear deal, it also continued improving its ballistic missile capabilities and supporting its proxies in Iraq, Syria, Yemen and elsewhere.
- With One Small Step, Trump Makes History in North Korea (Atlantic Council)
 Alexander Vershbow ... "While President Trump's DMZ meeting with Kim Jong-un was conceived mainly as a public relations stunt, it may prove to be an important step toward reinjecting momentum into the negotiations on denuclearization."

NUCLEAR WEAPONS

The Hill (Washington, D.C.)

Nuclear Monitor Confirms Iran Exceeds Uranium Stockpile Limit

By Rebecca Kheel

July 1, 2019

The international organization that monitors Iran's compliance with the nuclear deal confirmed Monday that Tehran has exceeded the amount of low-enriched uranium it is allowed to stockpile.

"In response to media inquiries, we can confirm that IAEA Director General Yukiya Amano today informed the Board of Governors that the Agency verified on 1 July that Iran's total enriched uranium stockpile exceeded 300kg of UF6 enriched up to 3.67% U-235 (or the equivalent in different chemical forms)," the International Atomic Energy Agency (IAEA) said in a statement.

The IAEA's confirmation comes after Iranian state media reported that Iran had breached the 300 kilogram limit.

The verification that Iran has breached the nuclear deal for the first time adds even greater uncertainty to an already volatile situation between the United States and Iran. Less than two weeks ago, President Trump called off a military strike against Iran at the last minute that was meant to respond to it shooting down a U.S. drone.

Under the 2015 nuclear deal — negotiated by the Obama administration and co-signed by the United Kingdom, Germany, France, China and Russia — Iran can stockpile no more than 300 kilograms of low-enriched uranium.

Tehran announced in mid-June it would soon exceed that limit, upping pressure on Europe to deliver benefits from the deal to offset U.S. sanctions.

The Trump administration withdrew the United States from the accord in May 2018, reimposing harsh sanctions on Iran.

The European signatories of the deal have been working to set up a mechanism for European businesses to continue trading with Iran without facing U.S. sanctions, but Iran has said Europe's efforts are insufficient.

Last-minute talks between Europe and Iran last week failed to convince Tehran to stay within the limits of the deal.

For now, Iran is still only enriching to the 3.67 percent limit set by the deal — enough for power plants but far from weapons-grade.

But Iran has set another deadline for Europe to deliver benefits, after which it will increase its enrichment levels. That deadline is Sunday.

Iran has said it needs 5 percent enrichment for its nuclear power plant in Bushehr and 20 percent enrichment for a Tehran research reactor.

Twenty percent is still under weapons-grade. But once it reaches that level, it takes much less time to enrich to 90 percent, which is considered weapons-grade.

https://thehill.com/policy/defense/451149-nuclear-monitor-confirms-iran-exceeds-uranium-stockpile-limit

Return to top

SIGNAL Magazine (Fairfax, Va.)

The U.S. Requires an Updated Nuclear Triad and Advanced Communication Systems

By Kimberly Underwood

June 28, 2019

With Russia and China pursuing "rapid and comprehensive" nuclear weapon modernization efforts, instead of denuclearization, the United States must remain vigilant in its commitment to update its defensive tools to protect the nation, said Gen. David Goldfein, USAF, chief of staff of the Air Force.

The chief of staff spoke at the Mitchell Institute's Strategic Deterrence Breakfast Series on June 26. He confirmed the necessity of the United States' nuclear deterrence triad, the combination of intercontinental ballistic missiles (ICBMs), ballistic missile submarines and the aircraft bomber fleet, which serve as the backbone of our national security.

"As chief, when I contemplate and think about the Air Force the nation needs to accomplish these missions and our nuclear missions side-by-side with our joint teammates and our allies and partners, I always start with an assessment of the threat," Gen. Goldfein stated.

Russia remains the most dangerous nuclear threat to the United States, the Joint Chief attested. And while the United States has continued to reduce its number of nuclear weapons, Russia, China and other countries "have moved in the opposite direction," he stressed.

"We're not interested in pursuing a repeat of the Cold War, but we have to recognize that our adversaries have not reciprocated our commitment to reducing the potential role of nuclear weapons in war," Gen. Goldfein noted.

Russia's program, which started in 2006, is focusing on advancing their land and sea-based strategic missile forces, as well as their airborne cruise missiles designed to evade U.S. detection, the general emphasized.

"They've also doubled down on their lower-yield weapons, and they'll be close to completing the modernization of their triad by about 2020, which is about the time we will begin our journey," he noted.

In addition, both Russia and China are taking "a more aggressive posture" in the Arctic region, especially along the Northern approaches to the United States and Canada. "And most concerning is the open declaration by Russian Chief of Defense [Valery Gerasimov] of their intent to use nuclear weapons early in any conflict," Gen. Goldfein stated.

For the Air Force itself, the Joint Chief continued to argue for a larger service. "The force today is a third smaller than the force needed in 1991 to oust Iraq, a nonnuclear, middleweight country from Kuwait," he noted. "I think this is one of the reasons that the Commission on the National Defense Strategy came to the conclusion that regardless of the operation or the location, the Air Force will be central to any operation. And that is why the secretary and I have continually stated and testified that the Air Force today is too small for what the nation is asking us to do."

In addition, the service will greatly rely on an updated nuclear command, control and communications system (NC3) to control any modernized components of the U.S. triad. The military stood up the Nuclear Command, Control and Communications Enterprise Center, or NEC, in April. Gen. John Hyten, commander of the U.S. Strategic Command, is the operational commander for the

NEC, which is aimed at modernizing the situation monitoring, decision making, force direction, force management and planning for NC3, according to the Air Force.

"That was a very important step, so we have a single individual who is responsible for the overall architecture and pulling that together," said Gen. Goldfein, commenting on Gen. Hyten's role.

And while the Joint Chief was not able to provide any timelines as to the NEC's next steps, he did speak of its importance. "The work that we're doing in connecting the force and building a network force across the services on the conventional side has got equal application to the nuclear command and control side," Gen. Goldfein stated. "Because at the end of the day, what we need is a resilient, capable architecture that keeps the commander in chief connected."

Gen. Goldfein added that the service will be looking to "significantly leverage the rapid and exciting expansion of commercial space," including "bringing low-earth-orbit capabilities that allow us to have resilient pathways to communicate."

And despite the Iranian downing of a key U.S. surveillance tool, a RQ-4A Global Hawk unmanned aircraft system, reportedly over the Strait of Hormuz, the military will continue to "fly where we need," in international airspace, Gen. Goldfein noted.

"This is a conversation we can have in the South China Sea," he said. "This is a conversation we can have anywhere in terms of international airspace. We will continue to protect those global commons for everyone, and we will operate where we need to operate. I don't see a significant change in capabilities there. At the end of the day, my job as a Joint Chief is to ensure that we are presenting executable options."

https://www.afcea.org/content/us-requires-updated-nuclear-triad-and-advanced-communication-systems

Return to top

Sydney Morning Herald (Sydney, Australia)

Nuclear Arsenal Must Be on Australia's Agenda, Argues Defence Expert

By Harriet Alexander

July 1, 2019

Australia can no longer rely on the United States to protect it in Asia and should consider developing its own nuclear weapons for the event that China becomes hostile, former defence strategist and security analyst Hugh White argues in a controversial new book.

Professor White argues in How to Defend Australia the assumption that the United States would protect the nation against any attack by a major power, which has underpinned Australian defence policy since the Cold War, is no longer true as China emerges as the dominant power in Asia.

For Australia to be self-reliant, it would need to boost defence spending from 2 per cent to 3.5 per cent of GDP - or \$30 billion - and consider the "difficult and uncomfortable" question of developing its own nuclear capability, said Professor White, a professor in strategic studies at the Australian National University.

"It's made perfect sense for Australia not to contemplate nuclear weapons for the last 40 years because we've enjoyed a very high level of confidence in the American nuclear umbrella, but America provided that umbrella because it secured its position as the primary power in Asia," Professor White said.

"If the chances of [maintaining] that position are much lower, then our circumstances will be very different.

"We have to ask ourselves, can we defend ourselves against a power like China?"

China's economy will be twice the size of the United States economy by 2030, and the shift in wealth distribution accompanying its rise is the largest the world has ever seen.

Although most think tanks and strategic policy institutes in the United States continued to assert that dominance in Asia was a strategic priority, America's global leadership has not figured as a priority for President Donald Trump nor for the contenders to the Democrat nomination, Professor White said.

Germany, South Korea and Japan are also beginning to debate the merits of obtaining weapons. Like Australia, they were signatories to the Nuclear Non-Proliferation Treaty.

Professor White said Australia should only consider defensive weapons such as submarine-launched ballistic missiles.

"We need to be extremely careful about how we talk about this and very conscious of the extraordinary cost to us of acquiring nuclear weapons," Professor White said.

"It would make us less secure in some ways, that's why in some ways I think it's appalling."

The last prime minister to canvass the development of nuclear weapons in Australia was Robert Menzies in the 1960s.

Professor White, a former deputy secretary for strategy and intelligence with the Department of Defence, was dismissed as alarmist when he first foreshadowed in 2010 the demise of American influence in Asia. But the Lowy Institute's international security program director Sam Roggeveen said he had since been proved correct.

Mr Roggeveen said the regional complications of Australia developing nuclear weapons would be huge, with Indonesia probably having to follow suit, but the logic was inescapable.

"If we ever completely decouple from the [US] alliance then it's hard to see how we could essentially maintain our independence against China's coercion if we didn't have nuclear weapons," Mr Roggeveen said.

The bipartisan political consensus on Australian defence policy is opposed to the development of nuclear weapons, and the domestic shipbuilding program would leave Australia "hopelessly vulnerable" if it ever came to a fight with China, Mr Roggeveen said.

"According to White, we are locking in a defence force for a generation that will be totally unsuited to the world we are entering," he wrote in a book review for The Interpreter. "That's the scandal."

The Minister for Defence, Linda Reynolds, said: "Australia stands by its Non-Proliferation Treaty pledge, as a non-nuclear weapon state, not to acquire or develop nuclear weapons."

La Trobe Asia executive director Euan Graham said the US alliance was more resilient than Professor White described and China had shown no signs of aggression, but he agreed Australia should think about developing its nuclear capability.

"We're talking about 15 to 20 years acquisition timeframe and the security environment that we're facing will almost certainly be more severe then that it is now," Dr Graham said.

"I think Australia has to be thinking about what will be required to move to a nuclear weapon posture because that can't happen overnight."

https://www.smh.com.au/politics/federal/nuclear-arsenal-must-be-on-australia-s-agenda-argues-defence-expert-20190701-p52306.html

Return to top

US COUNTER-WMD

Homeland Preparedness News (Washington, D.C.)

Experts Warn of Antimicrobial Resistance, Additional Threats to National Biosecurity

By Claudia Adrien

June 28, 2019

Dr. Asha George understands firsthand the threats biological agents can cause. George, who is executive director of the Blue Ribbon Study Panel on Biodefense, served in Operation Desert Storm. She knows what it's like to be standing on the battlefield wondering whether antimicrobial resistant anthrax or some other biological agent had been loaded into a scud missile directed her way.

George, who has spent 30 years in the biodefense field, also experienced what it's like to take a vaccine that received emergency use authorization just the week before.

"I bring that up really only because I know what it feels like to be operating in an arena under the specter of biological warfare," George said on Wednesday before the U.S. House Committee on Oversight and Reform's National Security Subcommittee.

She was among a panel of experts testifying about the state of U.S. preparedness for biological attacks and infectious disease pandemics. The experts agreed that a range of factors affect our country's ability to fight these threats, including weakened or fragmented federal oversight, limited incentives for research and development, and a lack of preparedness at the local level to protect vulnerable populations.

The Blue Ribbon Study Panel on Biodefense issued its bipartisan report, A National Blueprint for Biodefense, which assessed the state of biodefense in the country looking at strengths, weaknesses and vulnerabilities.

"In short, the nation is not prepared for biological outbreaks, acts of bioterrorism, biological warfare of accidental releases with catastrophic consequences," George said. "We are talking about catastrophic events that affect the function of our entire society."

Among these concerns is antimicrobial resistance, one of the foremost global public health threats. Drug resistant diseases cause at least 700,000 deaths worldwide each year and could increase to 10 million deaths per year by 2050, said U.S. Rep. Stephen Lynch (D-MA), chairman of the subcommittee. He added that those were conservative projections.

"Antibiotic infections pose serious threats to our national security," said Helen Boucher, director of the Tufts Center for Integrated Management of Antimicrobial Resistance at Tufts University. "Resistant pathogens complicate our soldiers' combat wounds, increasing risk of limb loss and death, and compromise our military combat readiness and effectiveness."

Between 2004-2009, more than 3,300 American soldiers in Iraq and Afghanistan became severely ill from a single resistant pathogen, Acinetobacter, which has become even more resistant to treatment over time.

From a bioterrorism perspective, the former Soviet Union successfully weaponized multidrug resistant strains of both the plague and anthrax. Studies have concluded the aerosolized release of a weaponized resistant pathogen in just a single incident of bioterrorism in the Washington, D.C. area would result in a death toll of over 3 million, Boucher said.

Antimicrobial resistance also puts our health security at risk, both in the United States and around the world. An outbreak with limited or no treatment options could overwhelm health systems, harm economies, and even destabilize countries.

The resistance can also undo decades of progress. Complicated surgeries are only effective with the support of safe antibiotics. While bacteria naturally develop resistance in nature, the use of antibiotics puts selective pressure, leading them to develop resistance even faster, Boucher said.

The opioid epidemic in the United States is also fueling antimicrobial resistance as people who inject opioids have a 16 times higher chance of contracting Methicillin-resistant Staphylococcus aureus, or MRSA.

But with rates of antimicrobial resistance increasing and fewer drugs available to treat infections, options seem to be few and far between.

"The pipelines for antibiotics have to be the answer here," Lynch said. "How do we incentivize that on our end?"

The solution lies somewhere in fixing a market that seems to be broken and providing a return on investment for drug development, Boucher said. Taking the return on investment away from the volume of sales, a term called de-linkage, may also help.

Addressing antimicrobial resistance and other threats can only be accomplished when there is coordination among agencies at the federal level, specifically at the level of the White House, the panelists said. The Government Accountability Office reports that there are almost two dozen presidentially appointed officials who have a responsibility for biodefense. The recent Zika and Ebola outbreaks show it's not always clear who is in charge or where funding comes from in a situation and is compounded by that it may take months for supplemental appropriations to be distributed.

There's also the biodefense challenge at the grassroots level.

"When the 2015 Ebola crisis occurred, Georgia received a lot of these patients from West Africa," said Cham Dallas, professor and director at the University of Georgia's Institute for Disaster Management. "We had to ramp up pretty quickly."

Georgia has since developed a network of 700 institutional stakeholders to respond to potential attacks and other naturally occurring pandemics that may have a substantial impact, Dallas said. Despite this coordination, there are still populations that may be severally impacted by a biodefense scenario, including nursing homes, where many residents would have to shelter in place due to complications in moving them from these units.

"We've designed evacuation plans for these facilities," he said. "But the evacuation is a nightmare."

https://homelandprepnews.com/countermeasures/34581-experts-warn-of-antimicrobial-resistance-additional-threats-to-national-biosecurity/

Stars and Stripes (Washington, D.C.)

US, Allies Warn Russia That Missile Defenses Will Be Bolstered to Counter New Threat

By John Vandiver

June 26, 2019

The U.S.-led NATO alliance will consider bolstering its air and missile defense systems in Europe as well as enhancing its conventional forces if Russia doesn't abolish a new missile system that poses a threat to the Continent, the alliance's top official said Wednesday.

"An arms control agreement doesn't work if it is only respected by one side," NATO Secretary-General Jens Stoltenberg said Wednesday. "This is extremely serious."

Stoltenberg's comments came at the start of a meeting of NATO defense ministers, including acting Defense Secretary Mark Esper, who is in Brussels to convene with allies.

NATO's new measures to counter Russia are expected to take effect if Moscow doesn't comply with the landmark 1987 Intermediate-Range Nuclear Forces Treaty by an Aug. 2 deadline. If the treaty breaks apart, "Russia bares the full responsibility," Stoltenberg said.

Last year, the United States warned it would pull out of the Cold War-era pact by August unless Moscow comes back into compliance with the treaty that bans missiles with a range between 310 and 3,400 miles. The United States and its allies in NATO contend Russia's SSC-8 missile system violates the weapons ban and poses a new threat. The weapon is nuclear capable, has short warning times and could hit European capitals within minutes, Stoltenberg said.

Moscow has denied the system violates the treaty and has warned it will take counter measures in light of the U.S. decision to withdraw from the ban.

Another underlying U.S. concern regarding the INF treaty is it applies only to the United States and Russia, but China's military emergence has sparked worries that Beijing is free to develop systems that the United States is banned from developing. In January, China tested an intermediate-range missile dubbed "the Guam killer," which purportedly has enough range to strike U.S. bases in the Pacific.

But in Europe, some analysts have warned the collapse of the treaty could affect the military balance and usher in a dangerous new era of nuclear brinkmanship. Allies have downplayed such concerns, saying NATO has no plan to deploy new ground based, nuclear capable, missiles in Europe.

"If they don't come back into compliance, we need to respond. So we also need to prepare for a world without the INF Treaty," Stoltenberg said at the start of talks at NATO's Brussels headquarters.

Stoltenberg did not detail how NATO would adapt its missile defenses in Europe, but one option could be to modify and enhance its existing networks to counter the new Russian threat.

Reconfiguring the alliance's missile defense system also is likely to ratchet up tensions with Moscow. For years, Russia has complained about the NATO ballistic missile defense system, which allies say is designed to counter threats emanating from countries such as Iran. But Moscow has always been suspicions of the system and feared it was an attempt to blunt Russia's own nuclear deterrent capabilities.

Over the years, allies have attempted to defuse Russian concerns about the system's limitations — namely that its interceptors are too few and located too far south or too close to Russia to be able to intercept Russian intercontinental ballistic missiles.

NATO's missile defense set up, however, could be enhanced, if allies agree.

U.S. military capabilities in Europe are the core of NATO's missile defense system. It includes a U.S. Army-manned radar positioned on a mountain top in Turkey, a U.S. Aegis site at Deveselu Air Base in Romania, another U.S. site in Poland and four Aegis destroyers based out of Rota, Spain.

Next week, NATO will hold a meeting with Russian officials with the talks likely to center on how to salvage the INF treaty.

"They still have the chance to save the treaty," Stoltenberg said. "Time is running out, but it is still possible for Russia."

https://www.stripes.com/us-allies-warn-russia-that-missile-defenses-will-be-bolstered-to-counter-new-threat-1.587748

Return to top

Homeland Preparedness News (Washington, D.C.)

Fort Drum in New York Gets Missile Defense Site Designation from DoD

By Dave Koveleski

June 28, 2019

The U.S. Department of Defense designated Fort Drum in Jefferson County, N.Y., as an East Coast Missile Defense Site.

U.S. Rep. Elise Stefanik (R-NY) commended the choice.

"I am proud to announce that after years of leading the effort on behalf of Fort Drum on the House Armed Services Committee, the Department of Defense has announced that Fort Drum is the preferred designation for an East Coast Missile Defense Site," Stefanik said. "Since day one in office, I have served as the number one advocate for Fort Drum and our region and worked every day to achieve this designation."

The Department of Defense points out that there is no current need for this type of missile defense system and they have no current plans to build one.

"I led the effort to unite much of the New York Congressional Delegation around the selection of Fort Drum as the preferred site, and I thank my colleagues for their support. I also want to thank the countless community groups, including Advocate Drum (FDRLO), state elected officials, and the tens of thousands of families for their advocacy on behalf of our region. Most of all, thank you to the troops of the 10th Mountain Division for their service to our nation," Stefanik said.

Stefanik has advocated for this designation since she took office. She included language into the NDAA that requires the Secretary of Defense to designate an interceptor site for potential future deployment in the continental United States.

https://homelandprepnews.com/stories/34561-fort-drum-in-new-york-gets-missile-defense-site-designation-from-dod/

US ARMS CONTROL

BBC (London, U.K.)

Iran Nuclear Deal: Why Does the Enriched Uranium Stockpile Matter?

Author Not Attributed

July 1, 2019

Iran has exceeded the amount of enriched uranium that it was allowed to have under a 2015 nuclear deal with world powers.

Under the accord, Iran agreed to limit its sensitive nuclear activities and allow in international inspectors in return for the lifting of crippling economic sanctions.

What is enriched uranium?

Enriched uranium is widely used for peaceful purposes, such as medical research and producing electricity. But if it is highly purified it can also be used to make a nuclear bomb.

Under the nuclear deal, Iran is only permitted (until 2031) to produce low-enriched uranium, which has a 3-4% concentration of the most fissile isotope, U-235, and can fuel a power plant. "Weaponsgrade" uranium is 90% enriched or more.

Iran can also stockpile no more than 300kg (660lbs) of the low-enriched uranium and operate no more than 5,060 of the centrifuges used to separate out U-235 isotopes from uranium hexafluoride gas.

Another part of the deal instructs Iran not to accumulate more than 130 tonnes of heavy water, which contains more hydrogen than ordinary water, and to redesign its heavy-water nuclear facility at Arak. Spent fuel from a heavy-water reactor contains plutonium, which can be used in a nuclear bomb.

Why did Iran break the limit?

The Iranian economy has slumped since President Donald Trump withdrew from the nuclear deal in May 2018 and began reinstating sanctions. He said the deal was flawed and that he wanted to force Iran's government to renegotiate the terms - something it refused to do.

The other parties to the deal - the UK, France, Germany, China and Russia - criticised Mr Trump's decision and said they remained committed to the deal.

In May 2019, the White House stepped up pressure on Iran by ending exemptions from secondary sanctions for countries still buying Iranian oil.

It also ended exemptions for countries participating in deals under which Iran exchanged its surplus low-enriched uranium for un-enriched ore concentrate known as "yellowcake" and sold its surplus heavy water. Such transfers allowed Iran to continue production of both materials without exceeding the stockpile limits.

Iran's President, Hassan Rouhani, subsequently said it would retaliate against the US sanctions by suspending its commitment to comply with the stockpile caps. Officials noted that Iran stated in the nuclear deal that it would cease performing its commitments "in whole or in part" if sanctions were reimposed.

Mr Rouhani also gave the five remaining parties to the deal until 7 July to shield Iran from the sanctions' effects. If they failed, he said, Iran might start enriching uranium beyond 3.67% concentration and halt the redesign of the Arak reactor.

The European countries have set up a bartering mechanism that would essentially allow foreign companies to trade with Iran in a way that would avoid sanctions, but it is not yet operational.

Why does this matter?

First and foremost, it could be considered a violation of the nuclear deal.

If a "material breach" is confirmed by the International Atomic Energy Agency (IAEA), whose inspectors monitor compliance, the deal allows for a so-called "snap back" of UN and multilateral sanctions on Iran. No permanent member of the UN Security Council would be able to veto the move.

Iran has also said it will speed up production of low-enriched uranium once it has breached the stockpile limit, but its concentration would still be well below anything that could be used possibly for a weapon.

Experts say they would be more concerned if Iran decided after 7 July to violate another commitment and started to enrich uranium beyond 3.67%.

The Atomic Energy Organisation of Iran said earlier this month that it might begin to enrich uranium up to 5% so that it could provide fuel for its nuclear power plant at Bushehr, or even up to the 20% required for Tehran's research reactor.

The production of 20% enriched uranium is a major concern because it is most of the way to weapons-grade uranium. Going from uranium's natural state of 0.7% concentration to 20% takes approximately 90% of the total effort required to reach weapons-grade.

Before the nuclear deal was implemented, Iran had a sufficient amount of 20% enriched uranium and number of centrifuges that its so-called "break-out time" - the time it would theoretically take to acquire enough fissile material for one nuclear weapon, if it chose to do so - was estimated to be about two to three months.

The deal slowed the break-out time to at least a year. But any reversal of Iran's commitments on uranium enrichment would see that start to shorten.

Does Iran want a nuclear bomb?

Iran insists it has never sought to develop such a weapon.

The international community does not believe that, pointing to evidence collected by the IAEA suggesting that until 2003 Iran conducted "a range of activities relevant to the development of a nuclear explosive device". Some of those activities continued until 2009, according to the IAEA.

Last year, Israel displayed what it said were archives it secretly took from Iran which showed Iran continued to pursue nuclear weapons knowledge after 2015 - though Iran called the accusation "ridiculous".

In January, the US intelligence community nevertheless assessed that Iran was "not currently undertaking the key nuclear weapons-development activities we judge necessary to produce a nuclear device".

What have world powers said?

Earlier this month, the US accused Iran of resorting to "nuclear blackmail" that it said should be "met with increased international pressure".

German Chancellor Angela Merkel has warned that if Iran does not abide by its commitments "that will of course have consequences".

https://www.bbc.com/news/world-middle-east-48776695

Return to top

The Hill (Washington, D.C.)

Trump Enters North Korea, Announces Nuclear Talks Will Resume

By Jordan Fabian and Kyle Balluck

June 30, 2019

President Trump made history on Sunday by becoming the first sitting U.S. president to cross into North Korea, a symbolic gesture toward Kim Jong Un during a meeting at the heavily guarded Demilitarized Zone (DMZ) in which the two leaders agreed to restart stalled nuclear talks.

Trump and Kim afterward spoke privately for more than 50 minutes, turning what was supposed to be a brief exchange of pleasantries into a negotiating session in which Trump said they both agreed to "designate a team" and "work out some details" in his on-again, off-again effort to end Pyongyang's nuclear program.

"Speed is not the object. We want to see if we can do a really comprehensive, good deal," Trump told reporters. "This was a great day. This was a very legendary, very historic day."

"It'll be even more historic if something comes up, something very important," the president added.

Trump's meeting with Kim was his first since nuclear talks broke down at a February summit in Hanoi, Vietnam. Major doubts still surround the negotiations and Kim's willingness to surrender his nuclear weapons and ballistic missiles.

But Trump was determined to show the public he can secure a nuclear deal with North Korea, which would be his biggest achievement on the world stage.

It came days after he agreed at the Group of 20 summit to reopen trade talks with Chinese President Xi Jinping, pressing to secure another elusive deal and show voters he can be the dealmaker in chief ahead of his 2020 reelection race.

The history-making moment came at 3:45 p.m. Korea time, when Trump and Kim shook hands across a concrete slab that forms the line separating the North and South. At Kim's request, Trump stepped over the line, and the two men walked back toward a plaza in the North, where they posed for photos.

"Good to see you again," Kim said to Trump, according to a translator. "I never expected to see you in this place."

"Good progress. Good progress," Trump said as he and Kim crossed back into South Korea.

"Stepping across that line was a great honor," Trump said, adding that he would invite Kim to visit the White House.

The image-conscious Trump framed the gesture as a rebuttal to critics who say he will not be able to secure a deal with Kim.

"You don't report it accurately, but that's OK. Some day, history will record it accurately," he said.

Trump and Kim met at the Freedom House on the South Korean side of the DMZ, where the North Korean leader said he was "willing to put an end to the unfortunate past."

Kim said he was "surprised" when Trump made the invitation by tweet on Saturday but hailed the importance of the meeting as a sign of the "excellent relations between the two of us."

"You hear the power of that voice" Trump said, adding that the North Korean leader "doesn't do news conferences."

"This is a historic moment, the fact that we're meeting," he added.

Trump later told U.S. troops at Osan Air Base in Pyeongtaek, South Korea, that he noticed that "many people ... from Korea were literally in tears" when he crossed the DMZ but did not cite specific examples.

He also said during brief remarks to reporters that sanctions against Pyongyang remain in place but that "at some point during the negotiations things can happen."

In a tweet before leaving South Korea, Trump described his meeting with Kim as "wonderful," adding that standing on North Korean soil was "an important statement for all."

Despite the historic nature of Trump's visit to the Korean Peninsula, the outcome essentially got the U.S. and North Korea back to the same place they were before talks broke down four months ago.

The Hanoi summit collapsed when Trump refused to accept Kim's offer of sanctions relief in exchange for shuttering the North's largest nuclear facility. Washington is looking for far greater concessions from Pyongyang, including a full accounting of their nuclear stockpile, comprehensive inspections and eventually the elimination of all nuclear weapons.

Before and during his trip to Asia, Trump had repeatedly hinted about the possibility of meeting with Kim.

The two leaders recently resumed contact. Trump said he received what he called a "beautiful letter" from Kim this month containing birthday greetings. In return, the president sent Kim a thank-you note and letter.

Trump first publicly suggested the possibility of a brief greeting with Kim at the DMZ in a tweet Friday.

In an exclusive interview with The Hill on Monday, Trump said he would be visiting the DMZ and that he "might" meet with Kim. The Hill delayed publishing news of the trip earlier in the week at the request of the White House, which cited security concerns about publicizing the president's plans that far in advance.

Trump said Saturday that the North Korean leader was open to a meeting, but the president noted potential logistical challenges could prevent it from taking place.

Sunday's meeting with Kim came after bad weather blocked Trump's attempt to make a surprise visit to the DMZ in November 2017.

Trump considered meeting Kim there in 2018 before deciding to hold the first summit between the two leaders in Singapore.

This report was updated at 9:04 a.m.

https://thehill.com/homenews/administration/451044-trump-makes-history-crossing-into-north-korea-before-announcing

Defense One (Washington, D.C.)

With Treaty Set to Expire, NATO Scrambles to Counter Russian Missile Threat

By Kevin Baron

June 30, 2019

BRUSSELS — On Aug. 2, the nuclear weapons treaty that may have saved Europe, if not the world, from annihilation for 30 years will dissolve into history. We have no clue how NATO will continue to keep Europe safe after Aug. 3.

The countdown clock began in February. One week after Russia first publicly displayed its nuclear-capable SSC-8 ground-based cruise missile, the Trump administration declared that because Russia had for years violated the Intermediate-Range Nuclear Forces Treaty, or INF Treaty, in part by developing and fielding the SSC-8, the treaty was in fact dead. The U.S. "suspended" its compliance with INF immediately; Trump gave Moscow six months to get back in line.

That clock is almost up. Then what?

Trump officials say this is all Moscow's doing, and that trashing the treaty frees the U.S. to develop and field badly needed matching missile capabilities to deter Russia, and potentially China.

"This is a dangerous and entirely avoidable reality, but Russia chose it by developing, manufacturing and deploying the SSC-8 missile," said Acting Defense Secretary Mark Esper on Thursday, at this week's regularly scheduled meeting of NATO defense ministers in Brussels. "This missile is proof-positive that Russia has been noncompliant with the INF Treaty for several years, and prudence now requires our alliance to take steps to counter this new capability."

Esper added that the U.S. and NATO are working to find a way to stop the SSC-8 — short of obviously problematic airstrikes on their launchers.

Moscow agrees — at least insofar as the INF's zombie status. Russian officials say the West's own offensive capabilities long ago made relics of INF and other treaties, and that Russia's missiles are an appropriate defense. Deputy Foreign Minister Sergei Ryabkov said on Wednesday that Russia would take "countervailing military measures" against whatever NATO decides.

Arms control advocates say this is all Trump's doing, and foisting an artificial deadline on Moscow only assures they will speed more missiles into place before the West is ready to ward them off. Moreover, they say, it tells China, Iran, and other regimes that they are free to develop their own dangerous intermediate-range missiles. In short, they argue, it will start an arms race.

NATO officials are still trying against hope to save the treaty.

"Our main focus now is to try and bring Russia back into compliance," said NATO Secretary Jens Stoltenberg, said in an on-stage interview with this reporter at the Brussels Forum, an annual policy conference convened by the German Marshall Fund of the U.S.(Defense One is a media partner of the event.)

"I admit the likelihood of that happening is actually going down every day," Stoltenberg said. "I think this treaty is so important we have an obligation to try and save the treaty...The INF Treaty is not just one arms control treaty; it's a cornerstone, landmark treaty."

Stoltenberg, a former prime minister of Norway, recalled growing up in a Europe threatened by mid-range cruise and Pershing missiles. "I actually demonstrated against all of them," he said. "That's why it was such a great achievement when we got the INF Treaty. Because the INF Treaty didn't only reduce the number of missiles, it actually banned all of them. So for decades there has been zero land-based, intermediate-range weapons systems in Europe."

But all of that is history.

This week, Stoltenberg and NATO ministers pledged that if Russia doesn't comply, "we will respond." The alliance leader listed possible options, including more military exercises, increased missile defenses, new arms control agreements where possible (some want the U.S. and Russia to at least keep the Treaty's ban on ballistic missiles), and "conventional" response options.

Stoltenberg declined to say whether NATO members were considering preemptive strikes on SSC-8 sites.

"It's not that we will have a conflict on the 3rd of August," he said.

But when the treaty expires, the gloves come off. Stoltenberg pointed to U.S. research and development into a similar intermediate-range missile capability which, he conceded, "would violate the treaty if it was developed and deployed before the treaty expires."

"We have not started to do anything which is in violation of the treaty, but we have started to prepare for a world without the treaty so we can react, respond — but we will respond in a defensive, measured way because we are not seeking conflict. Our aim is still to reduce tensions, but at the same time maintain credible deterrence also, in a world with more Russain missiles and without the INF Treaty."

In fact, the U.S. has been working on post INF-Treaty missiles for some time. One such is the U.S. Army's Precision Strike Missile, or PrSM, intended to be operational in four years. "Abrogating the treaty also opens the possibility of building even longer-ranged 'strategic fires' such as rocket-boosted artillery shells and ground-launched hypersonic missiles, both of which could hit targets beyond 1,000 miles," wrote Technology Editor Patrick Tucker, adding that the Pentagon may have difficulty finding Euroepan countries to host them.

On July 5, the NATO-Russia council will meet again, likely the last such meeting before the deadline and a new world begins for Europeans living within range of nearly unstoppable nuclear-tipped missiles at Vladimir Putin's fingertips.

"Make no mistake: The U.S. will remain in compliance with the INF Treaty until its very last minute," Esper said in Brussels, but "should Moscow choose to walk away from the treaty, we and our allies will move forward, and we will meet the future together. We will invest and we will adapt and our alliance has done — as our alliance has done so many times in the past."

Kevin Baron is the founding executive editor of Defense One. Baron has lived in Washington for 20 years, covering international affairs, the military, the Pentagon, Congress, and politics for Foreign Policy, National Journal, Stars and Stripes, and the Boston Globe, where he ran investigative ...

https://www.defenseone.com/threats/2019/06/treaty-set-expire-nato-scrambles-counter-russian-missile-threat/158114/?oref=d-topstory

COMMENTARY

Bulletin of the Atomic Scientists (Chicago, Illinois)

A Not So Modest Proposal: Maintain the INF, Extend New START, and Involve New Actors in Arms Control

By Pierce S. Corden

June 26, 2019

For the United States and the Russian Federation to avoid withdrawal from the Intermediate-range Nuclear Forces Treaty on August 2, 2019, both parties must resolve claims that the other is in noncompliance. The Treaty prohibits deployment of missiles with a range between 500 and 5500 kilometers and their launchers. The United States cites intelligence that the Russian Federation tested a cruise missile within the prohibited range, and has deployed several battalions of these missiles. Russia takes issue with the US ballistic missile defense system, Aegis Ashore, as being capable of launching INF-range cruise missiles. Aegis Ashore systems are currently deployed in Romania and are headed to Poland.

The back and forth accusations of INF Treaty violations are not new. The United States has accused the Russian Federation of violating the agreement, first by its testing and now by deployment. These accusations were met with denials, requests for details, and counter-accusations. When the United States identified which cruise missile they judged was in violation, Russia offered to display the 9M729 cruise missile to US inspectors but, bilateral discussions earlier this year failed to resolve the situation.

President Trump is now exploring the possibility of addressing the INF issue by reframing how the practice of arms control is conducted. Instead of focusing on bilateral agreements between the United States and the Russian Federation (the two countries with the largest nuclear arsenals) the President believes that we should involve more actors. Actors like China who also have deployed missiles with INF range.

A path forward might begin with Presidents Trump and Putin suspending the August 2 withdrawal and pursuing discussions to agree to on-site inspections of both the 9M729 cruise missile and the Aegis Ashore installations. Russia would need to demonstrate that the range of the missile was less than 500 km; US intelligence suggests previous tests of the 9M729 cruise missile exceeded 500 km. If the missile as deployed is found to be in violation, it would need to be modified in a verifiable manner to ensure that its range is less than 500 km. This would probably involve modification to its fuel capacity. For the Aegis Ashore system, it will likely be necessary to modify these installations until the Russians are satisfied that they comply with the INF Treaty.

Assuming that the INF Treaty can be sustained and anticipating that the New START limits on nuclear arsenals are extended, the United States and Russian Federation would be in a position to propose an agreement involving China and potentially the UK, France, India, Pakistan, and Israel. This new agreement would aim to engage the other nuclear-armed states, including those not party to the Non-Proliferation Treaty, and put limits on their nuclear-weapon systems. The objective would be a declared ceiling on the systems of each participating state.

Both the United States and the Russian Federation would need to set overall ceilings on their nuclear weapons to complement the INF and New START undertakings. China would need to agree to announce a ceiling on its deployed systems (perhaps beginning with the launchers), as would India and Pakistan. The United Kingdom and France have fairly well known upper bounds on the

numbers of their deployed warheads. Israel would be more complicated because it does not officially acknowledge possessing nuclear weapons. Language could be devised preserving its ambiguous position, e.g., "Israel states that it will not be the first state to introduce nuclear weapons into the Middle East, and in no case would this number exceed X." States need not all join into the agreement at the same time. As with the early US-USSR SALT agreements, verification of the ceilings would be by national technical means. Hopefully, as such an undertaking was negotiated, North Korea would agree to return to the NPT as a non-nuclear-weapon state, with its relevant nuclear materials under IAEA safeguards.

These established ceilings would provide a basis for further reductions over time, bearing in mind the large differences in numbers and/or announced ceilings on numbers among the states involved and thus be an important next step toward the global elimination of nuclear weapons.

https://thebulletin.org/2019/06/a-not-so-modest-proposal-maintain-the-inf-extend-new-start-and-involve-new-actors-in-arms-control/

Return to top

Chicago Tribune (Chicago, Illinois)

Commentary: With U.S.-Iran Tensions Rising, Is Diplomacy Still Even an Option?

By Ivo Daalder

June 20, 2019

The United States and Iran are on a collision course. Escalation is the order of the day, as the Trump administration doubles down on its maximum pressure campaign and the Iranian government responds with maximum resistance. The only question now is how this ends — in war, new negotiations or one side backing down.

That we've reached this point was entirely predictable when President Donald Trump announced over a year ago that the United States was withdrawing from the 2015 Iran nuclear deal, formally known as the Joint Comprehensive Plan of Action and negotiated by his predecessor. Trump, who denounced that agreement "as defective at its core," pledged to get a better deal — one that would extend the nuclear prohibitions indefinitely and also address Iran's ballistic missile capabilities and destabilizing regional behavior.

To that end, the administration embarked on a strategy of maximum pressure, designed to squeeze Iran economically and force Tehran to change its behavior. Iran, though, did not budge. While it continued to scrupulously abide by the terms of the nuclear deal, it also continued improving its ballistic missile capabilities and supporting its proxies in Iraq, Syria, Yemen and elsewhere.

Last month, the Trump administration doubled down. It ended earlier waivers on Iranian oil sales to China, India, Japan and others in an effort to reduce Iranian exports to zero. It declared Iran's Islamic Revolutionary Guard Corps a terrorist organization. And it cited ambiguous intelligence to rush an aircraft carrier, B-52 bombers and additional troops to the Persian Gulf region, warning of "unrelenting force" if Iran were to attack U.S. or allied interests.

This time, Tehran did respond. It announced that it would abandon some limits on its nuclear program that were in the deal. It also upped the ante militarily, surreptitiously attacking oil tankers in the Persian Gulf and using its proxies to attack oil and other installations in Iraq and Saudi Arabia. The downing early Thursday of a U.S. Navy drone over the Strait of Hormuz is the latest escalation.

Iran's message is clear. It can walk away from a nuclear agreement the United States has abandoned. It can disrupt oil shipments from the gulf, which supply 30 percent of the world's total oil consumption. It can use its proxies to attack U.S. and allied interests throughout the region.

This leaves Washington with some difficult choices. It can continue to increase the pressure on Tehran. But Iran has made clear that it will escalate rather than give in. And with escalation comes increased risks of accidents or miscalculation, possibly leading to war.

Trump, for one, appears to recognize these risks and has disavowed any interest in war or regime change. He's urged his own advisers to tone down the tough talk to avoid further escalation. And he downplayed the attack on the U.S. drone as a "mistake" done by a lower-ranking, "loose and stupid" Iranian officer. His only real concern is Iran's nuclear capabilities. "I would certainly go over nuclear weapons," Trump said when asked if he would use force against Iran.

Yet by abandoning the nuclear deal, Trump lifted any incentive for Tehran to stick to the agreed limits. Indeed, the maximum pressure campaign is now making it that much more likely that Tehran will break out of the agreement.

Which leaves a return to negotiations as Washington's only real choice. In recent weeks, Trump has said he's open to talks, even sending messages to Iran's supreme leader through Swiss and Japanese interlocutors. Iran, though, is in no mood for negotiations under pressure. "I do not see Trump as worthy of any message exchange, and I do not have any reply for him, now or in future," Ayatollah Ali Khamenei said in responding to Trump's offer.

But if direct U.S.-Iranian talks are off the table for now, Tehran might be more open to returning to negotiations that also included the other parties to the nuclear deal — Britain, France, Germany, Russia and China, all of whom have stuck by the agreement. The aim of those talks would be to prevent Iran from getting nuclear weapons, first, by persuading Tehran to continue complying with the deal's strict limits and, second, by extending the nuclear limits beyond the 15-year time frame of the agreement.

It won't be easy to get Iran to return to the negotiating table on these terms, though U.S. sanctions are clearly biting. But the bigger question will be whether Trump, having seen the limits and dangers of escalation, would agree to new talks, especially if it meant negotiating on the basis of a framework that produced what he once called the "worst deal in history."

Ivo Daalder is the president of the Chicago Council on Global Affairs and a former U.S. ambassador to NATO.

https://www.chicagotribune.com/opinion/commentary/ct-iran-conflict-nuclear-agreement-daalder--20190620-gt7crr6zrrhs3on5zikwhzm2qv-story.html

Atlantic Council (Washington, D.C.)

With One Small Step, Trump Makes History in North Korea

By Ashish Kumar Sen

June 30, 2019

On June 30, Donald J. Trump became the first US president to set foot in North Korea. Trump made history when stepped across a low concrete marker accompanied by North Korean leader Kim Jong-un and walked a few steps into the North. The two leaders agreed to have their negotiators resume an effort to reach what has so far been an elusive nuclear deal.

"The United States, under the Trump administration, has disrupted the longstanding, but failing, US policies of past administrations by seeking to build trust from the top down," said Barry Pavel, senior vice president, Arnold Kanter chair, and director of the Atlantic Council's Scowcroft Center for Strategy and Security.

"This was helpful for reducing the near-term threat, but so far it is unclear whether it will help to achieve the denuclearization that we seek," said Pavel. "How much trust building will be required before North Korea begins the process of denuclearization? Certainly, today's ceremony and symbolism is not unhelpful, but it is unclear how and when this path will lead to a nuclear-free North Korea."

Alexander Vershbow, a distinguished fellow in the Scowcroft Center and a former US ambassador to South Korea, said: "While President Trump's DMZ meeting with Kim Jong-un was conceived mainly as a public relations stunt, it may prove to be an important step toward reinjecting momentum into the negotiations on denuclearization."

The downside to this "spectacular historical stunt," said Robert Manning, a senior fellow in the Scowcroft Center, is that "what Trump is oblivious to is that it helps legitimize Kim Jong-un, with Trump appearing the supplicant to 'Dear Leader' in the eyes of North Koreans."

"What does the United States or Trump get for it? Mainly, a great stage prop for Trump's re-election campaign," said Manning, adding: "It was political theater masquerading as diplomacy, but one has to give Trump credit, it was a brilliant move."

The Trump-Kim meeting on June 30 was the third time that the two leaders have met. They have had two summits in the past thirteen months. The first, in Singapore on June 12, 2018—the first time that a sitting US president had met the leader of North Korea—produced a joint statement in which Trump committed to provide security guarantees to North Korea, while Kim "reaffirmed his firm and unwavering commitment to complete denuclearization of the Korean Peninsula."

The second summit in Hanoi on February 27 and 28, 2019, ended in failure as Kim refused to agree to complete denuclearization. Instead, North Korea insisted that all sanctions be lifted in exchange for dismantling only its most important nuclear facility—the Yongbyon enrichment facility.

"After two summits, Kim is testing short-range missiles and continuing to work on his missile and nuclear program," said Manning. "Trump pretends this is not happening because he's such great friends with Kim."

Manning noted that despite Trump's declarations of the great relationship he shares with Kim, "the word 'denuclearization' was not spoken. And is not that the central point of diplomacy with North Korea? The United States and North Korea still do not have a common definition for denuclearization. So how can it happen?"

US and North Korean negotiators have struggled to bridge the gap on how they define complete, verifiable, and irreversible denuclearization (CVID)—a key US demand.

US Special Representative for North Korea Stephen Biegun admitted as much in remarks at the Atlantic Council on June 19. "We don't have that agreed definition of what denuclearization is and we do consider that to be a very important starting point," Biegun said. "We will never get to our destination if we don't know where we are going, so it is very important for us to agree upfront on what that destination is."

"For both countries, denuclearization sits at the center of this discussion," Biegun said, adding: "Our expectations have been made quite clear to the North Koreans, but Chairman Kim has also signaled to us during the course of [the Hanoi summit] how important this issue is to him."

But Biegun also said that the "the door is wide open" for negotiations with North Korea.

"The agreement to intensify negotiations at the senior expert level, to be led by Steve Biegun on the US side, provides an opportunity to bring the parties together on a common definition of denuclearization and to agree on at least the initial stages of a roadmap leading to the achievement of that goal," said Vershbow. "The roadmap would define the steps North Korea is prepared to take to freeze and eventually dismantle its nuclear weapons programs, and what reciprocal steps the United States is prepared to take in terms of sanctions relief, security guarantees, normalization of diplomatic relations and conclusion of a peace treaty."

"Both sides will need to show greater flexibility if they want to bridge the gap that has remained since the collapse of the Hanoi Summit," said Vershbow.

Manning said: "Beyond the show business and symbolism [of the Trump-Kim meeting], there appears potential progress in breaking the diplomatic stalemate as Trump and Kim spoke of agreement to starting working-level talks."

A key to success of future negotiations would be if the North Korean negotiators are empowered to discuss denuclearization. Biegun said that ahead of the Hanoi summit US negotiators quickly realized that their North Korean counterparts were not empowered and that this topic was one over which Kim had total control.

"The United States wants denuclearization. North Korea's leadership wants regime security from attack and continued control with a growing economy," said Pavel.

Manning sensed some flexibility in the US position. "Before any more empty summits, they need to negotiate the framework and roadmap for a deal. To break down deep distrust on both sides, this needs to be a step-by-step, action-for-action reciprocal process. But the United States had held to an all-or-nothing hardline position. So this appears a shift toward more flexibility," he said.

US-North Korea negotiations have been in what Biegun described as a "holding pattern." Biegun reportedly received no response to a letter he wrote to North Korean Vice Foreign Minister Choe Son Hui asking to resume working-level talks.

Now, with a signal from Trump and Kim to resume negotiations, Manning said that the steps the two sides take can be big. "After Hanoi, Kim's offer to dismantle all nuclear facilities at Yongbyon was left on the table. That will be the starting point for Biegun-Choe talks: Is the DPRK willing to dismantle all nuclear facilities at Yongbyon, including the tritium plant, under IAEA monitoring and verification? I would also add the HEU facility about 15 miles outside Yongbyon," he said.

"If Kim is willing to do that, that would be a big frontloaded first step, capturing a large chunk of his nuclear weapons program. This should be worth a lot to the United States and Trump should consider a big package, including some suspension of sanctions," Manning said, noting that at the

DMZ, Trump hinted that this might be negotiable. "Also, in the package might be an exchange of liaison offices, security assurances, allowing some economic cooperation (reopen the Kaesong industrial complex, etc.), support for North Korea starting talks with the IMF/World Bank on membership, and four-party talks on a peace treaty," Manning added.

While Manning expected senior working-level negotiations between the United States and North Korea to resume, he said he has seen no indication of any change in Kim's view of denuclearization, "which unlike that of the United States, would come in the context of nuclear arms control—after the United States withdrew its nuclear umbrella from the Korean Peninsula, not as a political deal."

"Kim's goal remains to be accepted as a de facto nuclear weapons state, like Pakistan and Israel, no sanctions and be treated as a normal country. Until that changes there is little cause for optimism," said Manning.

Ashish Kumar Sen is the deputy director of communications, editorial, at the Atlantic Council. Follow him on Twitter @AshishSen.

 $\underline{https://www.atlanticcouncil.org/blogs/new-atlanticist/with-one-small-step-trump-makes-history-in-north-korea}$

ABOUT THE USAF CSDS

The USAF Counterproliferation Center (CPC) was established in 1998 at the direction of the Chief of Staff of the Air Force. Located at Maxwell AFB, this Center capitalizes on the resident expertise of Air University — while extending its reach far beyond — and influences a wide audience of leaders and policy makers. A memorandum of agreement between the Air Staff's Director for Nuclear and Counterproliferation (then AF/XON) and Air War College commandant established the initial personnel and responsibilities of the Center. This included integrating counterproliferation awareness into the curriculum and ongoing research at the Air University; establishing an information repository to promote research on counterproliferation and nonproliferation issues; and directing research on the various topics associated with counterproliferation and nonproliferation.

In 2008, the Secretary of Defense's Task Force on Nuclear Weapons Management recommended "Air Force personnel connected to the nuclear mission be required to take a professional military education (PME) course on national, defense, and Air Force concepts for deterrence and defense." This led to the addition of three teaching positions to the CPC in 2011 to enhance nuclear PME efforts. At the same time, the Air Force Nuclear Weapons Center, in coordination with the AF/A10 and Air Force Global Strike Command, established a series of courses at Kirtland AFB to provide professional continuing education (PCE) through the careers of those Air Force personnel working in or supporting the nuclear enterprise. This mission was transferred to the CPC in 2012, broadening its mandate to providing education and research on not just countering WMD but also nuclear operations issues. In April 2016, the nuclear PCE courses were transferred from the Air War College to the U.S. Air Force Institute for Technology.

In February 2014, the Center's name was changed to the Center for Unconventional Weapons Studies (CUWS) to reflect its broad coverage of unconventional weapons issues, both offensive and defensive, across the six joint operating concepts (deterrence operations, cooperative security, major combat operations, irregular warfare, stability operations, and homeland security). The term "unconventional weapons," currently defined as nuclear, biological, and chemical weapons, also includes the improvised use of chemical, biological, and radiological hazards. In May 2018, the name changed again to the Center for Strategic Deterrence Studies (CSDS) in recognition of senior Air Force interest in focusing on this vital national security topic.

The Center's military insignia displays the symbols of nuclear, biological, and chemical hazards. The arrows above the hazards represent the four aspects of counterproliferation — counterforce, active defense, passive defense, and consequence management. The Latin inscription "Armis Bella Venenis Geri" stands for "weapons of war involving poisons."

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