



UNITED STATES AIR FORCE CENTER FOR
**UNCONVENTIONAL
WEAPONS STUDIES**

OUTREACH JOURNAL

Issue No. 1286
20 October 2017

Featured Item

"Federal Efforts to Develop Biological Threat Awareness". Published by the United States Government Accountability Office; October 2017

<http://www.gao.gov/assets/690/687675.pdf>

Biological threats come from a variety of sources and can pose a catastrophic danger to public health, animal and plant health, and national security. Threat awareness, which consists of activities such as collecting and analyzing intelligence, developing risk assessments, and anticipating future threats, is vital to help federal agencies identify necessary biodefense capabilities and ensure investments are prioritized to make effective use of federal funds.

GAO was asked to review how key federal agencies develop and share threat awareness information, and how that information informs further investments in biodefense. This report describes: (1) the types of actions that key federal agencies have taken to develop biological threat awareness, and how that information is used to support investment decisions; (2) the extent to which these agencies have developed shared threat awareness; and (3) how DHS's NBACC determines what additional threat characterization knowledge to pursue.

TABLE OF CONTENTS

US NUCLEAR WEAPONS

- [Air Force to Fire Next-Gen ICBM Prototypes in 2020](#)
- [Trump Says He Wants Nuclear Arsenal in 'Tip-Top Shape,' Denies Desire to Increase Stockpile](#)
- [Experts Urge U.S. Military to 'Develop and Deploy Enhanced-EMP Nuclear Weapons'](#)
- [NATO Members Train to Nuke a 'Fictional' Enemy after Major Russian Drills](#)

US COUNTER-WMD

- [Pressing, Multiplying Biodefense Issues Plague U.S., Experts Say](#)
- [Formidable Shield 2017: Ship Engages BMD Target During NATO Exercise, MDA and Navy Conduct SM-6 Test Launch](#)
- [First Shipment of ANTHIM Anthrax Treatment Delivered to Strategic National Stockpile](#)
- [What Do We Need? Missile Defense.](#)

US ARMS CONTROL

- [Trump May Have Just Relit the Iran Nuclear Fuse](#)
- [Every Nuclear Test is a Red Line Not to be Crossed – Non-Proliferation Organization Leader](#)
- [Russia 'Good Student' of Nuclear-Test-Ban Treaty – CTBTO Head](#)
- [Pelosi Urges New Law to Limit President's Use of Nuclear Weapons](#)

ASIA/PACIFIC

- [North Korea's Threat to Australia for Supporting the US and South Korea as Nuclear Tensions Continue](#)
- [Sinpo South Shipyard: SLBM Test Not Imminent; Unknown Shipbuilding Program Underway](#)
- [China's Underwater Nukes: The Most Dangerous Threat No One is Talking About?](#)
- [Pyongyang to Continue to Build Up its Nuclear Potential -- Senior Lawmaker](#)

EUROPE/RUSSIA

- [EU Takes Further Measures Against North Korea](#)
- [Russia Tests Modified RS-24 Ballistic Missile with an 'Experimental Warhead'](#)
- [European Leaders Criticize Trump's Disavowal of Iran Deal](#)
- [EU Says Committed to Full Implementation of Nuclear Deal](#)

MIDDLE EAST

- [US Violator of JCPOA Spirit, Letter: Iran's UN Envoy](#)
- [Syria Defends Iran and Blasts Trump for Decertifying Nuclear Deal](#)
- [Iran's Foreign Minister: Trump's Action on Nuclear Accord Damages U.S. Credibility](#)
- [Netanyahu Congratulates Trump on 'Courageous' Iran Decision](#)

INDIA/PAKISTAN

- [Get Ready, Pakistan: India is Developing Its Own Missile-Defense Shield](#)
- [Through a Periscope Darkly: The Nuclear Undersea Competition in Southern Asia is Just Beginning](#)
- [The Risks of Pakistan's Sea-based Nuclear Weapons](#)
- [India Rules Out Joining NPT as Non-nuclear Weapon State](#)

COMMENTARY

- [North Korea: Time to Think Beyond Denuclearization](#)
- [Trump May Be Kicking Off a New Age of Nuclear Weapons](#)
- [Seven Reasons Why Putting U.S. Nukes Back in South Korea Is a Terrible Idea](#)
- [Playing with Fire: Trump Risks New Conflagration in Middle East](#)

US NUCLEAR WEAPONS

Scout Warrior (Brentwood, TN)

Air Force to Fire New Next-Gen ICBM Prototypes in 2020

By Kris Osborn

October 12, 2017

The Air Force plans to fire off new prototype ICBMs in the early 2020s as part of a long-range plan to engineer and deploy next-generation, high-tech intercontinental ballistic missiles with improved range, durability, targeting technology and overall lethality, service officials said.

The service is already making initial technological progress on design work and “systems engineering” for a new arsenal of ICBMs to serve well into the 2070s – called Ground Based Strategic Deterrent, or GBSD.

Northrop Grumman and Boeing teams were recently awarded Technology Maturation and Risk Reduction deals from the Air Force as part of a longer-term developmental trajectory aimed at developing, testing, firing and ultimately deploying new ICBMs.

Overall, the Air Force plans to build as many as 400 new GBSD weapons to modernize the arsenal and replace the 1970s-era Boeing-built Minuteman IIIs.

The new weapons will be engineered with improved guidance technology, boosters, flight systems and command and control systems, compared to the existing Minuteman III missiles. The weapon will also have upgraded circuitry and be built with a mind to long-term maintenance and sustainability, developers said.

Initial subsystem prototypes are included within the scope of the current Boeing and Northrop deals, Col. Heath Collins, System Program Manager, GBSD, told Scout Warrior in an interview.

“Over the next three years, the GBSD prime contractors will develop and test those prototypes to demonstrate technical and integration design maturity. In the end, these prototypes will burn down risk early to ensure successful execution of the next acquisition phase,” Collins said.

Following this initial 3-year developmental phase, the Air Force plan an Engineering and Manufacturing Development phase and eventual deployment.

Much attention has been focused on nuclear deterrence and the need for the US to modernize its arsenal, particularly in light of recent North Korean threats. Senior nuclear weapons developers have told Scout Warrior that upgraded guidance packages, durability and new targeting technology are all among areas of current developmental emphasis.

While, quite naturally, many of the details of the emerging new ICBMs are not available for discussion for security reasons, Collins did elaborate a bit on the systems engineering strategy being employed by Air Force developers.

Collins, an engineer himself, explained that the current acquisition strategy prioritizes model-based systems engineering designed to expedite technological development.

“Our approach to systems engineering leverages the power of 21st century technology to allow the program office to better “Own the Technical Baseline” through a spectrum of tools, models and simulations in a collaborative and interactive data environment,” Collins said.

The strategy, Collins explained, is intended the Air Force to better manage program and technical complexity through digital traceability and aggregation.

“This provides a single source of truth across the weapon system design, and allows a more comprehensive and deeper understanding of the architecture and design,” he said.

The new ICBMs will be deployed roughly within the same geographical expanse in which the current weapons are stationed. In total, dispersed areas across three different sites span 33,600 miles, including missiles in Cheyenne, Wyoming, Minot, North Dakota and Great Falls, Montana.

The Air Force plans to award the single EMD contract in late fiscal year 2020.

Excerpts from the previous report [HERE](#):

If one were to passively reflect upon the seemingly limitless explosive power to instantly destroy, vaporize or incinerate cities, countries and massive swaths of territory or people -- images of quiet, flowing green meadows, peaceful celebratory gatherings or melodious sounds of chirping birds might not immediately come to mind.

After all, lethal destructive weaponry does not, by any means, appear to be synonymous with peace, tranquility and collective happiness. However, it is precisely the prospect of massive violence which engenders the possibility of peace. Nuclear weapons therefore, in some unambiguous sense, can be interpreted as being the antithesis of themselves; simply put – potential for mass violence creates peace – thus the conceptual thrust of nuclear deterrence.

It is within this conceptual framework, designed to save millions of lives, prevent major great-power war and ensure the safety of entire populations, that the U.S. Air Force is now vigorously pursuing a new arsenal of land-fired, Inter-Continental Ballistic Missiles, or ICBMs.

Nuclear Deterrence

Earlier this year, the commander of U.S. Strategic Command, Air Force Gen. John E. Hyten, said the United States has about the right numbers of nuclear weapons, but they need to be modernized.

A Pentagon statement said the General asked reporters to imagine what the world was like in the six years preceding the atomic bombings of Hiroshima and Nagasaki. “In those six years, the world in conflict killed somewhere between 60 million and 80 million people,” he said. “That’s about 33,000 people a day, a million people a month.”

The world has seen bloody conflicts -- Korea, Vietnam, Desert Storm, Enduring Freedom and Iraqi Freedom were awful, but nowhere near the level of carnage the world had experienced, he said.

“The submarines are the most survivable element of it; the ICBMs are the most ready; the bombers are the most flexible,” he said. “When you put those pieces together, it gives our nation the ability to withstand any attack and respond if we are attacked, which means we won’t be attacked.”

<https://scout.com/military/warrior/Article/Air-Force-to-Fire-New-Ground-Based-Strategic-Deterrent-Next-Gen--108784109>

[Return to top](#)

CNN Politics (Atlanta, GA)

Trump Says He Wants Nuclear Arsenal in 'Tip-Top Shape,' Denies Desire to Increase Stockpile

By Jennifer Hansler

October 11, 2017

President Donald Trump said that he just wants to have the US nuclear arsenal in "tip-top shape," pushing back on a report that he wanted to increase the stockpile tenfold.

"I want modernization and total rehabilitation," Trump told reporters Wednesday during an appearance with Canadian Prime Minister Justin Trudeau. He called an increase in the stockpile "totally unnecessary."

Secretary of Defense James Mattis also denied the NBC report, saying, "Recent reports that the President called for an increase in the US nuclear arsenal are absolutely false. This kind of erroneous reporting is irresponsible."

Indeed, attempting to substantially grow the United States' nuclear weapon arsenal would be "absurd" and "inconceivable," several nuclear experts say.

"This is a little bit like saying, 'I'd like a moon base, please,'" said Jeffrey Lewis, the publisher of the blog "Arms Control Wonk" and the director of the East Asia Nonproliferation Program at the James Martin Center for Nonproliferation Studies.

Lewis told CNN that there are a number of reasons that the US has decreased its nuclear stockpile from the approximately 30,000 warheads it possessed during the peak of the Cold War.

"One factor is that a lot of those warheads existed for things we now do with conventional weapons," Lewis said, adding that there are "a whole bunch of missions" that the US no longer does.

"Then on top of that, as the Soviet Union numbers came down and the Soviet Union collapsed, there were fewer strategic targets for us to hit. So it became a very expensive legacy system," he said.

If Trump really did want the US to increase its nuclear arsenal, he would have to ask Congress for a massive increase in funding.

"He'd have to get a whole ton of money authorized and appropriated to do it," said Barry Blechman, a distinguished fellow at the Stimson Center, a nonpartisan policy research center.

"To expand that number by more than tenfold is absolutely unaffordable," Daryl Kimball, the executive director of the Arms Control Association, told CNN.

In addition, that there would be a number of "little practicalities," as Lewis put it, that would have to be considered.

"It's not like you can just go to the store and buy 30,000 nuclear weapons," Lewis said. "You'd have to build an entire infrastructure to produce and sustain that stockpile. So that's not a one-year decision by Congress, that's a multi-year, multi-trillion dollar commitment that has to be made every year by the Congress."

"They'd have to build new reactors, new plutonium handling facilities ... that'd certainly be over \$100 billion dollars," Blechman estimated.

Beyond the logistical and monetary limitations, there would also be diplomatic implications.

"Not only is it unaffordable, but we have legally binding treaty commitments, specifically with Russia, not to deploy more than 1,550 nuclear warheads under the new strategic arms reduction

treaty," Kimball told CNN, referring to the New START Treaty signed by President Barack Obama in 2011. Both the US and Russia have until February 2018 to reach these arms limits.

Kimball noted that the treaty could theoretically be renegotiated between Trump and Putin to allow for a greater stockpile.

The current nuclear arsenal is undergoing a modernization process. The plan was outlined under the Obama administration to modernize nuclear delivery systems, command and control systems and to refurbish warheads in the US nuclear triad -- the US force of sea, airborne and missile delivered nuclear weapons.

The plan, which keeps the number of weapons the same, is estimated to cost about \$1.5 trillion over 30 years, according to an analysis by the ACA.

The Pentagon is currently reviewing US policy on nuclear weapons and is expected to present its final report to the President by the end of the year. The review, which typically occurs every eight years, will establish US nuclear policy, strategy and force posture regarding the use of nuclear weapons under the Trump administration.

"Over the time, the results of that review will be reflected in the budget requests from the President to Congress," Kimball said.

"We may not see a ten-fold increase but I think it's likely that we're going to see President Trump's policy put a greater emphasis on the role of nuclear weapons, looking for ways to make these weapons more 'usable' ... and perhaps to develop new types of nuclear weapons," he noted.

All three of the experts who spoke with CNN emphasized a lack of need for a large quantity of nuclear weapons.

"More and bigger is not better. It does not require a large number of nuclear weapons to destroy another country," Kimball said.

CNN's Barbara Starr and Ryan Browne contributed to this report.

<http://www.cnn.com/2017/10/11/politics/nuclear-arsenal-trump/index.html>

[Return to top](#)

Futurism (Brooklyn, NY)

Experts Urge U.S. Military to 'Develop and Deploy Enhanced-EMP Nuclear Weapons'

By Karla Lant

October 14, 2017

EMP Calamity

In a statement, experts recommended to Congress that the U.S. military strengthen its ballistic missile defenses — including the deployment of space-based defenses — with the specific aim of protecting the U.S. from potential electromagnetic pulse (EMP) attacks. They also recommended the development and deployment of enhanced-EMP nuclear weapons and other means to deter attacks on the United States by North Korea.

An EMP attack has the potential to “shut down the U.S. electric power grid for an indefinite period,” according to the assessment delivered Thursday at the U.S. House of Representatives Committee on Homeland Security’s hearing, “Empty Threat or Serious Danger: Assessing North Korea’s Risk to the Homeland.” William Graham and Peter Vincent Pry — Chairman and Chief of Staff, respectively, for

the Commission to Assess the Threat to the United States from EMP Attack (the EMP Commission) — provided the sobering statement.

The EMP Commission was established in 2001 to advise Congress, the Department of Defense (DoD), the President, and other agencies on any nuclear EMP threats. It was re-established with a broader charter in 2015 so its focus would include all manmade EMP threats, including cyber attacks, sabotage, and what they call “Combined-Arms Cyber Warfare.” However, their funding was recently terminated, as reported by Newsmax, in the same month as North Korea detonated a “Super-EMP” weapon.

The Detailed Recommendations

The report pointed out that, six months ago, North Korea’s nuclear capabilities were believed to be primitive, but the U.S. now approximates that the country has 60 nuclear weapons and can reach the United States with those weapons. The EMP Commission urged Congress to recognize the dire threat posed by EMP weapons, which can be devastating even when used with “primitive, low-yield” nuclear weapons.

Moreover, while much of the focus regarding North Korea has centered on its ability to reach a city with a missile, the EMP Commission argued that the threat from an EMP attack has been mostly ignored:

EMP attack does not require an accurate guidance system because the area of effect, having a radius of hundreds or thousands of kilometers, is so large ... North Korea could make an EMP attack against the United States by launching a short-range missile off a freighter or submarine or by lofting a warhead to 30 kilometers burst height by balloon ... even a balloon-lofted warhead detonated at 30 kilometers altitude could blackout the Eastern Electric Power Grid that supports most of the population and generates 75 percent of U.S. electricity.

Their bottom line recommendations?

We recommend the development and deployment of enhanced-EMP nuclear weapons and other means to deter adversary attack on the United States. Enhanced-EMP nuclear weapons, called by the Russians Super-EMP weapons, can be developed without nuclear testing ... We recommend strengthening U.S. ballistic missile defenses — including deployment of space-based defenses considered by the Strategic Defense Initiative — and that these be designed and postured to also protect the U.S. from EMP attack.

In a nation utterly dependent on being online and having power, a single nuclear warhead detonated above us — even without much precision — could have apocalyptic consequences, creating, as Peter Kelly-Detwiler put it in Forbes, “an existential crisis like nothing the world has never witnessed.” The challenge for the U.S. — and every developed county — will be to take the necessary preemptive responses while at the same time avoiding the unintentional escalation of this precarious situation.

<https://futurism.com/us-nuclear-weapons/>

[Return to top](#)

The Warzone (Tampa, FL)

NATO Members Train to Nuke a 'Fictional' Enemy after Major Russian Drills

By Joseph Trevithick

October 17, 2017

The alliance is tight-lipped about the annual Steadfast Noon exercise and the very existence of its nuclear capabilities.

NATO has quietly begun an annual exercise to practice how it might launch a nuclear attack during a crisis. The drills follow massive Russian war games along its borders with the alliance, including a test of new nuclear intercontinental ballistic missile, as well as increasing reports of electronic and cyber attacks likely originating in Russia.

On Oct. 16, 2017, NATO personnel in Belgium and Germany kicked off this latest iteration of the alliance's main nuclear deterrence exercise, nicknamed Steadfast Noon. Publicly available U.S. military documents describe its main goal simply as "operations plan validation." This year's iteration involves operations at Kleine Brogel Air Base in Belgium and Büchel Air Base in Germany, where the United States maintains stores of B61 nuclear bombs.

The North Atlantic bloc rarely highlights the event and generally omits it from publicly available lists of upcoming exercises. The drills involve an entirely "fictional scenario," one anonymous NATO official told The Wall Street Journal.

It's hard not to see the exercise in the context of the Kremlin's increasingly revanchist foreign policy, though. Since Russian troops seized control Ukraine's Crimea region in 2014 and subsequently began actively supporting separatists seeking to break away from the central government in Kiev, NATO has adopted an increasingly more militarized posture along its eastern and southern frontiers. A proposed drawdown of American nuclear weapons on the continent has effectively been on indefinite hold ever since.

In September 2017, approximately 13,000 troops from Russia and Belarus, conducted drills along the same borders as part of the Zapad 2017 exercise. Zapad, which means "West," occurs once every four years. Officials in Moscow insist it is defensive in nature, but it focuses on large scale, high intensity warfare, something that sounds a lot like practicing for a conflict with the western alliance.

In addition, the Russians followed up the massive conventional demonstration with a show of nuclear force, including intercontinental ballistic missile tests by its Strategic Missile Forces. One of these involved a weapon with an all-new warhead design that seems intended to defeat ballistic missile shields such as the one the NATO is presently developing. Though experts debate how serious the danger is, there is a real concern that the Kremlin has adopted a doctrine of "escalating to de-escalate," as well, which could involve a limited nuclear strike, further underscoring the continued importance of deterrence.

On top of that, there have also been an increasing number of reported incidents of electronic and cyber harassment against alliance members and their other European partners. These almost certainly originate in Russia and highlight the tense nature of the situation despite the lack of any active conflict.

We don't know what exactly goes into the actual Steadfast Noon drills, regardless of whether the scenario is focused on Russian threats or not, but the main goal is undoubtedly to run through what can only be heavily regimented procedures. Since the end of the Cold War, the United States has kept B61 nuclear gravity bombs at bases such as Kleine Brogel Air Base in Belgium and Büchel Air

Base in Germany. There are approximately 150 to 200 of the weapons spread out between those bases, as well as additional locations in Italy, the Netherlands, and Turkey, with the latter location becoming increasingly controversial.

The bombs are technically “tactical nuclear weapons,” though experts and advocates routinely debate the validity of this term and whether any nuclear weapon can be seen as a limited, tactical tool. Crews can set the tactical versions of the so-called “dial-a-yield” B61 to explode with the force of anywhere from 0.3 to 170 kilotons of TNT, that upper limit being more than eight times more powerful than the Fat Man bomb the United States dropped on Nagasaki in 1945. The United States is presently working on a new B61 Mod 12 version that will be a dual-purpose, tactical and strategic design that incorporates a GPS guidance system and a deep penetrating design.

As well as keeping those weapons forward deployed, the U.S. government maintained agreements with all of the hosts, save Turkey, to potentially share those bombs in an emergency. After an American commander released the weapons to those countries, Belgian and Dutch F-16 fighter jets and German and Italian Tornado multi-role combat aircraft – described as “dual-capable” conventional and nuclear aircraft for treaty purposes – would deliver them onto the specified targets. There are no American aircraft stationed at either Kleine Brogel or Büchel.

For the alliance to conduct a nuclear attack, American personnel at these bases would need to receive and input the appropriate codes into the B61’s Permissive Action Link, a fail-safe device to prevent unauthorized use, before then signing control of the weapons over to European crews. A simultaneous authorization from the host country’s government is reportedly necessary, too.

The exercise likely has conventional components, as well, since any nuclear-armed jets speeding toward their targets could need to refuel on the way to and from their targets. Since the present European dual-capable aircraft aren’t low-observable in design, other elements would need to clear the way first, which could include physically destroying enemy air defenses or launching coordinated electronic or cyber attacks to disrupt those networks. NATO even has a specific term for the aerial companion missions, SNOWCAT, or Support of Nuclear Operations With Conventional Air Tactics.

But the lack of fanfare surrounding Steadfast Noon, which by all accounts should be a very visible signal to potential enemies, highlights the alliance’s complicated relations with nuclear weapons. NATO has long had to temper its clear desire to present a strong deterrent to potential opponents, especially an increasingly aggressive Russia, with consistent domestic political and public opposition to the presence of nuclear weapons in much of Europe.

That the B61 gravity bombs at Kleine Brogel Air Base in Belgium and Büchel Air Base in Germany are the property of the United States only makes the situation more complicated. The exercise is a “delicate balancing act,” another anonymous official told The Journal.

These issues aren’t new, of course. For decades during the Cold War, the U.S. military stockpiled and deployed a variety of nuclear bombs and missiles in NATO member countries to deter the Soviet Union, which did the same, along with its Warsaw Pact allies. France and the United Kingdom were the only other alliance members with their own nuclear arsenals. Aircraft carrying nuclear bombs was a key component of the doctrine, as Richard Crandall explained to The War Zone’s Tyler Rogoway in 2016, telling him:

I was absolutely convinced I would have to nuke a Warsaw Pact nation, as that was about all we could hit with the F-111. We had a couple of targets in Russia where we would have had to recover with emergency fuel at one of the far northern bases in Norway. But really, we all knew the base would be gone and we would have to punch out. We also knew that we would not be the first nuke

on the target. Every single target I ever saw had ICBMs and then SLBMs and then us on it, and then hours and hours later, the stateside B-52s and B-1s.

We always practiced World War III as starting conventional, usually with the Russians punching through the Fulda Gap. I remember looking at the plans and seeing that we had a handful of tanks to stop them, compared to thousands of Russian and East German tanks lined up just waiting to punch through. We would fall back, and back, and then stand down, load up the nukes, and then sortie. Exercise over.

Treaties and the final collapse of the Soviet Union meant that by the time the United States signed the New Strategic Arms Reduction Treaty, or New START, with Russia in 2010, the B61s were the last of these U.S. weapons in Europe. And despite the fact that it is widely accepted that the bombs are there, both the United States and NATO decline to comment on them as a matter of policy.

“I think they are an absolutely pointless part of a tradition in military thinking,” former Dutch Prime Minister Ruud Lubbers said in a National Geographic documentary released in 2013, becoming one of the more senior officials to ever acknowledge the bombs presence in NATO countries. “I would never have thought those silly things would still be there in 2013.”

Most recently, the stockpile of B61s in Turkey came under renewed scrutiny following a coup attempt in 2016 that involved many members of that country’s air force, including some of that service’s top leadership. Turkish authorities arrested the commander of Incirlik Air Base, where the U.S. keeps the bombs, in the aftermath of the crisis.

At the time, The War Zone’s own Tyler Rogoway highlighted the potential dangers of maintaining what many consider to be largely a symbolic stockpile in that country, writing:

The idea of a country stealing nuclear weapons from the US has long been a staple of pop culture fascination, but the reality is far less sensational. Still, an incident where American nuclear weapons security was directly threatened could be a massive geopolitical failure for the United States, and if they were to fall into someone else’s hands, even those of a close former ally, it would be devastating to American credibility abroad, regardless of if they can actually be used or not.

On the other hand, if their withdrawal were made public, some say it would set a bad precedent and offer disturbing symbolism for NATO. Then again, if the alliance is that weak, than we have much bigger problems, especially considering that there would still be around 150 American nuclear bombs deployed to four other NATO countries. Will 50 less make that big of a difference? No it won’t. That is unless the US plans to leave a standing contingent of fighters at Incirlik Air Base with crews trained and ready to fly these weapons into combat at a moment’s notice, which it doesn’t.

One alternative to keeping those bombs in Turkey, and elsewhere in general, would be to continue expanding ballistic missile defenses throughout NATO, which the alliance is already doing. Earlier in October 2017, before Steadfast Noon, NATO forces conducted a major ballistic missile defense exercise called Formidable Shield 2017.

The scenario for this drill involved the first-ever instance where the alliances ships practices using traditional air defenses to protect ship-based ballistic missile defenses, demonstrating an expanding layered, integrated defensive network. During the exercise, the Arleigh Burke-class destroyer USS Donald Cook fired an SM-3 Block IB interceptor at mock ballistic missile, while Spanish and Dutch warships knocked down incoming anti-ship cruise missiles with RIM-162 Evolved Sea Sparrow Missiles. Separately, another Arleigh Burke, the USS McFaul, conducted a European test launch of the increasingly versatile SM-6 missile.

The U.S. Missile Defense Agencies had two of its specially modified Gulfstream II business jets on hand for the exercise, as well. Able to fly at high altitudes, these aircraft carry various sensors to

help gather data on tests for future research and development that personnel on the ground or other lower flying planes would be unable to collect.

The issue here of course is that ballistic missile defense systems have yet to conclusively prove their capabilities in testing, let alone against a real world in-coming threat. In addition to often limited engagement envelopes, the interceptors rely on data from various space-, sea-, and land-based radars, as well as other sensors, which have vulnerabilities and deficiencies themselves at present.

These limitations have come to the forefront in light of the increasing threat of North Korea's long-range ballistic missiles and growing nuclear weapons capabilities. Critics quickly debunked U.S. President Donald Trump's assertion earlier in October 2017 that America's ballistic missile defense shield could reliably take out threats 97 percent of the time.

Perhaps more problematic, even if the component systems work as intended, missile defense shields only protect against a select few nuclear delivery systems. Russia alone has nuclear capable aircraft and is developing ground-launched nuclear-tipped cruise missiles, as well, neither of which a ballistic missile interceptor would be well suited to protect against. As such, they would not be a complete counter to potential nuclear attacks as a whole and it would be hard to see how they could ever truly replace the deterrent capability of nuclear weapons.

Another alternative to American nuclear weapons in Europe would be to allow other NATO members to develop their own national stockpiles. However, one of the main arguments for the U.S. military keeping the B61s across Europe in the first place is to give alliance members that sense of localized security without the need to actually expand the number of nuclear weapon states. Neither the United States nor countries such as Belgium and Germany seem inclined to change this status quo.

Given the available options, NATO members seem inclined to want to keep the bombs on their territory, even as they try to keep the fact out of the public eye. There are already reports that Italy and the Netherlands plan to integrate the B61 on their future F-35 Joint Strike Fighters in order to maintain their ability to perform the nuclear mission. There is the suggestion that this is one the reasons why Belgium is part of that program and the capability will likely be a consideration as Germany looks to replace its Tornados, as well.

Unless a truly viable alternative appears or the security situation in Europe changes dramatically, it seems likely that the B61s, and the need to train for the hopefully remote possibility that NATO members could need to use them, will continue to be an open secret.

<http://www.thedrive.com/the-war-zone/15211/nato-members-train-to-nuke-a-fictional-enemy-after-major-russian-drills>

[Return to top](#)

US COUNTER-WMD

Homeland Preparedness News (Washington, DC)

Pressing, Multiplying Biodefense Issues Plague U.S., Experts Say

By Kim Riley

October 16, 2017

The Blue Ribbon Study Panel on Biodefense, a privately funded group established in 2014 to ascertain the current biodefense capabilities of the United States and issue expert

recommendations to encourage change, has grown increasingly worried about microbial forensics and biological attribution.

And according to recent statements from several experts, it's no wonder why.

"The diffusion of technical expertise coupled with the biotechnology revolution, drastically increases the threat of bioterrorism. New technologies have decreased resources and financial requirements for entry, and increased capabilities that could be misused by a determined bioterrorist. We need core microbial forensic laboratory capabilities to enable attribution," said Dr. Gerald W. Parker, Jr., director of Texas A&M University's Pandemic and Biosecurity Policy Program at the Scowcroft Institute for International Affairs and associate dean for Global One Health in the College of Veterinary Medicine.

Involved in biodefense since 1982, Parker recently told the panel that he feels like he has "been at the eye of the storm witnessing evolving biological threats over my career."

"And today, I am more concerned than ever about the risk of biological threats—whether from outbreaks, accidents or attacks—and the need to underpin no-regret attribution decisions with a sound scientific foundation in microbial forensics," Parker said during a panel meeting held earlier this month.

Attribution to determine who was responsible for an attack, whether a crime, act of terror, or warfare is essential to hold those responsible accountable for their actions, prevent future attacks and serve as a deterrent, he said.

Attribution and the supporting microbial forensic sciences also are important to exonerate and rule out suspected perpetrators, whether a nation state, terror group or criminal that is innocent, Parker said.

"The stakes could be very high, particularly when a nation state is involved or suspected, and a rush to judgment before the science and evidence are in, should be avoided," said Parker. "Decisions to attribute, especially a nation state, will be consequential, no-regret decisions that must be guided by a strong scientific and evidentiary foundation."

Online biocrimes

Essentially, microbial forensics and biological attribution are used to find out who, how and what disease agent was used, and where it was obtained following a biological attack.

And as biological threats and attacks increase worldwide, the risks are heightened for the United States, a fact the Blue Ribbon Study Panel on Biodefense has belabored since 2015 when it issued its national reform blueprint, which specifically includes Recommendation 9 saying the nation lacks biological attribution capabilities due to "the inherent challenges associated with microbial forensic techniques and related analyses."

Today the panel continues advocating for the establishment of a national biological attribution decision-making process that would be overseen by the U.S. vice president; developed by the secretaries of the departments of State, Defense and Homeland Security (DHS), as well as the Attorney General and the Director of National Intelligence; and run by the Federal Bureau of Investigation (FBI), which also would be in charge of the National Bioforensics Analysis Center (NBFAC) where biological forensics and attribution work would be handled.

The panel is also concerned about U.S. President Donald Trump's FY 2018 budget request, which would eliminate biological attribution and biodefense functions from DHS and close the National Biodefense Analysis and Countermeasures Center in Maryland, which houses the NBFAC.

“Terminating funding would leave the country without a core investigative tool for biocrimes and bioterrorism,” panel co-chairman and former Sen. Joseph Lieberman said.

Specifically, the NBFAC conducts technical analyses in support of federal law enforcement investigations and attempts to coordinate multi-agency biological forensic efforts. The NBFAC currently is administered by the DHS Science and Technology Directorate, which the panel says in its blueprint has caused NBFAC to struggle to coordinate with and serve other agencies “because its scientific goals sometimes run at cross-purposes to those of the operational communities it could serve.”

In addition to proposed budget cuts, the panel also is concerned about biothreats from virtual terrorists, who, like their offline counterparts, are tantalized by biological agents for several reasons: detection is tough, production is cheap, incubation periods allow ample get-away times, they’re simple to unleash, and common technology to produce and deliver warfare agents are readily available. Virtual terrorists now can gather online what’s needed to build deadly pathogens that may be used as weapons.

For instance, there’s the Clustered, Regularly Interspace, Short Palindromic Repeat (CRISPR) technique—a recent and significant scientific breakthrough that allows DNA code to be removed and replaced with new genes—that’s been used by virtual terrorists or even unknowing amateurs who can buy a cheap, online kit to reconstruct or edit DNA in their own makeshift synthetic biology labs.

Because CRISPR techniques now are “feasible for a greater range of users,” fears have increased that “in the wrong hands, the procedure could unleash dangerous strains of bacteria or other organisms,” explains Daniel Wagner, managing director of risk solutions at Risk Cooperative, in an Oct. 2 Huffington Post contributed piece.

“Prior to CRISPR, editing DNA required sophisticated labs, years of experience, a PhD degree, and many thousands of dollars,” Wagner writes. “Today the simple do-it-yourself CRISPR kits could enable virtual terrorists targeting the food supply chain to alter the avian influenza genome and engineer a large bird flu epidemic, similar to the 2009 H1N1 epidemic in Asia that affected not only poultry, but also other mammals, including human beings.”

And to properly and fully prosecute whomever committed such an act of bioterrorism, the U.S. must be able to rapidly and accurately identify the pathogens used, who used them and how.

The Blue Ribbon Study Panel held an Oct. 3 meeting, entitled Biological Attribution: Challenges and Solutions, to learn about the existing capabilities of the U.S. government to correctly identify pathogens and their sources; attribute the use of biological weapons with scientific and other forms of evidence; and explore the processes used for investigative, legal, policy, and political decisions involving biological attribution.

Clearly, after hearing from three experts who framed the problem for the biodefense panel, the prognosis wasn’t good.

In fact, panel member and meeting chairman Ken Wainstein, former U.S. Homeland Security Advisor and a partner in the litigation department at the Washington, D.C.-based Davis Polk and Wardwell LLP, called the experts’ statements “very illuminating and sobering.”

The nitty gritty

Specifically, the experts discussed biological threats and their potential for large-scale consequences, and how such threats and consequences have been and would be much worse because of an inability to obtain microbial forensic evidence. (The discipline of microbial forensics

is based in epidemiology and focused on the characterization, analysis and interpretation of evidence from the scene of a bio-crime or an act of bioterrorism.)

Nicolas Dunaway, chief biosecurity officer at Inspirion Biosciences, previously oversaw weapons of mass destruction (WMD) investigations for the FBI and conducted liaison and outreach with public and private entities with a nexus to chemical, radiological, biological and nuclear material.

Dunaway has unique experience in computer network intrusion and computer network exploitation operations and has developed novel approaches for large-scale data management, bioinformatic analysis, biological warfare threat identification and information technology system development. He is also a subject matter expert on biological WMD matters, specifically select agents, synthetic biology and advanced biotechnology.

In providing panel members with examples about recent events, Dunaway generalized published research he had read about a hack that was conducted on a network system for a company that produced genetic sequences. The researchers showed that by sending a sequence of a certain type, they could compromise the code of the machines and take control of those machines, Dunaway told the panel.

“So instead of the typical hacks we see today ... it demonstrates one of many, many issues we’re going to see with cyber and bio. Every time I see a cyber event, I think of an analogous bio event. I think that mindset is one we all need to start taking,” he said.

Edward H. You, a supervisory special agent in the biological countermeasures unit of the FBI Weapons of Mass Destruction Directorate, told the panel that attribution is also a major component needed in the nation’s overall biodefense strategy, regardless of whether bioterrorism events are accidental or intentional.

The FBI WMD Directorate was created in July 2006, consolidating WMD investigation and prevention efforts to create a unique combination of law enforcement authorities, intelligence analysis capabilities, and technical subject matter expertise focused on chemical, biological, radiological, nuclear and explosive matters, according to You.

In his position, You is responsible for creating programs and activities to coordinate and improve FBI and interagency efforts to identify, assess and respond to biological threats or incidents, and the efforts include expanding FBI outreach to the Life Sciences community to address biosecurity.

In a world of open-source DNA sequences, You told the panel that the potential for great discoveries in biology is nearly limitless, but so is the potential for exploitation, particularly as their associated costs decrease.

You noted that biological threat issues have historically been focused on the potential acquisition, development and use of materials such as viruses, bacteria and toxins. But new biotechnologies and the convergence of biology with the cyber/digital realm are challenging the nation’s current policies and practices to address biological threats.

“Public health, military labs, other nations ... all of the stakeholders focused on this need to be connected in one way and we have to integrate these components. It will take leadership to do that,” You said. “We’re living in a perfect storm.”

Dunaway said he has “no idea” what to predict about challenges coming over the next year, except to say that the nation must remain involved and engaged.

“I expect genetic engineering will become more targeted, more capable. Tech will become more effective and more expansive. Should we ban/allow certain types of research? In my opinion, these types of advances are inevitable. Bans will serve only to take the U.S. out of leadership in this space

and we'll have national economic ramifications in security. And if you're not in the field, you're not having an effect on the game," he said.

Facing reality

Members of the Blue Ribbon Study Panel on Biodefense tried to remain positive.

"We face some major challenges in microbial forensics and biological attribution, but we can overcome many of them," said panel co-chairman and former U.S. Senate Majority Leader Tom Daschle. "We need to do what we can to eliminate them now, before we find ourselves under attack again."

Wainstein said that he also hopes attribution is a national budget priority, particularly to maintain operations at national research labs and at NBFAC. "There are bioterrorism cases happening all the time. These aren't just labs with the lights on and nothing's happening. That's a misconception that they're just waiting for the next attack to come," he said.

Lieberman said it's critical for the United States to address the fact that the extraordinary expansion and advances in biotech can be used for adverse purposes.

"We're dealing with a recurring human problem but inevitably governments and law have to try and intervene to protect people's security," Lieberman said. "This is an example of a problem our government has today due to partisan, ideological gridlock and rigidity and the inability to deal with budgeting in a rational way.

"It's hard to get ahead of problems because [Congress] tends to only react when there's a crisis. So what we're working on here in this particular area ... is to try to get ahead of this potential real threat before we have a crisis or a catastrophe," he said.

<https://homelandprepnews.com/featured/24745-pressing-multiplying-biodefense-issues-plague-u-s-experts-say/>

[Return to top](#)

Missile Defense Agency (Fort Belvoir, VA)

Formidable Shield 2017: Ship Engages BMD Target During NATO Exercise, MDA and Navy Conduct SM-6 Test Launch

Author Not Attributed

October 15, 2017

Ships from Canada, France, Germany, Italy, the Netherlands, Spain, the United Kingdom, and the United States participated in a live-fire integrated air and missile defense (IAMD) scenario, defending against a ballistic missile target as well as three anti-ship cruise missiles Oct. 15 as part of exercise Formidable Shield 2017 (FS17). Naval Striking and Support Forces NATO (STRIKFORNATO) is conducting Formidable Shield on behalf of the U.S. 6th Fleet. The U.S. Missile Defense Agency is also a major participant in this exercise.

During the collective self-defense scenario, the Arleigh Burke-class guided-missile destroyer USS Donald Cook (DDG 75) successfully detected, tracked and intercepted a medium-range ballistic missile target with a Standard Missile-3 Block IB guided missile. Simultaneously, the Spanish frigate SPS Alvaro de Bazan (F101) fired an Evolved SeaSparrow Missile (ESSM) against an incoming anti-ship cruise missile while the Netherlands frigate HNLMS Tromp (F803) fired ESSMs against a pair of incoming anti-ship cruise missiles. This was the first time NATO's smart defense concept was

demonstrated with ships serving as air defense units protecting naval ballistic missile defense units.

Following that event, the U.S. Missile Defense Agency and U.S. Navy sailors aboard USS McFaul (DDG 74) successfully test fired a Standard Missile-6 (SM-6). That flight test, designated Standard Missile Controlled Test Vehicle (SM CTV)-03, demonstrated the successful performance of an SM-6 launched from an Aegis Ballistic Missile Defense capable DDG and was conducted as part of the system's flight certification process. The SM-6 test was not part of the Formidable Shield exercise, but was conducted in coordination with that event to leverage the available range assets.

"I am extremely proud of the Task Group members and their performance during these complex, live-fire engagements," said Capt. Shanti Sethi, commander, Task Group IAMD for Formidable Shield, and Commander, U.S. 6th Fleet's Task Force 64. "The exercise scenarios are designed to test our limits and give us a unique opportunity to truly practice how we would fight together as an alliance. We are coordinating and sharing information in real time the way we would in a real IAMD operation."

Formidable Shield is designed to improve allied interoperability in an IAMD environment, using NATO command-and-control reporting structures and datalink architecture. FS17 is the inaugural iteration of this exercise.

"I couldn't be more proud of the government and industry team from across the NATO alliance who planned and executed these missions," said U.S. Missile Defense Agency Director Lt. Gen. Sam Greaves. "Both the joint exercise and the Navy test launch truly demonstrate the capabilities the U.S. and our allies are developing to defeat complex, cruise and ballistic missile threats."

More than 14 ships, 10 aircraft, and approximately 3,300 personnel from Belgium, Canada, Denmark, France, Germany, Italy, the Netherlands, Spain, the U.K., and the U.S., are participating in FS17 on the U.K. Ministry of Defense's Hebrides Range located on the Western Isles of Scotland.

"Formidable Shield is, as the name already implies, a formidable setup for both testing architectural constructs to TDL (tactical data link) and for the conduct of operational decision making of the complex environment of Integrated Air and Missile Defense," said Cmdr. Peter Jansberg, Danish Navy, CTG IAMD Senior Operations Officer. "As such, Formidable Shield demonstrates the necessity of constantly maintaining and sustaining a Joint Operational Air picture, so all nations have the ability to act and operate from the same hymn sheet. This making the decision line as short as possible, and the room for error minimal."

U.S. ships participating in Formidable Shield include the Arleigh Burke-class guided-missile destroyers Donald Cook, USS Mitscher (DDG 57), USS Winston S. Churchill (DDG 81), and the Louis and Clark-class dry cargo ship USNS Medger Evers (T-AKE 13).

Formidable Shield 2017 began Sept. 24, and is scheduled to conclude Oct. 18, 2017. This exercise is planned to be a recurring, biennial event, and is designed to assure allies, deter adversaries, and demonstrate our commitment to collective defense of the NATO alliance. Formidable Shield and exercise Joint Warrior 17-2, a U.K.-led, multinational exercise in a maritime training environment for allies to improve interoperability and prepare forces for combined operations, are occurring concurrently.

STRIKFORNATO is a rapidly deployable headquarters that provides scalable command and control across the full spectrum of the alliance's fundamental security tasks. As part of that mission, STRIKFORNATO is responsible for integrating U.S. naval and amphibious forces into NATO operations.

U.S. 6th Fleet, headquartered in Naples, Italy, conducts the full spectrum of joint and naval operations, often in concert with allied and interagency partners, to advance U.S. national interests and security and stability in Europe and Africa..

<https://www.mda.mil/news/17news0010.html>

[Return to top](#)

Global Biodefense (Seattle, WA)

First Shipment of ANTHIM Anthrax Treatment Delivered to Strategic National Stockpile

Author Not Attributed

October 10, 2017

Elusys Therapeutics, Inc. announced Oct. 10 that the company has delivered the first doses of ANTHIM® (obiltoximab) Injection, its treatment for inhalational anthrax, to the U.S. Strategic National Stockpile (SNS), the U.S. Government's repository of critical medical supplies for public health emergency preparedness.

The company is providing this delivery of ANTHIM as part of a procurement contract totaling \$44.9M issued in 2015 by the Biomedical Advanced Research and Development Authority (BARDA), part of the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response (HHS ASPR).

ANTHIM is a monoclonal antibody that binds to the protective antigen (PA) component of anthrax toxin. ANTHIM's toxin neutralizing activity prevents entry of anthrax toxin into susceptible cells, avoiding further spread of the toxin throughout the body and the ensuing tissue damage that leads to death. ANTHIM is supplied as single-dose vials for IV infusion.

ANTHIM received U.S. Food and Drug Administration (FDA) marketing approval in March 2016. ANTHIM is indicated in adult and pediatric patients for the treatment of inhalational anthrax due to *Bacillus anthracis* in combination with appropriate antibacterial drugs, and for prophylaxis of inhalational anthrax when alternative therapies are not available or are not appropriate.

Elusys has received over \$240M in grants and contracts from the U.S. Department of Defense (DoD), National Institutes of Health (NIH), and BARDA, and is now partnering with the U.S. Centers for Disease Control and Prevention (CDC), which manages the SNS, to ensure that this lifesaving countermeasure can be provided in the event of an anthrax outbreak.

Elusys also announced today that it continues to make progress in developing an alternate dosage form for ANTHIM with the initiation of a manufacturing campaign to produce material for completion of the lyophilization (freeze drying) commercial process, in addition to providing product to complete the 2015 procurement order.

The lyophilized form of ANTHIM is expected to extend product shelf-life by several years. Lyophilization also may improve tolerance of ANTHIM to extreme temperatures during shipping and field use.

<https://globalbiodefense.com/2017/10/10/first-shipment-anthim-anthrax-treatment-delivered-strategic-national-stockpile/>

[Return to top](#)

The Weekly Standard (Washington, DC)

What Do We Need? Missile Defense.

By Robert Zubrin

October 13, 2017

When do we need it? Now.

“The best defense is a good offense,” as the old saw goes. The nature of that “good offense” matters, though. Too often, American officials mistake “any offense” for a “good offense.” As tensions between North Korea and the United States continue to escalate, it is apparent that American policymakers haven’t yet determined what form its “good offense” will take. Sanctions on the Kim regime have not worked and will not work as a means of defending the United States against North Korean aggression—nor do sanctions appear to be restricting North Korea’s development of nuclear bomb-tipped intercontinental ballistic missiles (ICBMs). A preemptive strike would invite disaster. Empty threats and tweeted insults are an absurd counterstrategy.

For the crisis with North Korea, the best defense would be a “good defense”: The United States should develop and deploy a comprehensive antimissile defense system.

President Ronald Reagan launched the Strategic Defense Initiative (SDI) in 1983 with the long-term goal of making nuclear weapons obsolete. He wanted to deploy a system that could neutralize the vast Soviet nuclear arsenal. The plan as he first proposed it was technically not feasible, and SDI opponents made much hay out of that fact.

To this day, many on the left still disdain the concept of national missile defense and continue to pooh-pooh “Star Wars” (as Reagan’s plan was derisively dubbed) as folly. They rarely mention that Reagan’s subordinate goal of protecting the United States from nuclear threats posed by lesser powers was achievable. The time would come, Reagan administration officials understood, when such ICBMs and nuclear arms would see wider distribution. It could not be expected that they would remain the monopoly of a few leading powers—and they haven’t. Today, according to the Arms Control Association, 31 countries have ballistic missiles, and 9 of those countries are known to have or are believed to have nuclear weapons.

The U.S. military has a fairly robust antimissile defense arsenal, including Patriot missiles, Aegis warships, Iron Dome technology, and Terminal High Altitude Area Defense (THAAD) systems. But these systems are designed to deal with short- to intermediate-range ballistic missiles. They are not capable of countering ICBMs, which come in much faster. So the missile defenses the United States now possesses are suitable for regional defenses, which is why we can share our defensive capabilities with South Korea, Japan, and Israel—allies who have adversaries or face potential threats from short- or intermediate-range missiles—but lack national coverage here at home.

Indeed, the American homeland is nearly defenseless against ICBMs. The one deployed system theoretically capable of countering ICBMs is the Ground-Based Midcourse Defense (GMD), which uses Raytheon SM-3 rockets to take out targeted warheads by direct impact. The GMD system, though, is much too small. There are currently only 44 GMD interceptors, with 40 located at Fort Greeley in Alaska and the remaining 4 at Vandenberg Air Force Base in California. There have been just 18 intercept tests of this system, of which only 10 achieved the goal of hitting their targets in flight, for a batting average of 0.556. Stats like that would be great for baseball, but not for national defense; they’d mean that if you’re facing incoming ballistic missiles and want a better than 90 percent chance of shooting them down, you’d need four anti-missiles in your battery for every incoming missile.

While Alaska is ideally situated for intercepting West Coast-bound North Korean missiles, the North Koreans could, with only modest improvements to their technology, bypass the Alaska-based system by firing directly over the North Pole, striking targets anywhere in the continental United States.

There are plans on the drawing boards for improvements to the GMD system—starting with the deployment of a “redesigned kill vehicle”—but those plans are years from becoming reality. And in the meantime, the number of GMD interceptors is expected to fall below the current number of 44 as today’s stockpile is used in planned tests or undergoes anticipatable retirement. Why, in the light of the present threat, is more not being done?

Two decades ago, there was growing consensus that the nation’s missile defenses needed to be strengthened. In 1998, a bipartisan commission reported that the missile threat was “broader, more mature and evolving more rapidly” than was generally believed. During the administration of George W. Bush, missile defense remained a priority even though in the post-9/11 years it received much less public attention than efforts to combat other threats to national security. But under the Obama administration, the budget for the GMD system and related programs shrank, and the budget for the Missile Defense Agency was cut. As former Senator Jon Kyl is quoted as saying in Peter Boyer’s recent cover article in THE WEEKLY STANDARD, “In the Obama years, some extraordinary damage was done” to missile defense efforts.

<http://www.weeklystandard.com/what-do-we-need-missile-defense./article/2010078>

[Return to top](#)

US ARMS CONTROL

RealClear Defense (Chicago, IL)

Trump May Have Just Relit the Iran Nuclear Fuse

By Ramesh Thakur

October 17, 2017

On Friday (Oct. 13), President Donald Trump refused to recertify the 2015 Iran nuclear deal. In a vituperative speech denouncing the Joint Comprehensive Plan of Action (JCPOA), he demanded that the deal be renegotiated to toughen its restrictions and make them permanent, or ‘the agreement will be terminated’. Since renegotiation is almost certain to fail, Trump’s decision is ‘an act of geopolitical arson’, for six reasons.

First, the JCPOA is a good deal. It mothballed Iran’s bomb-making program by terminating its plutonium production capability, severely curtailing uranium enrichment for weapons purposes and instituting a robust transparency, verification and consequences regime. All the upfront ‘payments’ came from Iran; sanctions were lifted gradually and could be rapidly restored if Tehran were caught cheating. Over the past few months, more than 75 European and 60 Asia-Pacific former leaders urged the US to stick with the deal that strengthened global non-proliferation norms.

Second, the deal is working. Thus John Kerry: ‘When I first met with Iran’s foreign minister in September 2013, Iran had mastered the nuclear fuel cycle, had built a uranium stockpile that could be enriched to make 10 to 12 bombs, and was enriching just below weapons-grade.’ The generals around Trump, known Iran hawks, argue the deal is in the US national interest and Iran is complying with it, as the IAEA has repeatedly certified.

Third, it is a multilateral deal negotiated by the P5 (China, France, Russia, the UK and the US) plus Germany and unanimously endorsed in UN Security Council Resolution 2231. In a joint statement after Trump's speech, the leaders of France, Germany and the UK reiterated that the deal 'is in our shared national security interest' and that they 'stand committed' to it. The EU insisted that no single country can terminate a 'working' deal and Russia repeated its commitment to the deal. The Elders went so far as to deplore decertification as a threat to peace. Iran's president Hassan Rouhani said the US stands 'more isolated than ever'.

Fourth, the notion of better terms is fanciful. In 2003, Iran was neither spinning centrifuges nor enriching uranium. Over the following decade, despite US, UN and EU sanctions, assassination of nuclear scientists and cyberattacks on nuclear facilities, Iran's centrifuges increased from 164 to 19,000, the stockpile of low-enriched uranium grew from 100 kilograms to over 8,000, and uranium enrichment increased from 5% to just below 20%.

Fifth, there are no upsides to the decision. No other country wants to go back to playing nuclear chicken with Iran when it has already lost. The JCPOA brought a 15-year respite from the threat of an Iranian bomb. The focus in this grace period should be to ensure Tehran's full implementation and to change its incentive structure against nuclear weaponisation.

Finally, there are multiple downsides to the agreement's unravelling. Diplomacy rests on compromise, pragmatism and mutual accommodation. The JCPOA gives political cover to the moderates in Iran. An Iran re-engaged with the international community will reinvigorate a growing middle class and could give ballast to moderation and stability in Iran and the Middle East.

A cornered Iran will have little left to lose. The main criticism of the JCPOA is that it leaves Iran free to resume the weapons path a decade from now. With the JCPOA wrecked by US unilateralism, Iran would be free to begin weaponisation immediately and could 'produce its first nuclear weapon in just months'. The US choice would then narrow to either accepting Iran as the world's 10th nuclear-armed state or launching another major war in the Middle East.

Imagine if today Kim Jong-un put on the table a package that halted his nuclear program and scaled it down to Iran's level under the JCPOA. The world would breathe a collective sigh of relief. If in two years' time the IAEA reported that Kim was faithfully implementing the deal, the world would celebrate.

The IAEA is the international community's nuclear watchdog. For the US to destroy the agreement despite the IAEA's certification of Iran's compliance would deal a potentially fatal blow to the integrity of the IAEA-based nuclear monitoring and verification system.

Iran's foreign minister, Javad Zarif, accuses Washington of being 'addicted to sanctions ... they have an obsession'. With tensions once again rising in the Middle East amid the wreckage of the JCPOA, world attention would be distracted from North Korea as the most pressing nuclear challenge. The US, which is already fighting at least seven wars around the world in 'autopilot' mode, could find itself drawn into two new and challenging wars. The Republican chairman of the Senate Foreign Relations Committee, Bob Corker, warns that Trump could put the US 'on the path to World War Three'.

As acknowledged by General Joseph Dunford, chairman of the Joint Chiefs of Staff, international faith in striking deals with the US would be broken. Moscow, Beijing and Pyongyang would hesitate to enter into discussions for a negotiated diplomatic resolution of the Korean nuclear crisis. With proof that the US can't be trusted and is fixated on forcible regime change, Kim would double down on his nuclear and missile programs. The distraction from North Korea could prove especially costly because of the 'pattern of comments that indicate a preference for a military response to North Korea'.

Congress has 60 days to decide whether to reimpose sanctions. Should it do so, there will be another 30-day cooling-off period before the deal collapses. The period will be used by Europeans to lobby Congress. The best outcome now would be a deal with Congress that Secretary of State Rex Tillerson and colleagues have been exploring: instead of reimposing sanctions, Congress rescinds the law requiring a presidential recertification every 90 days. That would preserve the status quo and all other parties, including Iran, could continue to abide by the JCPOA.

https://www.realcleardefense.com/articles/2017/10/17/trump_may_have_just_relit_the_iran_nuclear_fuse_112482.html

[Return to top](#)

RT (Moscow)

Every Nuclear Test Is a Red Line Not to be Crossed — Non-proliferation Organization Leader

By Sophie Shevarnadze

October 16, 2017

Once again, the world faces a nuclear crisis in North Korea – this time more than ever, with unpredictable leadership on both sides. With missiles armed and ready, the world may perish in a free-for-all exchange, despite all the diplomacy. Calls for a total ban on nuclear weapons are also ringing louder. But can humanity really give them up? We ask Lassina Zerbo, executive secretary of the Comprehensive Nuclear Test Ban Treaty organization and participant of the Valdai Discussion Club.

Sophie Shevarnadze: Lassina Zerbo, welcome to the show, it's great to have you on our program. So, President Trump has recently reiterated that 'only one thing will work' with North Korea - hinting at a military option. We've heard this many times before from U.S. officials. Is it just tough talking or is a pre-emptive strike really on the cards?

Lassina Zerbo: First of all, thank you for having us in studio with you. What I often said is that at a time of high tensions, sometimes words go beyond our thoughts. I'm just hoping that this is the case right now, and that everything will be done together, with all stakeholders, within the international community framework to find the solution of the problem, of the issue of DPRK.

SS: But why do you think that the U.S. has attempted an attempt to force Pyongyang into something by fear? I mean, these guys don't seem to be easily scared at all.

LZ: With nuclear weapons, the possibility of war - I mean, it's always scary, from the civil society viewpoint and from the international community as well. Any rhetoric that goes towards this end can be scary and is scary, in fact. But as I said, once again, my hope is that we live in a difficult period, the tensions are pretty high and difficult moments, and words sometimes go beyond our thoughts, and I'm hoping that things will settle one way or another and that's what we all try to push for.

SS: We all hope that things will settle, but U.S. Army Chief of Staff Gen. Mark Milley took it even further - he said that the North Korean issue has a deadline, that decisions would be made soon. What does that mean? Is he saying that we are actually heading towards war? How much time do you think we have here?

LZ: I think, my hope is that things so far have been settled through the UN framework and the UNSC. I think the UNSC has gone beyond the words that we're hearing and it always found solution to the problem in the DPRK. It is true that there's no definite solution, but if we manage to get DPRK to

stop testing, I mean, all kinds of tests, I mean, both nuclear testing and then missile testing, I think that could be a good start to the solution in the region.

SS: So, international community has urged North Korea many times before to stop its nuclear testing. But it does not seem to bow to the pressure. Neither UN resolutions nor sanctions work. In your opinion - what else can be done to make Pyongyang stop their nuclear tests?

LZ: That is the question that comes often - to say, what is the solution to Pyongyang problem? We've reached the 8th sanctions since the problem started in the Korean Peninsula. And despite incremental sanctions, North Korea has gone from one test - I talk about nuclear tests - every three years, to two tests a year in 2016, and then one huge one that has gone beyond anything thinkable that they were able to do. What does it tell? I mean, if you take a layman on the street, he'll tell you: "Look, the sanctions seem to not be working," from a layman's perspective. So if we are incrementally pushing sanctions and these sanctions seem to go incrementally with what North Korea is doing, I think we have to probably find a way in coercive diplomacy where we have the way to put pressure, but at the same time keep the door open for discussion and so that we move towards a solution that is sustainable. This is what we're hoping or, beyond words.

SS: Some experts believe an aboveground test would be a logical step for North Korea to prove success of their nuclear programme. Others believe Pyongyang wouldn't go for it due to the risks. What's your take on that?

LZ: I hope we won't go for an atmospheric test. You have to remember that the history of nuclear test, explosion in the air, have pushed people in the United States in Nevada and beyond that, to ask to stop - the CTBT from a Limited Test Ban Treaty, moving from atmospheric tests to underground testing. But then came the CTBT in 1996, the treaty to ban comprehensive tests, whereby there's no testing in the air, underground or underwater. So it is my hope, and I'm glad you're mentioning this, that we push towards the Comprehensive Test Ban Treaty, its entry into force, so that there's no room for testing, be it in the air or underground. We talk about underground testing, we shouldn't take it as something that is acceptable, and that the atmospheric test would be the red line. I think every test today is a red line and the red line is we have to get this treaty to force so that we leave no room for underground or atmospheric tests, or underwater testing. And that's what we're pushing for and that's why we have to finish what we started, which is finishing the CTBT by getting it into force as soon as possible.

SS: You've posted a motion graphic on Twitter which shows a simulation of the aftermath of a potential test over the Pacific. Some users found this video chilling, some - misleading. Could you give me a more detailed idea of the consequences of such a test?

LZ: Yes, you're right, I did post on Twitter the simulation of a possible test in the air. That was in response of the request of many journalists and experts who were asking us - should we have to today an atmospheric test, what will be the consequences? What we did, we basically simulated the weather forecast, how an atmospheric test could be taken and an isotope be moved with weather and conditions and be spread around, same as we did for Fukushima when we had the Fukushima accident in 2011. It's a same thing, the same type of simulation we put together. It is true that it has caused some concerns because we get back people saying that this is scary. I mean, there's nothing scary in this map, this map is just an indication of how things can be transported with weather conditions that are on the planet. That's what we did and that's what we put forward on Twitter for the international community, or, you know, laymen to be able to see as well, twitter being the way to move forward this day in communication.

SS: So, what will be the consequences of the test? Can you tell me what will be the consequences?

LZ: Consequences of an atmospheric test would be certainly more damaging than what we've ever seen so far with underground testing. Underground testing, we talk about geological stress and earthquakes that might happen in the event of the cracking in the ground - that could seep through some radioactive isotopes that could come in very minimal quantity or minimal level, but if you talk about atmospheric tests, you just have to go to Kazakhstan and then see what the consequence could be. I've been to Semipalatinsk and the consequences that can be are often very damaging, because you talk about an atmospheric test, and conditions that are in the air, are it's affecting the environment more than if it was in the ground. Not that I'm justifying, that we should do tests underground, I'm just saying that the consequences in the air for the environment are more damaging than what could come underground.

SS: The U.S. is the staunchest opponent of North Korea's nuclear tests. Yet it has never ratified the Comprehensive Nuclear-Test-Ban Treaty. How much credibility does the U.S. hold when it seeks to prevent others from nuclear testing?

LZ: It is true. You talk about the U.S. not having ratified the Comprehensive Nuclear-Test-Ban Treaty. This is where I often quote democracy. That's a sign of democracy that people should take forward. I mean, a leader can be willing to consider the CTBT ratification, but if he doesn't have the numbers at the Senate or at the Parliament, it's difficult for him to pursue this policy as he wishes. So this is the situation in the U.S.. Having said this, the U.S. does contributed tremendously to the Comprehensive Nuclear-Test-Ban Treaty, they've completed the international monitoring system facility on their territory. I think there are one or two remaining and then we're working towards that and participating in the technical work of the Comprehensive Nuclear-Test-Ban Treaty. It is my hope that the conditions, putting the U.S. into saying that anything that contributes to their national security, they buy in - I am yet to prove that the CTBT is indeed contributing to the U.S. national security, and I think if we manage to do that, as we're trying our best, we'll put the U.S. into conditions of ratification of the Comprehensive Nuclear-Test-Ban Treaty.

SS: U.S. ratification of the treaty would most likely set a good example for other states including China and even Iran. If those countries join, U.S. security will benefit - so why aren't the Americans ratifying the CNTB?

LZ: Why the remaining countries are not ratifying the treaty? I think it's... not a million dollar question, but I mean it's a question and an answer that I give sometimes for schoolkids. I mean, kids are telling me often, "but mr. Zerbo, why don't you bring them in the room and then get them to ratify all at the same time?" and the answer to this question is often because we tell them, they hear from civil society or from reading that U.S. or China is waiting for U.S., Israel is waiting for Iran and Iran is waiting and so and so forth. I mean, it's the answer of people who are of pure mind - they say, "bring them all in one room and get them to sign at the same time, so there won't be a problem of who ratifies first and does it late." So, that's probably an idealistic scenario. But having said this, I often say that we have 8 countries that all have the responsibility of ratifying the CTBT and they should go for it. There's no 800 pound gorilla or 150 pound gorilla. From the eight countries that ratification is necessary to enter this treaty into force, and we're working closely, or, I would say, very closely with some of them, and we wish to do with all of them, to get this treaty into force the soonest. That will leave no room for nuclear testing.

SS: The Trump White House wants to disavow and toughen up the Iran deal, which helped halt Tehran's nuclear weapons programme. If Trump does it, what will that mean for non-proliferation?

LZ: The Iran deal was one of the few, if I can put it this way, agreements for nearly a decade, in non-proliferation arms control. It is my hope that everything will be done by those stakeholders who are key in that agreement to find a way to pursue it, to give the confidence necessary for the international community, to move on with other arms control treaties, like the CTBT, MCT, and

arms control that seeks to establish a peaceful environment that this world needs today. That is my hope. I am positive that with Iran, there's always solution to be found, to issue, and then, I think, the same way they concluded this deal, the same way they can find ways to continue in the best way for the international community and all parties.

SS: Are nuclear weapons the only insurance that countries like North Korea can count on for the safety of their regimes against intervention? What can be more solid than a nuke?

LZ: I hope that nuclear weapons are the not the only assurance for countries, as you are asking. I think what could be more assuring, is the conducive environment that one could create for people to feel at ease, that the security and their national security is not threatened by their neighbors or the international community. How do we do that? I think that's why multilateral diplomacy exists and that's why we have regional framework, you know, asian framework, western framework, african framework, you name it. I think we need multilateral and regional diplomacy to be able to put countries in the position where they feel comfortable, that there's no threats by all means next to them or coming from afar. That's what we need and that's what we have multilateral diplomacy for.

SS: But tell me something - we're ok with India and Pakistan having nuclear weapons, right, why not North Korea? Why not just admit it and move on with it?

LZ: Oh. I mean. Why not admit that North Korea's nuclear weapons are like India and Pakistan and move on with it... I think you're asking a pretty difficult question, but my answer to that would be: we're aiming for non-proliferation and we're aiming for disarmament in the end. We cannot, in the framework of the NPT, consider more countries that are coming up today with nuclear weapons and the risk that we have that others will say: "If this country has managed to do it under this current framework, why not me?" And who wants that? What we want is to put an end to nuclear testing and then to move towards a world free of nuclear weapons, and to do that we have to bring countries who seek or who have this ambition to understand that a national security doesn't depend on the possession of the nuclear weapons. And I just want to say, if you take a toddler, a toddler would want only to sit, crawl, before he walks. If he walks without crawling, you would not have solid legs to work in a sustainable fashion. And I'm putting the move towards the world without nuclear weapons - in the same way. We need solid ground that includes putting into force a CTBT, and a legally binding one. So, we'll be creating conditions that are right for world without nuclear weapons.

SS: Military doctrines of global powerhouses depend on having nuclear arsenals, policies are made based on having nuclear arsenals, nukes provide checks and balances in global politics - wouldn't outlawing them and getting rid of them bring more instability, make politics unpredictable?

LZ: You are asking somebody from tiny little country, somebody that will not say that having nuclear weapons brings stability, because I don't think that some regions where there's no nuclear weapons, are not stable because there's weapons, or stable because there aren't weapon. I think we're moving towards bringing peace and stability for this world, for this planet, and bringing peace and stability is about also stopping anything that leads to arms race, and then, achieving disarmament, and that's what we want and that's what we're working towards, and working towards this, the international community, has brought forward treaties like the CTBT or FMCT, Fissile Material Cut-off Treaty, and many other treaties that come together as we move towards achieving this world that we're dreaming of, dreaming of world without nuclear weapons. I hope we will achieve this in our lifetime and people will not see nuclear weapons as means for stability, by any means. I think that we have the opportunity to do that, because now, more than ever, we have a big risk of a start of a new arms race again.

SS: The Nobel Prize winners managed to push a Treaty on the Prohibition of the Nuclear Weapons in the UN. But none of the nuclear club members backed it, with the U.S. calling the initiative unfit for today's security situation, and Russia calling it dangerous. Without the signatures of the heavyweights, is this Treaty powerless, and then what's the point of it?

LZ: You talk about the Nobel Prize. I think I will try and quote what exactly the Nobel Committee said. They said, they've ordered this Nobel Prize knowing that it will not achieve stopping nuclear weapons today, but it's a message that they wanted to send to the international community. But beyond the message, what we want is the practical disarmament and the practical disarmament takes into account arms control treaties that are here, the CTBT being one of them. I've used the example of the toddler, I think we have to finish what we started. One of the things that we started more than 20 years ago is CTBT. It's such a low-hanging fruit! If you can't have a world free from nuclear testing, how can you achieve a world free from nuclear weapons? North Korea cannot be testing - still - and we're talking about world free from nuclear weapons... North Korea like any other country, it's only country that is testing today, they must stop this, stop nuclear testing, stop missile testing, and then create the conditions for the international community to see them as partners, and with that we can move towards the world free from nuclear weapons. That's what we think and that's what we want to achieve.

SS: Does the Comprehensive Ban on Nuclear Tests as well as the Non-Proliferation make this new UN Prohibition Treaty redundant? I mean, we already have a structure in place that controls nuclear weapons reasonably well...

LZ: Whether the Prohibition Treaty is a redundancy to the CTBT and the NPT?... I wouldn't take one versus another. I think what we hear from civil society and from the proponents of the prohibition of nuclear weapons is the perceived frustration that I have seen in what they see as no movement towards disarmament. But precisely, movement towards disarmament includes the getting the CTBT into force to create the conditions of trust that is necessary for countries to come together and then discuss how they can effectively and practically achieve disarmament. This is important. When I used toddler's example, I think it might look a little bit funny, but the reality is, to have something sustainable, we have to prepare the ground for it, and to prepare the ground for an effective and practical, we need to achieve entering into force of the CTBT, and bring many of the arms control treaties that are pending - live. If we bring them live, we create the conditions. Because we have to move on them, because if you don't move on entering into force of the CTBT, you effectively give the perception that nothing is moving towards non-proliferation and disarmament. That's the risk, that's what we're facing today, and this is why we still have to finish what we started, the CTBT is the lowest-hanging fruit in that in marsh.

SS: Alright, Mr Zerbo, thank you very much for being with us today. We were talking to Lassina Zerbo, Executive Secretary of the Comprehensive Nuclear Test Ban Treaty organisation and participant of the Valdai Discussion Club, about the nuclear crisis on the Korean peninsula and whether a world without nukes is actually possible. That's it for this latest edition of Sophie&Co, I will see you next time.

<https://www.rt.com/shows/sophieco/406798-nuclear-crisis-north-korea/>

[Return to top](#)

Sputnik News International (Moscow)

Russia 'Good Student' of Nuclear-Test-Ban Treaty — CTBTO Head

Author Not Attributed

October 18, 2017

In an interview with Sputnik, Executive Secretary of the Comprehensive Nuclear-Test-Ban Treaty Organization Lassina Zerbo spoke on the importance of the enactment of the Nuclear-Test-Ban Treaty, the role of Russia and the Iran nuclear deal as well as the situation on the Korean Peninsula.

Lassina Zerbo plans to visit Moscow and Sochi during his official visit to Russia. He will also visit St. Petersburg in order to take part in the annual security conference, where he will be one of the keynote speakers on nuclear non-proliferation and disarmament.

Zerbo told Sputnik that he would discuss the nuclear proliferation treaty, North Korea's nuclear tests and the Iran nuclear deal at his Friday meeting with Sergei Lavrov. He noted that the Comprehensive Nuclear-Test-Ban Treaty would also be a part of the discussion.

Russia's Role in Promoting the Nuclear-Test-Ban Treaty

According to Zerbo, Russia is a "good student of the Comprehensive Nuclear-Test-Ban Treaty," as it is fully complying with the provisions of the deal. It also should push the remaining eight states who have yet to ratify the agreement to do so in order to put it into force once and for all.

The Comprehensive Nuclear-Test-Ban Treaty (CTBT), under which all 183 signatories pledge to halt nuclear weapon test explosions, was adopted by the United Nations General Assembly in 1996. It will enter into force only after all states mentioned in Annex 2 sign it. As of now, the treaty requires ratification by China, Egypt, India, Iran, Israel, North Korea, Pakistan and the United States.

Zerbo also underlined the existence of political support for the treaty "from basic to the highest level" in Russia.

The CTBTO official stressed that pushing the treaty forward was not the organization's task. Instead, he claimed that the job of parties to the accord since the treaty could contribute to international security and national security.

Iran's Nuclear Deal

Lassina Zerbo expressed confidence that the deal on Tehran's nuclear program can promote the enactment of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and thus clear the world from nuclear weapons, despite the recent claim by the US administration.

On Friday, Donald Trump made a decision not to certify Iran's compliance with the nuclear agreement. The US president characterized the Joint Comprehensive Plan of Action (JCPOA) as "the worst transaction the US has ever entered into" pointing out that Iran violates the agreement and is still able to develop elements of the nuclear program. Commenting on the possible unilateral withdrawal of the US, Trump said that there is a "very real possibility" of canceling of the deal.

The JCPOA was signed in July 2015 by Iran, the European Union and the so-called P5+1 group of nations, comprised of the five permanent members of the UN Security Council — China, France, Russia, United Kingdom, United States — plus Germany. The agreement provided for the gradual lifting of nuclear-related sanctions imposed on Tehran in exchange for assurances that its nuclear program would remain peaceful.

The CTBTO head noted that he met with Ali Larijani, the speaker of the Iranian Parliament, on Monday and discussed the ratification of the CTBT. According to Zerbo, Larijani pointed out that he is not against the treaty, but linked its possible ratification to the outcome of the JCPOA.

"It would be difficult to get any consentient support for any other arms control treaty [by Tehran] until [Iran's] civil society and parliament see the outcome and the fruit of what is pending right now, which is the Iran deal," Zerbo said, referring to Larijani's remarks.

The CTBTO head reminded that the JCPOA's value is that it brought the international community together to agree on a measure to stop Iran from moving toward a nuclear weapon program.

North Korean Nuclear Tests

The Comprehensive Nuclear-Test-Ban Treaty's (CTBT) entry into force could help ensure that North Korea stops its nuclear tests, which continue to be carried out in spite of the numerous UN Security Council resolutions that stipulate otherwise, Lassina Zerbo told Sputnik.

The treaty needs to be ratified by all states that took part in its negotiation in 1994-1996 and had nuclear power or research reactors at the time. Five of these countries, namely China, Egypt, Iran, Israel, and the United States, have signed the treaty, but not ratified it, while India, North Korea, and Pakistan have to both sign and ratify. The secretary expressed hope that Pyongyang would decide to join the agreement as it was in its own national security interest.

As for the way to bring North Korea to join the CTBT, Zerbo said that it is necessary to lobby and to explain the value of international monitoring system, the value of the verification regime and the value of the treaty as a whole to DPRK.

The CTBTO chief expressed hope that "at the end of the day, multilateral diplomacy will prevail and the institutional framework that governs not only the United Nations as a center for multilateral diplomacy, but regional dealings among states as well, will be able to ease the tension in a way where [the globe does] not suffer a nuclear war."

Zerbo pointed out that North Korea has not stopped the tests despite being hit with increasingly strict sanctions. The UN Security Council adopted new sanctions against Pyongyang on September 11, banning textile exports from North Korea and capping imports of crude oil and refined petroleum products. North Korea carried out its sixth nuclear test on September 3, claiming to have successfully tested a hydrogen bomb which could be loaded onto an intercontinental ballistic missile.

Lassina Zerbo also told Sputnik that he may use the upcoming Moscow Nonproliferation Conference to discuss the ban on nuclear tests with North Korea. A diplomatic source told Sputnik on Tuesday that the chief of the North Korean Foreign Ministry's North America department, Choe Son Hui, was planning to attend the conference that would begin on Thursday and last through Saturday as part of a delegation of experts.

Nobel-Winning International Campaign to Abolish Nuclear Weapons and Nuclear-Test-Ban Treaty

The Nobel Peace Prize-winning International Campaign to Abolish Nuclear Weapons (ICAN) can contribute to the enactment of the Comprehensive Nuclear-Test-Ban Treaty since it has drawn the attention of the entire world to the problem, Lassina Zerbo told Sputnik.

Earlier in October, the Norwegian Nobel Committee awarded the Nobel Peace Prize to ICAN for its work to draw attention to the consequences of nuclear conflict, as well as for its efforts to "achieve a treaty-based prohibition of such weapons."

Zerbo noted that the Nobel committee focused on the relevant issues which required high attention, and therefore awarding Nobel Peace Prize to ICAN could send a strong message to the international community regarding the importance of nuclear disarmament and non-proliferation.

“Because [this is] what happens when you get the Nobel Prize – all the attention is on you. So because the attention is on you, it will certainly reverberate in other issues that are linked to disarmament and non-proliferation and will hopefully get the Comprehensive Nuclear-Test-Ban Treaty into force,” Zerbo said.

The Comprehensive Nuclear-Test-Ban Treaty (CTBT), under which all 183 signatories pledge to halt nuclear weapon test explosions, was adopted by the United Nations General Assembly in 1996. It will enter into force only after all states mentioned in Annex 2 sign it. As of now, the treaty requires ratification by China, Egypt, India, Iran, Israel, North Korea, Pakistan and the United States.

<https://sputniknews.com/analysis/201710181058338072-ctbto-zerbo-nuclear-test-ban-treaty/>

[Return to top](#)

The Hill (Washington, DC)

Pelosi Urges New Law to Limit President's Use of Nuclear Weapons

By Mike Lillis

October 12, 2017

House Minority Leader Nancy Pelosi (D-Calif.) is pressing Congress to bar the president from using nuclear weapons unless the United States is attacked first.

“I put this in the category of ‘urgent,’ ” Pelosi said Thursday during a press briefing in the Capitol. “We each take an oath to protect and defend.”

Pelosi said her promotion of the nuclear “first-use” concept has nothing to do with the volatility surrounding President Trump, whose saber-rattling with North Korea and threat to scrap a nuclear deal with Iran have raised plenty of concerns on both sides of the aisle.

Still, she characterized the 1946 law authorizing the president to launch pre-emptive nuclear strikes as “ancient,” calling on lawmakers from both parties to rally behind legislation reining in that unilateral power.

“It was in a different world,” she said, “and now I think it is necessary for us to address it.”

Pelosi outlined several different designs for restricting pre-emptive nuclear strikes. They range from proposals to define and expand the Cabinet members who advise the president before such an attack, to a blanket declaration that “the United States will not engage in first use of a nuclear weapon.”

“I like that one the best,” Pelosi said of the latter.

Trump has a long history of aggressive positions when it comes to nuclear weapons. As president-elect in December, he rattled the arms-control community when he tweeted that “the United States must greatly strengthen and expand its nuclear capability until such time as the world comes to its senses regarding nukes.”

This week, Trump has been under fire after NBC News reported that he was eyeing a dramatic increase in the country's nuclear arsenal — a report the president and his defense secretary vehemently denied.

Trump's public jousting with Kim Jong Un, the North Korean autocrat, over Pyongyang's escalating nuclear program has captivated nuclear weapons experts for months. He's threatening to decertify the Iran nuclear deal negotiated by President Obama and a long list of America's allies. And over the weekend, Sen. Bob Corker (R-Tenn.), the chairman of the Senate Foreign Relations Committee, warned that the president's volatile behavior risks putting the U.S. "on the path to World War III."

Pelosi has criticized Trump at virtually every turn of his foreign-policy platform, which she characterized Thursday as "the stop-the-world-I-want-to-get-off agenda." But she insisted her promotion of the nuclear "first-use" limits transcends the current administration.

"It has nothing to do with him," she said. "It has to do with the presidency — any president who is there."

Pelosi emphasized that the restrictions wouldn't apply if the U.S. is attacked, in which case "the War Powers Act triggers for the executive any and all powers."

"But there is interest in the U.S. establishing itself as no first-use," she added. "The law that was passed in 1946 was in a different reality of our country's standing in the world."

<http://thehill.com/policy/defense/355186-pelosi-urges-new-law-to-limit-presidents-use-of-nuclear-weapons>

[Return to top](#)

ASIA/PACIFIC

news.com.au (New South Wales, Australia)

North Korea's Threat to Australia for Supporting the US and South Korea as Nuclear Tensions Continue

By Claire Bickers

October 15, 2017

JULIE Bishop has responded to Pyongyang's threats towards Australia after the rogue nation sent a chilling warning of 'disaster' to come.

JULIE Bishop has moved to reassure Australians the nation is not a primary target for North Korea despite its threats of "disaster" at the weekend.

The Foreign Affairs Minister responded to Pyongyang's direct threats today, saying Australia's determination to find a peaceful solution was only strengthened by its provocative language.

Her remarks come as the international community braces for another missile test by the rogue nation this week.

"Australia is not a primary target and North Korea has made threats against Australia before," Ms Bishop told reporters in Sydney.

"But North Korea's threats only strengthen our resolve to find a peaceful solution to the rising tensions on the Korean Peninsula, caused entirely by North Korea's illegal, threatening and provocative behaviour."

“Our focus is on deterring North Korea from continuing to carry out illegal ballistic missile and nuclear weapons’ tests and to compel it back to the negotiating table.”

North Korea criticised and threatened Australia for aligning itself with South Korea and the United States and for its attitude toward the Pyongyang regime.

The rogue nation has said that Australia has made a “dangerous” move to join the US in hostile action against its regime, warning that it could result in a “disaster” for the country.

“Lately, Australia is showing dangerous moves of zealously joining the frenzied political and military provocations of the US against the DPRK,” the Korean Central News Agency (KCNA) said in a statement on Saturday.

The nation also took aim at Foreign Minister Julie Bishop and Defence Minister Marise Payne, who have been meeting with South Korean counterparts in Seoul.

Ms Bishop and Senator Payne visited the truce village of Panmunjom.

“The Australian foreign minister personally expressed her support for the stand of the US to consider all options including the use of force towards the DPRK, and turned up at Panmunjom on October 11 together with the Australian defence minister to condemn the DPRK during her visit to South Korea,” it added.

Panmunjom is located within the tense demilitarised zone (DMZ), a 4km-wide strip that separates the two Koreas, which have technically been at war for more than 65 years.

During the visit, the ministers stressed the need for diplomatic pressure to thwart North Korea’s nuclear ambitions and urged the country not to carry out any more weapons tests and halt its nuclear and missile program.

But North Korea has sent a chilling warning to Australia and the two Turnbull Government ministers.

The KCNA said that there are media reports that Australia is preparing for a war on the Korean Peninsula, citing a joint military drill with the US. It warned of a disaster should it continue the hostile acts.

“Should Australia continue to follow the US in imposing military, economic and diplomatic pressure upon the DPRK despite our repeated warnings, they will not be able to avoid a disaster,” KCNA warned.

The warning comes after Ms Bishop pledged solidarity with South Korea in the face of the North’s ongoing nuclear threat.

“We stand united with (South Korea) against the provocative and threatening behaviour of North Korea,” Ms Bishop told reporters.

The ministers discussed ways to work together to compel North Korea back to the negotiating table.

The visit comes as a small quake was detected near the North’s nuclear test site early on Friday.

The tremor was the latest in a string of at least three shocks to be observed since Pyongyang’s September 3 nuclear test, which caused a 6.3 magnitude earthquake.

Friday’s quake was a magnitude 2.7 with a depth of 3km in North Hamgyong Province in North Korea, the Korea Meteorological Administration said.

The series of quakes has prompted experts and observers to suspect the last test, which the North claimed to be of a hydrogen bomb, might have damaged the mountainous location in the northwest tip of the country, where North Korea's six nuclear tests were conducted.

Senator Payne and Ms Bishop have also visited the Korean War Memorial to pay their respect to the 340 Australians who lost their lives during the Korean War.

<http://www.news.com.au/finance/work/leaders/north-koreas-threat-to-australia-for-supporting-the-us-and-south-korea-as-nuclear-tensions-continue/news-story/b677c35fbd3d4651baea5b733ca56206>

[Return to top](#)

38 North (Washington, DC)

Sinpo South Shipyard: SLBM Test Not Imminent; Unknown Shipbuilding Program Underway

Author Not Attributed

October 11, 2017

Commercial satellite imagery of North Korea's Sinpo South Shipyard from September 21 shows ongoing activity at the facility that indicates:

- The netting previously present at the SINPO-class experimental ballistic missile submarine (SSBA) on August 7 has been removed, indicating that whatever work was being conducted is now complete;
- The SINPO-class submarine and submersible missile test stand barge remain in the same positions in the secure boat basin as observed last month;
- There are no activities suggesting either previous or forthcoming ejection tests at the facility's test stand;
- Given the continued movement of components in the parts yards, a shipbuilding program is probably underway although the type of vessel remains unknown; and
- Two heavy-lift barge cranes are working on a submerged object just off the main construction hall's launching ramp. While the nature of the object is unclear, what is visible suggests a sunk mother ship or small submarine.

While there is growing concern that the North may be planning a submarine-launched ballistic missile (SLBM) test in the near future, the current imagery does not indicate an imminent test. The SINPO-class submarine, submersible test stand barge and nearby test stand, however, appear capable of supporting a test at any time of Pyongyang's choosing.

SINPO-class Submarine

The netting suspended over the SINPO-class submarine (SSBA) observed last month is no longer present, indicating that whatever work was being conducted on the vessel has been completed. The nature of such work is, however, unknown. Both the submarine and submersible missile test stand barge remain berthed at the same positions in the secure boat basin as noted in our August 7 report, suggesting, without offering real proof, that they have not left port. No activity is observed on the dock adjacent to the submarine or test stand barge, none of the commonly seen support vessels are present in the boat basin and the floating security barrier remains present at the entrance to the boat basin. This relatively tranquil scene notwithstanding, both the submarine and test stand barge could be put to sea to conduct new SLBM tests at relatively short notice.

Test Stand Developments

No new activity is noted at the static test stand used for Pukguksong-1 SLBM launch systems verification and pop-up and prototype testing since 2014. At the test stand, the service tower remains in place and there are no indications of the ejection tests reported to have taken place during late-July or early August or of any forthcoming ejection tests. Additional ejection test should, however, be expected in the future for further development of the Pukguksong-1, a potential Pukguksong-3, or other future SLBMs.

Shipbuilding Program

During this year, the rail-mounted tower and gantry cranes at the construction hall's parts storage yards continue to be re-positioned, as is the case with the rail-mounted transfer table that is visible in the present image. Additionally, the contents of the storage yards have continued to change. All this activity suggests an ongoing shipbuilding program of some type. While the Sinpo South Shipyard has historically been involved in the construction or repair of submarines, infiltration mother ships, small combatants and hovercraft, it is not apparent what type of shipbuilding program is being pursued.

Two heavy-lift barge cranes are working on a submerged object just off the main construction hall's launching ramp. While the nature of the object is unclear, what is visible suggests a sunk mother ship or small submarine.

Additional Construction Activity

The erection of a new construction or maintenance hall on the southern tip of the Yuktaeso-ri (Sinpo) Peninsula, which began in 2012, has proceeded very slowly through 2016 and 2017. One of the few notable changes has been the modest extension of the L-shaped pier to approximately 225 meters long. The positioning and construction methods of the new hall suggest that when it is completed, it may be covered with earth to provide protection from possible attack. This, in turn, suggests a potential use in support of future submarine operations.

Since 2015 the port and associated facilities at Nopyong-ni, located on the west side of the Yuktaeso-ri Peninsula, have been undergoing a significant modernization and rebuilding program. This program is continuing and progress is observable in the current imagery. Whether this modernization program is related to the future development and deployment of a ballistic missile submarine capability is unknown.

<http://www.38north.org/2017/10/sinpo101117/>

[Return to top](#)

The National Interest (Washington, DC)

China's Underwater Nukes: The Most Dangerous Threat No One is Talking About?

By Robert Farley

October 13, 2017

Deployed appropriately, any of the more modern submarines can strike the United States with nuclear missiles. The Type 096 can strike the U.S. from secure areas near China's coast. The Pentagon currently believes that China will build around eight SSBNs in total, giving the PLAN the capacity to maintain multiple boats on continuous patrol. Much depends, however, on whether China shifts its overall nuclear posture from minimal deterrence to active pursuit of secure second strike capability.

China's nuclear ballistic missile submarines (SSBNs, or "boomers") are soon to become a major worry for the United States. How does this change the balance of power in the Pacific?

History of Program:

China completed its first SSBN, the Type 092 “Xia” boat, in 1981. The sub did not enter service until 1987, however, and has reportedly never conducted a deterrence patrol. The sub (various rumors over the years have asserted that a sister ship was built, and lost) represented a triumph of China’s limited submarine building industry, but did not constitute a meaningful deterrent.

China’s second effort, the Type 094 class, has resulted in a much more effective group of boats. The Type 094s displace about 11,000 tons submerged, and carry 12 JL-2 submarine launched ballistic missiles (SLBMs), capable of launching a nuclear warhead some 7,500 kilometers.

Reports vary on whether the missiles can carry MIRVs, but given Chinese advances in this area it is likely that these and future boats will carry them in the future. Thus far China has constructed around four Type 094 class subs, the minimum necessary for conducting continuous deterrent patrols.

The next step is the Type 096 “Tang” SSBN. Reports vary widely on the design parameters and expected deployment dates, but it will undoubtedly be larger, quieter, and carry more missiles with more warheads. The Type 096 is expected to carry up to 24 JL-3 SLBMs, with a range of 10,000 kilometers.

Deployed appropriately, any of the more modern submarines can strike the United States with nuclear missiles. The Type 096 can strike the U.S. from secure areas near China’s coast. The Pentagon currently believes that China will build around eight SSBNs in total, giving the PLAN the capacity to maintain multiple boats on continuous patrol. Much depends, however, on whether China shifts its overall nuclear posture from minimal deterrence to active pursuit of secure second strike capability.

Strategies:

The Type 092 boat is practically undeployable, and has effectively been retired. The PLAN has been conducting extensive exercises with the Type 094 boats, presumably in preparation for their first deterrent patrols. The PLAN has developed an extensive infrastructure for servicing these boats. However, the Type 094 class cannot operate independently in conditions of high intensity conflict. The boats are reputedly noisier than 1970s era Soviet SSBNs, making them easy prey for American attack subs.

In light of this disadvantage, it seems likely that China will adopt the “bastion” concept that guided Soviet SSBN deployment during the Cold War. The Soviets adopted the bastion strategy because of concern about the survivability of its SSBNs, and because of paranoia about a decapitating American first strike. If anything, China’s boats remain less survivable than the Soviet subs of the late Cold War, and China is considerably more vulnerable to pre-emptive nuclear attack than the Soviet Union. Consequently, a bastion strategy might make sense. However, the PLAN needs to accelerate the development of its anti-submarine warfare capabilities in order to pose a genuine threat to American attack submarines.

On the one hand, the noisiness of China’s boomers make them easy for U.S. attack boats to find. On the other hand, and insecure nuclear deterrent does not bode well for crisis stability. As Brendan Thomas-Noone and Rory Medcalf have suggested, noisy SSBNs present tempting targets for nuclear attack submarines. In a war, the United States (or Japan, or India) might press this advantage by engaging in a concerted effort to destroy China’s boomers. This was precisely the strategy the U.S. Navy envisioned in the 1970s and 1980s; attacking the “bastions” in which Soviet SSBNs patrolled.

While sinking the SSBNs seems attractive, a concerted campaign might produce a “use it or lose it” mentality in the Chinese Communist Party, and would undoubtedly heighten concerns about U.S.

escalatory intentions. In short, the vulnerability of Chinese SSBNs is both an opportunity and a problem for the United States.

Effects on Deterrence:

In practical terms, the expansion of the Chinese submarine nuclear deterrent doesn't have much effect on the United States. As was the case with the Soviet Union, and is the case with Russia, China has plenty of good reasons to refrain from launching. The decision to devote resources to the SSBN fleet may well result from concerns over U.S. nuclear primacy; the idea that the United States could decisively destroy China's nuclear forces on the ground. The deployment of additional submarines undoubtedly makes China's second strike deterrent somewhat more secure, but the United States would require excessively high confidence to undertake a first strike against under any conditions.

As the world's most powerful navies have found, SSBNs are a mixed blessing. They suck up cash and resources at every stage of design and development, and return very little in terms of operational value. The United States Navy has grudgingly settled on an Ohio replacement boat, although not without controversy. The ability of the United Kingdom to replace its existing SSBN force is an open political question. Even the Russians have been slow to replace their aging, Cold War era boomers. Moreover, "bastion" strategies are particularly costly, as they force the deployment of support units in the vicinity of the boomer.

The more interesting questions come down the road, as China tries to catch the United States (and Russia) on quieting technology. If future PLAN boomers have sufficient stealth to operate independently, then the Chinese deterrent strategy could come to resemble the American more closely than the Soviet. This would, incidentally, free up surface and subsurface anti-submarine units for other work.

In any case, the presence of additional Chinese boomers adds a wrinkle to the escalation-management problems that will arise if China and the United States ever go to war. The development of the Indian SSBN force, which has lagged behind the Chinese for some time, could further complicate the nuclear politics of the Indo-Pak. But most likely, Chinese boomers will spend their careers doing what everyone else's boomers do; hide deep in the ocean, waiting for an order that will probably never come.

<http://nationalinterest.org/blog/the-buzz/chinas-undewater-nukes-the-most-dangerous-nuclear-threat-no-22709>

[Return to top](#)

TASS (Moscow)

Pyongyang to Continue to Build Up its Nuclear Potential -- Senior Lawmaker

Author Not Attributed

October 16, 2017

It was the United States who prompted Pyongyang to develop a nuclear program, the deputy chairman of the North Korean parliament said

North Korea will continue to build up its nuclear potential and will not discuss its right to nuclear weapons as long as a US threat is in place, Deputy Chairman of North Korea's Supreme People's Assembly An Tong Chun, who heads his country's delegation to the Inter-Parliamentary Union Assembly, said at a plenary session on Monday.

"We are determined to build up our nuclear forces until peace in struggle with the United States is secured," he said. "North Korea will never discuss its right to nuclear weapons as long as the United States keeps its nuclear threat and belligerent policy towards North Korea."

Pyongyang will not discuss its right to nuclear weapons as long as it sees a threat from the United States, Ahn Dong Chun said.

"North Korea will never discuss its right to nuclear weapons as long as the United States keeps its nuclear threat and belligerent policy towards North Korea," he said. "North Korea will invigorate its efforts to ensure its sovereignty and the right to exist, to preserve peace and security in the region and will spare no effort to reach parity with the United States."

Ahn Dong Chun also said that it was the United States who prompted Pyongyang to develop a nuclear program.

"It was the United States who prompted the DPRK to create a hydrogen bomb and ballistic missiles," he stressed.

Pyongyang considers sanctions against North Korea illegal

Pyongyang considers unilateral sanctions against the DPRK to be absolutely illegal, Ahn Dong Chun said.

"Sanctions against the DPRK are aimed at preventing our foreign trade even in the fields crucial for our people's survival," he said. "These resolutions are totally illegal and run contrary to the United Nations Charter and the statutes of the Inter-Parliamentary Union. It is a manifestation of state terrorism aimed at destroying modern civilization and plunging the Korean Peninsula into medieval darkness," he stressed.

"The US imposed a horrible and absolutely unfair economic blockade against us, as well as sanctions. At the same time, the measures that we have been taking for self-defense are branded as 'a global threat,' while they are only aimed at ensuring the existence and security of our country, which has been facing US threats," Ahn Dong Chun pointed out.

<http://tass.com/world/970965>

[Return to top](#)

EUROPE/RUSSIA

Luxemburger Wort (Luxembourg)

EU Takes Further Measures Against North Korea

Author Not Attributed

October 16, 2017

The European Union adopted new sanctions against North Korea at a meeting of the bloc's foreign ministers in Luxembourg on Monday, citing the country's development of nuclear weapons "in violation and flagrant disregard" of resolutions passed by the United Nations Security Council.

"Given the persistent threat to international peace and stability posed by the DPRK [Democratic People's Republic of Korea], the Council adopted new EU autonomous measures to further increase the pressure on the DPRK to comply with its obligations," the European Council said in a statement. "The measures complement and reinforce the UN Security Council sanctions."

They are effective immediately, the Council said.

There is a total ban on EU investments in all sectors of the North Korean economy, the Council said. Previously the ban was limited to nuclear and conventional arms, mining, refining, chemical, metallurgy, metalworking and aerospace, it said.

There is also a ban on the sale of refined petroleum products and crude oil to North Korea.

The amount of personal payments into the country has been lowered to €5,000 from €15,000 "as they are suspected of being used to support the country's illegal nuclear and ballistic missile programmes."

The EU will now not renew work permissions for North Korean nationals, except for refugees and others under international protection. Three people and six entities were added to list of those subject to asset freezes and travel restrictions.

Additionally the bloc called for "an immediate end to all violence" in Myanmar.

"The humanitarian and human rights situation in Rakhine State is extremely serious," the council said in a separate statement. "There are deeply worrying reports of continuing arson and violence against people and serious human rights violations, including indiscriminate firing of weapons, the presence of landmines and sexual and gender-based violence."

It said that more than 500,000 people, mostly Rohingya, have fled Myanmar for Bangladesh.

The EU will also spend €14 million euros for one year on a new civilian mission to Iraq to provide advice and assistance as the country builds state institutions "capable of consolidating security, peace and preventing conflicts," the Council said in a separate statement.

The European Council defines the EU's overall political direction and priorities. It is not one of the EU's legislating institutions, so does not negotiate or adopt EU laws. It sets the EU's policy agenda, traditionally by adopting 'conclusions' during European Council meetings which identify issues of concern and actions to take.

<https://www.wort.lu/en/luxembourg/sanctions-eu-takes-further-measures-against-north-korea-59e4c8dc56202b51b13c551d>

[Return to top](#)

The Warzone (Tampa, FL)

Russia Tests Modified RS-24 Ballistic Missile with an 'Experimental Warhead'

Joseph Trevithick

October 6, 2017

Russia says it has successfully tested a new version of its RS-24 Yars nuclear-armed intercontinental ballistic missile (ICBM) with an "experimental warhead" design. The three-warhead configuration could make the weapon more accurate, as well as harder for an opponent to track and intercept.

The Russian Strategic Missile Force conducted the test launch from the Plesetsk Cosmodrome in the northwestern Arkhangelsk Oblast, flying approximately 3,500 miles before impacting the Kura Missile Test Range in Kamchatka Krai on the other side of the country. It was unclear whether or not this was the first test of the new warhead arrangement on the RS-24, which first entered service in December 2010.

“The main purpose of the launch was to reaffirm the reliability of a batch of the same class missiles,” the Russian Defense Ministry said in a statement, according to state-run media outlet TASS. “The experimental warheads reached the designated area at the Kura proving ground in the Kamchatka Peninsula. The targets were met and tasks accomplished in full.”

That the RS-24, also known as the Topol-MR, carried multiple warheads was already well established. From all accounts, the initial version was simply a modification of the original RS-12M Topol-M to allow it to carry multiple independently targetable reentry vehicles, or MIRVs, each able to strike a separate target. The United States has argued that the new designation is simply an attempt to circumvent existing Strategic Arms Reduction Treaty (START) limitations on the total number of warheads U.S. and Russian forces can have available on ICBMs.

Though Russian media has reported that each Topol-MR carried as many as 10 individual nuclear weapons, experts believed the actual number is far lower. Each one reportedly has a yield of between 150 and 250 kilotons.

In a typical MIRV arrangement, the missile holds all of the warheads in a single stage that detaches from the rest of the weapon after launch. This unit can independently maneuver once it leaves the earth’s atmosphere, releasing each warhead over an individual target.

According to a report by The Diplomat, the newly modified RS-24s have what are known as independent post-boost vehicles, or IPBVs. Instead of a single stage with all the warheads, this configuration essentially consists of multiple vehicles that break off after launch and then speed toward their final destination.

The difference between when and how the missile releases its warheads may seem academic. However, the new Yars’ design could have a major impact on its ability to strike independent targets and break through and future missile defenses.

Though a MIRV-capable missile can release a number of individual nuclear weapons, they’re all attached to a single main unit that is flying on a relatively linear course. As such, the warheads can only hit targets in relatively close proximity to that path, which one can see in the still impressive photographs of these vehicles re-entering the atmosphere during tests.

With an IPBV setup, it is possible that the warheads will be able to chart a course that is much more independent of the main missile’s trajectory, allowing a single ICBM to attack across a far wider area. It could also make for more precise targeting, since the vehicles would not be restricted to the same degree to a single flight path.

On top of that, the new warheads could then be harder for and opponent to monitor in flight or to knock out with a ballistic missile defense system, especially since the warheads would remain clustered together as a single object for a much shorter period of time. At present, the United States, for instance, relies heavily on its Space-Based Infrared System (SBIRS) satellites to detect the heat of missile launches and then track their flight even when they “go cold.” For mid-course monitoring, various radars, other sensors, and communications nodes contribute to the overall picture and make sure the information gets where it needs to go. A projectile that more rapidly turns into multiple projectiles each heading on significant different courses could possibly overwhelm the capabilities of this network.

This would present a challenge for any attempt to intercept the warheads during this mid-course flight, as well. The ability for the post-boost vehicles to fly on significant different trajectories might allow them to dodge past the U.S. military’s existing Ground-based Mid-course Defense and SM-3 Block IIA interceptors’ engagement envelopes. In May 2016, a Russian television special on the Yars already claimed that its warheads had advanced maneuvering capability to defeat interceptors

Though the United States say its ballistic missile defense projects aren't aimed at limiting the credibility of Russia's or China's nuclear deterrents, both countries publicly express concerns that this will be the end result all the same. It seems almost certain that the new version of the RS-24 is in direct response to the Kremlin's concerns.

It seems likely that the Russians could combine the IPBV concept with additional decoys and countermeasures, as well. In addition, earlier in 2017, the U.S. Air Force's National Air and Space Intelligence Center highlighted that "Russian officials claim a new class of hypersonic vehicle, probably called 'object 4202,' is being developed to allow Russian strategic missiles to penetrate missile defense systems," in its latest public review of global ballistic and cruise missile developments.

We at The War Zone have already written in depth about how hypersonic projectiles could easily add an entirely new dimension to warfare in general and be a serious challenge to existing ballistic missile defense systems. In June 2017, I wrote:

A hypersonic weapon, able to carry a nuclear or a conventional warhead could upend this calculus entirely. The most common design involves a booster of some sort, often a rocket motor, which gets the craft going fast enough for an air-breathing high-speed jet engine to take over. Once at its cruising speed, these powerplants becomes highly efficient.

But more importantly, this air-breathing engine generates a very different signature from a rocket motor, meaning space-based surveillance assets might not be able to spot one as quickly or keep tracking it during flight, or even spot it at all for that matter. On top of that, prototype designs look much more like super-fast flying cruise missiles or drones, able to fly in more erratic ways well within the atmosphere, maybe even changing course in mid-flight relatively rapidly. This could make any such weapon more accurate, since it could make more corrections before impact, as well. A projectile flying at a mile a second would be too much to process in general for even the most fast-scanning surface- and airborne radars that exist at present, and even if they could be tracked, engaging something going that speed within the atmosphere represents a huge set of problems of its own.

The RS-24's new warhead may only be one part of an expanding strategic missile arsenal that also includes other ICBMs with a hypersonic payload. With this in mind, it's worth noting, following the RS-24 test in September 2017, there was a separate launch of an older Topol-M with an unspecified "advanced combat payload" later that month, according to the Russian Ministry of Defense.

These new warhead designs have the distinct potential to reignite the existing disputes between the United States and Russia about whether the Kremlin is abiding by its START and New START treaty obligations with the RS-24 design to begin with. Starting with the Russian's position, however dubious, that Yars is an all new design, reconfiguring the missile's warheads, but not changing the overall number, would not necessarily amount to a new violation of the agreements.

Still, Russia continues to see focusing on warhead designs to defeat missile defenses and otherwise expand capabilities as a cheaper avenue than designing all new missiles. This is an always important consideration for the Russians, who have seen their economy contract since 2014, in no small part due to the collapse of the global price of oil. This has forced them to significantly scale back or otherwise put on hold a number of advanced military modernization projects.

It's very possible that if the Russians have success with the IPBV concept, showing that it offers a cost-effective way to challenge opposing missile defenses and increase the overall flexibility of a country's strategic missile forces, that we could see other countries move to adopt similar systems. The United States is similarly in the process of developing an all-new ground-launched ICBM as part of the Ground Based Strategic Deterrent (GBSD) program.

“I think some of the technologies and processes we saw, during the Peacekeeper program, we will see again,” U.S. Air Force Major General Anthony Cotton, in charge of the U.S. military’s ICBM forces, said during a visit to Minot Air Force Base in North Dakota on Sept. 29, 2017, referring to the now retired LGM-118A missile, which had a MIRV warhead configuration. “But, I think the next game changer is one I haven’t seen yet – and that is GBSD.”

The Air Force’s remaining LGM-30G Minuteman III missiles only have a single warhead. The U.S. Navy’s submarine-launched Trident II D5 missiles are MIRVed.

Of course, it’s almost guaranteed that the United States and the Russians are closely watching each other’s ICBM developments. If the Kremlin has any success with this new IPBV arrangement, this might impact the U.S. Air Force’s own thinking.

<http://www.thedrive.com/the-war-zone/14941/russia-tests-modified-rs-24-ballistic-missile-with-an-experimental-warhead>

[Return to top](#)

The New York Times (New York, NY)

European Leaders Criticize Trump's Disavowal of Iran Deal

By Stephen Castle and Thomas Erdbrink

October 13, 2017

LONDON — Iran, Russia and European leaders roundly condemned President Trump’s decision on Friday to disavow the Iran nuclear deal, saying that it reflected the growing isolation of the United States, threatened to destabilize the Middle East and could make it harder to resolve the growing tensions on the Korean Peninsula.

The reaction was far from panicked, as Mr. Trump’s decision punts to Congress the critical decision of whether the United States will reimpose sanctions on Iran — a step that would effectively sink the deal.

But Mr. Trump also warned that unless the nuclear agreement was altered and made permanent — to prohibit Iran from ever developing nuclear weapons — he would terminate the agreement, an ultimatum that threw the future of the accord into question.

Though they avoided direct criticism of Mr. Trump, Prime Minister Theresa May of Britain, Chancellor Angela Merkel of Germany and President Emmanuel Macron of France said in a rare joint statement that they “stand committed” to the 2015 nuclear deal and that preserving it was “in our shared national security interest.”

“The nuclear deal was the culmination of 13 years of diplomacy and was a major step towards ensuring that Iran’s nuclear program is not diverted for military purposes,” they added.

Sigmar Gabriel, Germany’s foreign minister, said that Mr. Trump was sending “a difficult and also from our point of view dangerous signal.”

He said that the Iran deal, and other diplomatic achievements, were necessary “to convince countries like North Korea, and maybe also others, that it is possible to create security without acquiring nuclear weapons.”

“Destroying this agreement would, worldwide, mean that others could no longer rely on such agreements — that’s why it is a danger that goes further than Iran,” he added.

Reaction from Iran was quick and pointed. Appearing on television, its president, Hassan Rouhani, denounced Mr. Trump and called the United States an outlier that had become “more lonely than ever” in the international community. Mr. Rouhani did not threaten to withdraw from the deal, but made it clear that he would not renegotiate the terms, either.

“The statements of Mr. Trump are nothing but abuse and threats against the people of Iran,” he said. “An international agreement cannot be disregarded.”

The European leaders noted that the United Nations Security Council had unanimously endorsed the deal, and that the International Atomic Energy Agency had confirmed Iran’s compliance with it.

But Mr. Trump’s aggressive stance on Iran won plaudits from several nations on Friday, specifically from adversaries of Iran like Israel, Saudi Arabia and the United Arab Emirates.

Benjamin Netanyahu, the Israeli prime minister who has always opposed the agreement with Iran, said that Mr. Trump’s announcement created “an opportunity to fix this bad deal” and was a sign of Mr. Trump’s determination to “boldly confront Iran’s terrorist regime.”

Saudi Arabia, which has waged a proxy battle against Iran for supremacy in the region and was the first country Mr. Trump visited after taking office, said it welcomed what it called a “new U.S. strategy” toward Iran.

The United Arab Emirates, which like Saudi Arabia is a predominantly Sunni Muslim country with a sizable Shiite minority, also said that it “fully supports” Mr. Trump’s stance on Iran.

Some leaders declared that the deal, reached in 2015 between Iran and six world powers, including the United States, was not something that Mr. Trump could cancel, contending that Mr. Trump was essentially putting on a show for his political base.

“The president of the United States has many powers — not this one,” the European Union’s top diplomat, Federica Mogherini, said at a news conference in Brussels.

She said that there had been no violations of the agreement and that the world could not afford to dismantle an accord that “is working and delivering,” especially at a time of “acute nuclear threat,” referring to the standoff with North Korea over its nuclear program.

Criticism of the nuclear deal was a central theme of Mr. Trump’s candidacy for president, and he has repeatedly called for revisiting what he sees as a fatally flawed agreement.

Mr. Trump said on Friday that under the current deal “Iran can sprint” toward the development of nuclear weapons when the deal’s restrictions expire.

Some of the prohibitions in the agreement are set to end in 2025, including limits on the number of its centrifuges. Iran, which has always maintained that its nuclear program is for peaceful purposes, not for weapons, would not agree to a permanent freeze in its ability to enrich nuclear fuel.

That must be changed, Mr. Trump said, or he would scrap the deal altogether.

Russia, which took part in the negotiations to reach the accord and has warned Mr. Trump not to rescind it, said that the president had no basis for disavowing the deal.

“Iran is abiding” by the nuclear agreement, Mikhail Ulyanov, a director at the Russian foreign ministry, told the Interfax news agency. “Everyone agrees with that. And an attempt to somehow heighten the tensions in this situation looks like unmotivated aggression.”

In blunt language, Ms. Mogherini, the European Union’s top diplomat, essentially looked past Mr. Trump and appealed to Congress directly.

America's next step "is now in the hands of the United States Congress," she said. "The international community and the European Union with it has clearly indicated that the deal is and will continue to be in place."

Russia urged American lawmakers to preserve the deal as well.

"We want to hope that Congress will not take any dramatic steps which would effectively signify a collapse" of the deal, Russia's deputy foreign minister told Interfax, referring to the renewed sanctions that might lead Iran to nullify the accord.

In his remarks, Mr. Trump accused Iran of violating both the letter and the spirit of the accord. But Iran has accused the United States of doing the same, and on Friday its mission to the United Nations warned that Iran might itself back away from the deal.

"Iran has many options on how to proceed and if necessary will terminate its commitment regarding this issue," the mission said in a statement, without elaborating.

Iran has also resisted the idea of renegotiating the nuclear agreement in the West's favor. Last month, its foreign minister rejected extending the length or conditions of the accord, saying that Iran would consider changing the agreement only if the concessions it had already made — including giving up nuclear fuel — were reconsidered.

There are fears that the basic framework of the accord could collapse if the United States walks away. Dmitri S. Peskov, the Kremlin spokesman, told reporters on Friday that Russia believed Iran would abandon the deal if the United States did.

<https://www.nytimes.com/2017/10/13/world/europe/trump-iran-nuclear-deal.html>

[Return to top](#)

Tehran Times (Tehran, Iran)

EU Says Committed to Full Implementation of Nuclear Deal

Author Not Attributed

October 16, 2017

The European Union issued a statement on Monday after a foreign ministers meeting in Luxembourg insisting the 27-nation bloc is committed to the "full and effective" implementation of the nuclear deal, formally called the Joint Comprehensive Plan of Action (JCPOA).

"The EU is committed to the continued full and effective implementation of all parts of the JCPOA," the statement said.

It also encouraged the U.S. to maintain its commitment to the 2015 nuclear deal.

Following is the full text of the statement published by the EU website:

1. The JCPOA, the culmination of 12 years of diplomacy facilitated by the EU, unanimously endorsed by UN Security Council Resolution 2231, is a key element of the nuclear non-proliferation global architecture and crucial for the security of the region. Its successful implementation continues to ensure that Iran's nuclear program remains exclusively peaceful. The EU underlines that the International Atomic Energy Agency has verified 8 times that Iran is implementing all its nuclear related commitments following a comprehensive and strict monitoring system.

2. The EU is committed to the continued full and effective implementation of all parts of the JCPOA. The EU underlines that the lifting of nuclear related sanctions has a positive impact on trade and

economic relations with Iran including benefits for the Iranian people. It strengthens cooperation and allows for continuous dialogue with Iran.

3. The European Union considers President Trump's decision not to certify Iran's compliance with the Joint Comprehensive plan of action (JCPOA) as being in the context of an internal U.S. process. The EU encourages the U.S. to maintain its commitment to the JCPOA and to consider the implications for the security of the U.S., its partners and the region before taking further steps.

4. While the EU expresses its concerns related to ballistic missiles and increasing tensions in the region, it reiterates the need to address them outside the JCPOA, in the relevant formats and fora. The EU stands ready to actively promote and support initiatives to ensure a more stable, peaceful and secure regional environment.

5. At a time of acute nuclear threat the EU is determined to preserve the JCPOA as a key pillar of the international non-proliferation architecture.

<http://www.tehrantimes.com/news/417637/EU-says-committed-to-full-implementation-of-nuclear-deal>

[Return to top](#)

MIDDLE EAST

Mehr News Agency (Tehran, Iran)

US Violator of JCPOA Spirit, Letter: Iran's UN Envoy

Author Not Attributed

October 16, 2017

Iran's Permanent Representative to the UN Khoshroo addressed the First Committee of the United Nations General Assembly on nuclear weapon.

The Permanent Representative of the Islamic Republic of Iran to the United Nations, Gholamali Khoshroo, addressed the First Committee of the United Nations General Assembly on nuclear weapons on Monday.

Here comes the full text of his address:

In the Name of God, the Most Compassionate, the Most Merciful

Mr. Chairman,

My delegation associates itself with the NAM statement delivered by Indonesia.

We reiterate our deep concern over the alarming trends of new nuclear arms race and new nuclear arms modernization race. These trends become more worrisome when a certain nuclear-weapon State wants even more nuclear weapons to remain at the "top of the pack". After over 70 years of inaction on nuclear disarmament, now it ironically states that progress is predicated on patience! These trends, with all their detrimental effects on international peace and security needs to come to an end.

While supporting the overall objective the Treaty on the Prohibition of Nuclear Weapons, we stress that it needs to be complemented by urgent conclusion of a comprehensive convention on nuclear weapons. Likewise, concrete practical measures on the total elimination of nuclear weapons need to be adopted in the 2020 NPT Review Conference.

Similarly, in the current international security situation, countering the danger of Israel regime's nuclear weapons is more urgent than ever. To that end, the 2020 NPT Review Conference have to take practical steps for the realization of the establishment of a nuclear-weapon-free zone in the Middle East.

Mr. Chairman,

A few days ago, the new policy of U.S. on the JCPOA was revealed. The claim of the U.S. administration regarding Iran's non-compliance has no international relevance or credibility.

US unilateral claim to extend Iran's provisional restriction as permanent runs counter to not only the letter of the JCPOA but also to the inalienable rights of States under the NPT.

US unilaterally and wrongly claims that Iran is not respecting the spirit of the JCPOA, and to save the spirit, it threatens to dismantle the deal entirely.

The U.S. fulfillment of its commitments has been lackluster and deficient from the very beginning. In several cases -- especially during the current administration -- it has violated both the content and the letter of the JCPOA. Iran has officially registered with the Joint Commission those violations.

As stressed in Iran's recent statement, the JCPOA is a valid international instrument. It cannot be renegotiated or altered. It is not a bilateral agreement that can be annulled by unilateral actions.

Iran will not be the first to withdraw from the JCPOA. However, if its rights and interests in the JCPOA are not respected, it will stop implementing all its commitments.

IAEA is the sole authority to verify Iran's commitment under the JCPOA. According to the statement of the IAEA Director General, dated 13 October 2017, "the nuclear-related commitments undertaken by Iran under the JCPOA are being implemented. The IAEA's verification and monitoring activities address all the nuclear-related elements under the JCPOA. Iran is now provisionally implementing the Additional Protocol to its Comprehensive Safeguards Agreement with the IAEA, a powerful verification tool which gives our inspectors broader access to information and locations in Iran. So far, the IAEA has had access to all locations it needed to visit."

Once again I thank all distinguished delegates who called for the continued and full implementation the JCPOA. As rightly stated by distinguished High Representative for Disarmament Affairs, the Committee members should "add their voice in support of this historic agreement, as a demonstration of what can be achieved through direct engagement and a shared commitment to dialogue and cooperation in good faith".

The international community should not allow the U.S. administration to continue to mock and undermine the JCPOA that would, in turn, undermine the non-proliferation regime as a whole. Otherwise, after each and every election in any corner of the world, we should expect undoing all decisions and commitments of previous administrations. This may serve the tactical and short-sighted advantages, but will inflict the long term and strategic liability. It means, duration of agreements will shrink to the duration of administrations; sanctity of international instruments will have no place between States; and the "withdrawal doctrine" will be a dominant factor in international relations. Therefore, we have a collective responsibility in countering such an alarming trend.

I thank you, Mr. Chairman.

<http://en.mehrnews.com/news/128704/US-violator-of-JCPOA-spirit-letter-Iran-s-UN-envoy>

[Return to top](#)

Telesur (Quito, Ecuador)

Syria Defends Iran and Blasts Trump for Decertifying Nuclear Deal

Author Not Attributed

October 15, 2017

The other signatories to the agreement in the international community have denounced the United States' move.

Syria has come to Iran's defense after U.S. President Donald Trump announced he was decertifying the Joint Comprehensive Plan of Action, or JCPOA.

The Syrian foreign ministry slammed Trump for his decision, saying the move could intensify tensions in the region.

“Syria condemns the aggressive policies of the U.S. administration against the interests of the people, and which will increase the atmosphere of tension in the region and the world,” reported the state news agency, SANA.

On Friday, Trump said he was decertifying the deal because Tehran has not complied — despite international observers affirming it has — but would not immediately withdraw from it.

He pushed the issue to the U.S. Congress, which has 60 days to decide whether to reinstate U.S. sanctions.

The U.S. President called Iran a “regime” and said that their “dangerous actions (have) only escalated (...) since the signing of the nuclear agreement”

Iran slammed Trump’s decision as “delusional” - the Iranian President Hassan Rouhani said Washington “is more isolated than ever” and cannot change the nuclear deal unilaterally.

The International Atomic Energy Agency, or IAEA, has confirmed that Iran adhered to the nuclear accord.

Other signatories — the United Kingdom, France, Germany, Russia, China — have all criticised Trump's decision.

The 2015 pact had agreed to lift longtime, economic sanctions on the Iranian government and its citizens, in exchange for the country’s gradually-decreased production of enriched uranium and weapons-grade plutonium. The IAEA was tasked with overseeing Iran’s compliance.

<https://www.telesurtv.net/english/news/Syria-Defends-Iran-and-Blasts-Trump-for-Decertifying-Nuclear-Deal-20171015-0027.html>

[Return to top](#)

Los Angeles Times (Los Angeles)

Iran's Foreign Minister: Trump's Action on Nuclear Accord Damages U.S. Credibility

By Laura King

October 15, 2017

Iran's foreign minister, Mohammad Javad Zarif, warned Sunday that President Trump's efforts to weaken the 2015 nuclear agreement will broadly harm U.S. international credibility.

In an interview on CBS' "Face the Nation," Zarif suggested that Washington might end up suffering more adverse consequences than Iran as a result of Trump's steps last week against the accord between Tehran and six world powers, including the United States.

"Nobody else will trust any U.S. administration to engage in any long-term negotiation because the length of any commitment, the duration of any commitment from now on with any U.S. administration would be the remainder of the term of that president," Zarif, a key architect of the deal, said. The interview was conducted Saturday in Tehran and aired Sunday.

On Friday, Trump declared his administration would not certify Iran's compliance with the landmark pact. That declaration does not end the deal, but does trigger a review by Congress. The deal's other signatories have signaled continuing support for the accord.

Nikki Haley, the U.S. ambassador to the United Nations, sought to dispel any notion that Trump's decision would lead to any immediate break with the accord.

U.S. law requires the president's certification every 90 days. Trump had twice declared Iran in compliance, but balked ahead of Sunday's deadline.

"Right now, you're going to see us stay in the deal," Haley said in an interview Sunday on NBC's "Meet the Press." Calling the president's move an important preventive measure, she said: "What we're saying now with Iran is: Don't let it become the next North Korea."

Trump has urged lawmakers to weigh the reimposition of sanctions if Iran engages in activities like firing ballistic missiles. Via executive action, he also set in motion new sanctions against Iran's most elite military unit, the Revolutionary Guard, which has sweeping powers as a regional enforcer for the Tehran government.

Amid reports of tensions between Trump and his secretary of State, Rex Tillerson, Zarif was asked in the CBS interview whether Tillerson had tipped him that the president's announcement was coming, the foreign minister said no — but that the absence of advance notice did not surprise him.

"There's not much courtesy left in the way the United States treats the rest of the world," he said.

<http://www.latimes.com/politics/washington/la-na-pol-essential-washington-updates-iran-foreign-minister-trump-s-action-1508077648-htlstory.html>

[Return to top](#)

Jerusalem Post (Jerusalem)

Netanyahu Congratulates Trump on 'Courageous' Iran Decision

By Joy Bernhard

October 13, 2017

Israeli Prime Minister Benjamin Netanyahu applauded US President Donald Trump on Friday evening for deciding not to recertify the nuclear deal with Iran, which he has been openly opposing since its inception in 2015. "I congratulate President Trump for his courageous decision today. He boldly confronted Iran's terrorist regime," the prime minister said in a video statement he released in English.

Moments after Trump declared a new and tougher US policy on Iran, leaving the US Congress to decide whether or not to impose new sanctions on Tehran, Netanyahu asserted that "If the Iran deal is left unchanged, one thing is absolutely certain- in a few years' time, the world's foremost terrorist regime will have an arsenal of nuclear weapons and that's tremendous danger for our collective future."

"President Trump has just created an opportunity to fix this bad deal. To roll back Iran's aggression and to confront its criminal support of terrorism," Netanyahu continued.

"That's why Israel embraces this opportunity. And that's why every responsible government, and any person concerned with the peace and security of the world, should do so as well," he stressed.

In September, Netanyahu expressed once more his deep dissatisfaction with the nuclear accord, telling the United Nations General Assembly in a speech that the deal with Tehran is bad.

"Fix it or nix it. Change it or cancel it," he urged at the time. Netanyahu warned that "an Iranian curtain is descending across the Middle East. It spreads this curtain over Iraq, Syria, Lebanon and elsewhere and pledges to extinguish the light of Israel."

However, the prime minister also noted that while Israel is facing an imminent threat that could further evolve should Iran remain unchecked, he had a simple message to what he often terms a "rogue terrorist regime."

"I have a simple message for Khamenei: The light of Israel will never be extinguished."

But other Israeli officials were less enthusiastic about Trump's speech announcing that the nuclear accord will be decertified by the US, which is also slated to impose new sanctions on elements linked to the deal, including the Islamic Revolutionary Guard Corps.

Speaking to Channel 2 following Trump's speech, Israeli Intelligence Minister Yisrael Katz said that he thought the US president's speech was "very significant" but that he believed it could trigger a war with Iran.

"I think that the speech was very significant. Iran is the new North Korea. We see where things are going," Katz stated.

Avi Gabbay, the recently-elected new head of the Zionist Union party who many predict could replace Netanyahu one day, echoed the prime minister's sentiment over Trump's announcement.

"I welcome Trump's decision to financially hurt the terror system of the Revolutionary Guard," Gabbay stated Friday evening. "The next stage- fixing the agreement and lengthening it so that Iran can't go back to enriching uranium," he expressed his hope.

Tzipi Livni (Zionist Union), who formerly served as Israel's Foreign Affairs Minister, also lauded Trump for his strong stance.

"Justifiability President Trump is dealing with the Iranian danger in general. The Revolutionary Guards, the support of terror and the missile program- the immediate threats that were not handled in the deal and demand an answer," Livni tweeted moments after Trump concluded his speech.

<http://www.jpost.com/Israel-News/Politics-And-Diplomacy/Netanyahu-congratulates-Trump-on-courageous-Iran-decision-507356>

[Return to top](#)

INDIA/PAKISTAN

The National Interest (Washington, DC)

Get Ready, Pakistan: India is Developing Its Own Missile-Defense Shield

By Sebastian Roblin

October 15, 2017

Ballistic missile defense systems have exploded in prominence across the globe since the United States withdrew from the 1972 Anti-Ballistic Missile (ABM) Treaty in 2002. Designing integrated radar warning systems and interceptor batteries that can shoot down a ballistic missile in flight is often described as akin to knocking down a bullet with another bullet, but the technology to perform such a feat is now entering service in countries like Japan, South Korea and Saudi Arabia.

India's acute interest in missile defense predates the demise of the ABM treaty, however, as it came uncomfortably close to a full-scale conflict with a nuclear-armed Pakistan during the 1999 Kargil War. This led New Delhi to begin early development of an ABM system which accelerated after the Washington vetoed a bid to acquire the Israeli Arrow-2 interceptor in 2002. With the successful testing of the Prithvi Air Defense missile in 2007, India became only the fourth country to have developed a functioning ballistic missile defense system, ahead even of China.

A decade later, New Delhi has finally begun setting up a two-layer ballistic missile defense shield that initially will protect New Delhi and Mumbai. The Prithvi Air Defense (PAD) system will provide long-range high-altitude ballistic missile interception during an incoming missile's midcourse phase, while the Advanced Air Defense system offers short-range, low-altitude defense against missiles in the terminal phase of their trajectory. Reportedly the first batteries have begun installation in two villages in Rajasthan.

Together the two systems offer only patchy protection of certain key cities. The Indian Defense Research and Development Organization (DRDO) is currently testing a successor to the PAD—the Prithvi Vehicular Defense—with greater range and speed, and a maximum interception altitude approaching that of the U.S. THAAD system.

The Indian ABMs are cued onto their targets by giant Swordfish Long-Range Tracking Radars, an indigenously built derivative of the Israeli Green Pine radar, which is used in BMD systems in both Israel and South Korea. The Swordfish currently has a range of 500 miles, though there are plans to upgrade it to over 900 miles. It can track up to 200 targets simultaneously, and is claimed to have the resolution to detect an object the size of a cricket ball.

At first glance, the Prithvi Air Defense missile seems quite capable, with a range of 1,250 miles and a maximum altitude of 260,000 feet, making it an exospheric interceptor. The missile is programmed prior to launch by the BMD command center on an intercept trajectory, which it

maintains using an inertial navigation system. It receives midcourse updates to its trajectory using data from the Swordfish radar, and then in the terminal approach phase switches to its own active radar seeker and destroys the target with a proximity-fused warhead.

In multiple tests, the PAD has successfully shot down Indian Prithvi short-range ballistic missiles (same name, different system) at altitudes as high as 246,000 feet. Traveling at speeds of Mach 5, the PAD in theory is fast enough to hit speedier, higher-flying medium-range ballistic missiles, but would struggle versus intermediate-range types.

However, a major limitation of the PAD is that the second phase of the two-stage rocket uses liquid fuel. As liquid rocket fuel corrodes fuel tanks when stored for long, the PAD could not be on standby 24/7. Instead, it would need to be gassed up during a period of crisis in anticipation of trouble. This is less than ideal for a weapon intended to defend against an attack which might come at any moment.

For defense at low-altitudes, the solid-fuel Advanced Air Defense system, or Ashwar, uses an endospheric (within the Earth's atmosphere) interceptor that knocks out ballistic missiles at a maximum altitude of 60,000 to 100,000 feet, and across a range between 90 and 125 miles for local defense. The AAD has performed successfully in most tests against targets at altitudes of 50,000 feet, though an improved model failed a test in April 2015 before succeeding in subsequent attempts. It is claimed the Mach 4.5 missile might also have application against cruise missiles and aircraft.

The new Prithvi Defensive Vehicle looks to be a promising "Phase 2" replacement for the PAD. This new two-stage exo-atmospheric interceptor uses only solid-fuel rockets, and can theoretically hit targets nearly as high as 500,000 feet at a range that may be as far 3,100 miles. Upon leaving the earth's atmosphere, the interceptor ditches its heat shields and activates an infrared seeker that helps it discriminate between decoys and its target.

The PDV's first test in 2014 missed its target but was still proclaimed a success. A second test on February 2017 succeeded in striking a Prithvi II missile. The PDV is believed to be faster than the PDA, possibly giving it IRBM-interception capability.

India also has several additional forthcoming systems with application to ballistic missile defense: an extended-range variant of the Barak-8 naval surface-to-air missile currently under development with Israel called the LR-SAM or Barak-8ER (projected range: 93 miles), and five Russian S-400 surface-to-air missiles systems, capable of firing Mach 8-plus missiles over a range of 200 miles. These will supplement S-300Vs already in Indian service that have some ABM capability.

A final note regarding the testing track records of the Prithvi and AAD: ABM tests are often conducted under ideal conditions more forgiving than those that would be encountered in a realistic combat scenario. The tests appear to have been conducted against slower SRBMs that do not employ evasive maneuvers or decoys. Therefore, claims that the BMD system would have a 98 percent hit probability rate should not be taken too literally.

More ABMs, More Security?

India's ballistic missile defenses are intended to defend against two states: China and India. China has a large and mature ballistic missile force, including intercontinental ballistic missiles which the Indian defenses are not designed to counter. Thus, India's BMD system could only protect against a limited ballistic missile attack from China, not a full-scale onslaught. Fortunately, both Beijing and New Delhi adhere to a no-first-use policy regarding nuclear weapons.

India's defenses are of greater significance to countering Pakistan's rapidly growing arsenal of short- and medium-range ballistic missiles—and Pakistan's policy amounts to "First Use!" In fact,

India's ballistic missile defenses add an ambiguous new dimension to one of the scariest arms races on the planet.

On several occasions, groups connected to the Pakistani state have committed violent attacks on Indian soil such as the Pakistani Army infiltration of Kargil in 1999, the attack on the Indian parliament in New Delhi in 2001, and the Mumbai terror attacks in 2008. Frustrated by these incidents, New Delhi claims that if sufficiently provoked by a future attack, it would swiftly retaliate by launching a mechanized assault into Pakistan per the Cold Start doctrine. However, Islamabad maintains that it would retaliate with nuclear weapons against a conventional ground attack—thus effectively claiming a nuclear trip-wire along the Line of Control between the two states.

India's BMD program would only counter a portion of Pakistan's nuclear capabilities. Many of Pakistan's nukes are in fact smaller, shorter-range tactical weapons for targeting frontline forces that may not enter within reach of Indian interceptors positioned to protect key cities.

Furthermore, not all of Pakistan's roughly 140 nuclear warheads are mounted on ballistic missiles. There are also nuclear gravity bombs slung under F-16 fighters, Ra'ad nuclear-tipped cruise missiles on Mirage IIIs and JF-17s, and possibly in the future Babur submarine-launched cruise missiles.

Other critics fear that the existence of ballistic missile defenses may simply prompt Pakistan and China to devise even deadlier nuclear missiles employing decoys, evasive trajectories and multiple reentry vehicles (MIRVs) to shower warheads over several targets. These would pose a formidable challenge for any ABM system. Alternately, Pakistan might simply produce more missiles and warheads, and plan saturate the Indian defense system, with the possible consequence of inflicting even more damage than would have been the case.

A short article in the Dawn newspaper implies that India's growing defenses will indeed engender such a reaction in Islamabad. Fearing that the system will "negate" Pakistani strategic strike abilities, the columnist concludes India's ABM interceptors will "force the armed forces to counter it, a solution which would prove to be both costly and time consuming." Indeed, in January 2017 the Pakistani military tested an Ababeel medium-range ballistic missile its claim can deploy MIRVs.

This highlights the tendency of adversaries to perceive ballistic missile defenses as a means to enable offensive schemes, rather than simply to preserve the lives of the populace. There is indeed concern that BMD systems may embolden national leaders to pursue military options based on an inaccurate perception that their nation will be impervious to nuclear retaliation. In truth, no BMD system anywhere is a hundred percent reliable; for example, the United States' SM-3 and GMD interceptors have averaged 50–60 percent success rates in tests. India's system will only protect a few major cities in the coming decade, and does not counter all possible vectors of nuclear attack.

New Delhi's rapid development of an indigenous BMD system remains a remarkable technical achievement. As the PDV and AAD batteries are installed and expanded, they may serve to protect major Indian cities against a limited nuclear strike, or discourage attempts to launch one in the first place. However, it remains to be seen whether the defensive benefits afforded by the missile interceptors will not be rapidly counterbalanced by improvements to offensive capabilities they spur in India's adversaries.

<http://nationalinterest.org/blog/the-buzz/americas-killer-m1-abrams-tank-now-has-its-own-shields-22719>

[Return to top](#)

War on the Rocks (Washington, DC)

Through a Periscope Darkly: The Nuclear Undersea Competition in Southern Asia is Just Beginning

By Diana Wueger

October 18, 2017

Strategic competition among China, India, and Pakistan has traditionally been land-oriented, with a focus on territorial disputes. On the conventional military front, the Chinese, Indian, and Pakistani navies have received the least attention and resources from their respective governments. Similarly, the development of air- and land-based nuclear weapons has historically taken precedence both in defense budgets and as a means of projecting power. However, as China continues its economic and military expansion across the Indian Ocean, the maritime domain is receiving increased attention, with all three states making a concurrent drive toward acquiring sea-based nuclear weapons.

Traditional deterrence theory posits that sea-based nuclear weapons provide strategic stability by reducing first-strike incentives. Because nuclear weapons deployed aboard submarines at sea are harder to find than weapons stationed on land, they are more likely to survive a decapitating first strike and, therefore, guarantee that the target can retaliate. Assured retaliation means a first strike carries significant risks for the first mover, risks that, in theory, no rational actor would take. For these reasons, nuclear triads are assumed to lead to stable deterrence.

While the emergence of sea-based legs in Southern Asia could be stabilizing in theory, in practice it could erode deterrence stability if China, India, and Pakistan neglect three clusters of challenges: first, developing and exercising operational concepts, second, ensuring survivability, and finally, building robust, redundant command-and-control processes. Navies are expensive to build, man, train, and equip, and there is no substitute for experience operating at sea. The domestic competition for resources between guns and butter and between ground, air, and maritime demands may leave these countries' navies unable to tackle these challenges effectively. Can China, India, and Pakistan overcome their sclerotic, rigid bureaucracies and entrenched interest groups that have long been focused on land-based military power to navigate these new waters successfully?

Sea-Based Deterrence in Southern Asia

China conducted its first nuclear test in 1964 and began its pursuit of sea-based strategic deterrence in the late 1970s. India and Pakistan crossed the overt nuclear threshold in 1998, and have since made significant strides toward incorporating sea-based platforms into their force postures. The learning curve for these platforms is steep, and as in other countries, the platforms are initially limited by such factors as the ship's endurance and the sea-based missile's range and reliability. But there are indications that China has overcome these engineering challenges and India and Pakistan may be on the verge of doing so. China is currently operating four Jin-class ballistic missile submarines that, according to the U.S. Department of Defense's 2017 China Military Power report, "represent China's first credible, sea-based nuclear deterrent." India has extensively tested and (quietly) inducted INS Arihant, the lead in its class of indigenously-developed, nuclear-powered ballistic missile submarines, with INS Aridhaman readying for its sea launch. In January, Pakistan test-fired a Babur-III sea-launched cruise missile from a submerged platform.

It is hardly surprising that China, India, and Pakistan are moving in this direction. While the costs and risks of sea-based nuclear weapons are high, all three states feel acutely, even existentially, threatened by their neighbors (and, in the case of China, by the United States). The Southern Asian neighborhood they inhabit is characterized by growing nuclear arsenals, outstanding border

disputes, economic and demographic challenges, increasing reliance on sea-borne trade, and active terrorist and insurgent threats. And unlike in the Cold War, bilateral efforts to address these tensions can only go so far.

Another driver of sea-based deterrence in the region is the strategic chain in which China, India, and Pakistan are locked: Pakistan reacts to India; India reacts to China and, to a lesser extent, Pakistan; and China reacts primarily to the United States. With all four states modernizing their nuclear forces, the chain is having greater ripple effects than in the past when these states generally either lacked the resources to develop sophisticated capabilities or subscribed to minimal deterrence concepts. For instance, China's longstanding concerns about the survivability of its nuclear deterrent have been exacerbated in recent years due to advances in U.S. counterforce capabilities, including ballistic missile defense and conventional prompt global strike. Similarly, India worries its nuclear arsenal could be vulnerable to Chinese ballistic missiles recently positioned at high altitudes near the Indian border as well as Beijing's growing investments in space-based assets. Pakistan, for its part, believes India's twin pursuit of ballistic missile defense and multiple-warhead missiles indicate a damage-limitation strategy — and recent debates over writings by former senior Indian officials have done little to assuage Pakistani fears of a disarming Indian strike. Thus, with survivability concerns paramount, the perceived security benefits of sea-based deterrence appear to be outweighing any costs.

The “Big Three” of Nukes at Sea

China, India, and Pakistan have dedicated significant resources to the engineering challenges associated with putting nuclear weapons to sea, but appear to have paid less attention to the operational aspects. Why is this? First, China and India have long prioritized attaining high-end technologies in the hopes of redressing their imbalance with Western powers. The strategic technical establishments — i.e. those institutions responsible for fissile-material production, nuclear-warhead designs, and nuclear-delivery platforms — have been viewed as guardians of international prestige and, consequently, have wielded considerable budgetary and political clout, even more so than the military services. While Pakistan does not aspire to industrial indigeneity and has a greater congruity between its military and technical establishments, it has often focused on keeping pace with India technologically, with rationales for new delivery systems sometimes coming after the fact. Second, all three countries' militaries, particularly their strategic elements, are dominated by land forces. Navies operate on a different logic than ground troops, but this fact is often underappreciated by ground warfare-oriented leaders, who lack a nuanced understanding of naval operations and maritime strategy. This dynamic may have led to a belief that operationally, sea-based nuclear weapons are fundamentally the same as the other two legs of the triad.

While the technological advances are indeed impressive, the real difficulty lies in addressing the bureaucratic, financial, and operational hurdles. It is the “big three” non-material elements — operational concepts, survivability, and command and control — that truly determine whether nuclear-armed submarines will result in a credible second strike or an expensive folly.

Operational Concepts

First, nations must design and exercise a concept of operations. Traditionally, states operating sea-based strategic deterrence have adopted either a bastion strategy, with submarines confined to home waters and protected by conventional forces, or continuous deterrent patrols, in which states rely on the inherent difficulty of locating submarines to protect the vessels. States could also opt to keep their submarines in port much of the time, thus reducing wear and tear and extending the ship's lifespan. However, this model has its drawbacks: Submarines in port are vulnerable, and states must believe they will have sufficient warning to sortie in advance of any threats.

Furthermore, the crew is less likely to be proficient in handling the ship and the weapons themselves than if they had been drilling regularly during deterrent patrols.

For India and China, naval nuclear power will give their submarines greater endurance, suggesting that continuous patrols could be an option in the future. However, the small size of their current nuclear-capable fleets and their relative inexperience operating these ships suggests that, in the near term, both India and China would derive the greatest benefit from a bastion strategy. This approach would allow these states to use conventional assets to protect their strategic submarines and deter other states from pursuing them while they gain the necessary experience to operate further afield. The downside of using nuclear-powered submarines is that China and India must plan for long refueling and maintenance periods, during which they may have fewer submarines available for patrols. This will put pressure on both states to increase their fleet sizes to ensure that at least one submarine will always be out of port.

For Pakistan, with its short coastline, few ports, and limited naval assets, the safest place for strategic submarines may be hidden among the noise of the North Arabian Sea. It's worth noting here that Pakistan's approach to sea-based strategic deterrence varies from the now-common approach of nuclear-armed ballistic missiles that would be launched from nuclear-powered submarines. Instead, Pakistan has been working to retrofit its Agosta 90B diesel-electric submarines with a nuclear-capable cruise missile, the Babur-III. While diesel-electric submarines are on balance quieter than nuclear-powered submarines, they cannot stay submerged indefinitely and must return to port to refuel regularly, creating vulnerabilities that could be exploited by an adversary. Pakistan thus faces the challenge of operating and protecting strategic submarines in congested waters with relatively few conventional assets that can deter Indian efforts to find and trail these boats. If Pakistan can maintain these ships at sea, however, the noisy waters and unique bathymetrics of the North Arabian Sea could work to its advantage by complicating anti-submarine warfare efforts. This would provide Pakistan's submarines a degree of protection while at sea without diverting naval or air assets from other missions.

Survivability

Second, states must prioritize the survivability of the ship and the security of its weapons. Sea-based deterrence depends on whether a state has the capability to strike second, which in turn depends on whether the nuclear arsenal can avoid detection and survive a first strike. There are two ways to improve the survivability of the sea-based leg of the arsenal: increase either the quantity or the quality of the submarine fleet. While China may be able to afford a larger force structure, India and Pakistan will need to make up in quality what they lack in quantity. For states with small fleets, stability ideally requires ships with the endurance to remain submerged at sea for long periods, as submarines in port or on the surface are much more vulnerable. A sense of vulnerability can increase "use-it-or-lose-it" pressures, whereby a state feels compelled to launch its weapons before an adversary can eliminate them, thus undermining stability.

Again, naval nuclear reactors will allow Indian and Chinese submarines to stay submerged longer than a diesel-electric submarine, which must operate near the surface regularly to access atmospheric oxygen and recharge its batteries. Ascending and operating at or near the surface runs the risk of detection and interdiction; the longer a ship can remain submerged, the likelier it is to remain undetected. Pakistan's challenges are compounded by its limited number of ships and its use of the same types of submarines for both conventional and strategic purposes, making any given ship a potentially lucrative target for strategic anti-submarine warfare efforts. Whether Pakistan's strategic submarines will also conduct conventional missions is not yet known, but either way, it will likely be nearly impossible for India to determine whether any given submarine it finds is nuclear-armed.

Beyond the survivability of the submarine, the weapons are another potential source of concern. The range of the missiles will in part determine where the ship is likely to operate. Longer ranges mean a ship can operate farther away from a potential target, while shorter ranges mean the submarine has a smaller box in which an adversary is likely to find it on patrol. Weapons security and surety are also critical, both in port and on ship. A comprehensive weapons system stewardship program that addresses both external and insider threats is essential — and expensive. These navies must be prepared to dedicate significant resources to the maintenance, training, and deployment cycle to maintain both the material condition of the platforms as well as the operational proficiency of the crews.

Command and Control

Finally, states must develop robust, redundant nuclear command, control, and communication capabilities, which requires having multiple systems and processes in place. There are two elements of command and control: over the ship itself and over the nuclear weapons aboard the ship. One command-and-control issue China must resolve is whether operational control and asset custody of sea-based platforms will rest with the People's Liberation Army Rocket Force or the Chinese Navy — or possibly a combination of the two. India has long maintained extremely tight civilian control over its nuclear arsenal, but the deployment of nuclear weapons to sea will require greater trust in the military, particularly the navy. For Pakistan, given its limited assets for relaying commands, communicating orders to its submarines will be a significant hurdle. All states with submarine-based strategic forces generally have one-way communications, since a response from at sea could give away the submarine's location. In this environment of limited connectivity, states must grapple with the “always/never” dilemma — how to guarantee that launch will always occur when authorized and authenticated by a national command authority while ensuring that an unauthorized launch will never occur.

Additionally, strategic submarines in Southern Asia will likely be carrying weapons that are ready to launch. The risks associated with assembling weapons on board a submarine are greater than the benefits of keeping the warheads de-mated until they are needed. This makes the problem of pre-delegation, or devolving launch authority from civilian leaders to military commanders in the field, even more acute: Some level of pre-delegation is needed for the system to be effective, but it also introduces new opportunities for the misuse of weapons. A combination of technological solutions, such as permissive action links and other locking mechanisms, and operating procedures, such as the two-man rule, could help mitigate the risks associated with nuclear weapons at sea. These challenges must be addressed early and exercised often so states can be confident in their ability to retaliate if necessary.

Bombs on Boats: Projecting the Future

There has been relatively little public discussion within strategic communities in India, China, and Pakistan about these issues, which is worrying in its own right. While some ambiguity is likely necessary, total opacity about sea-based nuclear weapons will leave adversaries to make worst-case assumptions in their own force planning, leading to a costly and dangerous arms race.

These are not one-and-done problems, either. There is an interactive effect between technological advances in anti-submarine warfare and the improvement of strategic submarines — as one state improves its anti-submarine warfare tactics and technologies, its opponent will be forced to alter its routines and upgrade its capabilities to avoid detection and interdiction. China, India, and Pakistan will need to continue investing substantial resources in their submarine programs, as well as in protective forces for these ships, if their sea-based weapons are to remain survivable second-strike

capabilities. In the intense intra-bureaucratic competition for resources between these states' armies and navies, the navies have on balance come out on the losing end. China has made the greatest investments in its submarine program, and seems to recognize the need for continual improvement. India has announced plans to upgrade its submarine force and its navy more broadly. If history is any guide, however, the investments currently in the pipeline will experience significant delays, with new ships delivered late and existing ships extended beyond their planned lifespan. The dominance of the army in Pakistan suggests that the navy will continue to be under-resourced, though the missiles themselves will likely attract continued investment as Pakistan relies ever more heavily on nuclear weapons for its security. In short, the costs of being in the sea-based deterrence business are likely to increase as adversaries hone anti-submarine warfare capabilities — and it remains an open question whether China, India, and Pakistan are prepared to keep pace.

The introduction of sea-based strategic deterrence to Southern Asia represents a significant change in the deterrence equation that has prevailed since India and Pakistan tested nuclear weapons in 1998. The nuclear arms race on the subcontinent and in its environs is nothing new, but sea-based nuclear weapons introduce fundamentally different problems into rigid bureaucracies and navies that have limited capacity to address these challenges on their own. If the emerging sea-based forces remain vulnerable or have ineffective command and control mechanisms, the result may be deterrence instability and a temptation by any one of the three nations to strike first. Whether all three nations will succeed in deploying a safe, effective, credible, and assured second-strike capability in the form of a nuclear-armed submarine fleet will depend less on whether they can overcome engineering hurdles and more on whether they address the bureaucratic and operational problems that come with sea-based strategic deterrence.

<https://warontherocks.com/2017/10/through-a-periscope-darkly-the-nuclear-undersea-competition-in-southern-asia-is-just-beginning/>

[Return to top](#)

The Diplomat (Tokyo, Japan)

The Risks of Pakistan's Sea-based Nuclear Weapons

Ankit Panda

October 13, 2017

The Babur-3 opens a dangerous era for Pakistan's nuclear forces

Nine days into 2017, Pakistan carried out the first-ever flight test of the Babur-3, its new nuclear-capable submarine-launched cruise missile (SLCM). A variant of the Babur-3 ground-launched cruise missile (GLCM), this SLCM will see Pakistan's nuclear deterrent head to sea—probably initially aboard its Agosta 90B and Agosta 70 submarines, but eventually, perhaps even on board new Type 041 Yuan-class submarines Pakistan is expected to procure from China.

In a new article in the Fall 2017 issue of the Washington Quarterly, Christopher Clary and I examine some of the novel security challenges Pakistan may experience with its sea-based deterrent. It is already well known that Pakistan has outpaced its primary rival, India, in terms of its nuclear stockpile growth.

On land, low-yield systems, like the Nasr, have also raised concerns of a lower nuclear-use threshold in South Asia. The move to sea can have some positive effects on overall strategic

stability; indeed, the perceived survivability of a sea-based deterrent can abate so-called “use-it-or-lose-it” pressures for Pakistan’s land-based forces. But the story doesn’t stop there.

Sea-based weapons can aggravate crisis stability concerns in the India-Pakistan dyad and present unique command-and-control challenges for Pakistan, which may be required to place these weapons at a higher level of readiness during peacetime. Finally, Pakistan’s internal security environment will remain a concern with a submarine-based deterrent. The threat of theft and sabotage may be greater in the case of Pakistan’s sea-based weapons than it is for its land-based forces. In aggregate, we argue that the sea-based deterrent may, on balance, prove detrimental to Pakistan’s security.

Pakistan, like other nuclear states, employs a range of physical and procedural safeguards to ensure that its nuclear weapons are only used in a crisis and a with a valid order from the country’s National Command Authority (NCA). The introduction of a nuclear-capable SLCM aboard its Agosta submarines would necessitate the erosion of some of these safeguards.

For instance, some physical safeguards that Pakistan is known to use for its land-based weapons — including partially disassembled storage, separation of triggers and pits, and de-mated storage — would be impractical at sea. Meanwhile, the experience of other nuclear states, like the United Kingdom, with sea-based deterrents suggests that sea-based nuclear weapons generally see fewer use impediments. Pakistan has long asserted that its nuclear command-and-control is highly centralized, but it remains doubtful that this would remain true for its small nuclear-capable submarine force in wartime or a crisis. The temptation to pre-delegate use authorization may be too great.

Leaving aside the command-and-control and safeguard concerns, sea-based weapons may seriously aggravate crisis stability, in other words, the temptation for India to attack first as a crisis begins. The theory behind a survivable sea-based second-strike capability is more compelling assuming a large submarine force capable of maintaining a continuous at-sea deterrent presence. Pakistan’s submarine force, by contrast, would likely employ a bastion model — meaning that their peacetime locations would be known and hence the submarines would be vulnerable to Indian conventional attack.

Similarly, Indian forces, unable to discriminate whether a detected Pakistani submarine in a crisis was fielding nuclear or conventional capabilities, would have to presume nuclear capability should the Babur-3 see deployment. All of this in turn not only would make Pakistan’s submarine force a prime early-crisis target for Indian forces, but also aggravate use-or-lose pressures for land-based forces.

Ultimately, even if India resisted attacking Pakistani submarines to avoid unintended escalatory pressures, it would at least see value in targeting the Very Low Frequency (VLF) radar facility established at Karachi in November 2016 that would allow Pakistan’s NCA to communicate with its at-sea deterrent in a crisis. This would require some confidence in New Delhi that Pakistan had not pre-delegated use authorization and that Islamabad’s sea-based weapons would still require the transmission of a use-authorization code from the NCA.

Finally, a major cause for concern with Pakistan’s move to the sea with its nuclear forces comes from its ongoing struggle with various radical Islamic militant groups. Here, Pakistan is somewhat unique among nuclear possessor states. While militants have mostly targeted soft targets in urban centers, the Pakistani military has endured major attacks as well. In particular, Pakistan has endured attacks and infiltration attempts at sensitive military and naval sites, some associated with its nuclear program. Then-Defense Minister Khawaja Asif acknowledged that Pakistan Navy

insiders even abetted al-Qaeda attackers in the 2014 PNS Zulfiqar attack. (Similar reports surfaced around the time of the 2011 PNS Mehran attacks, too.)

Militants with an eye on Pakistan's nuclear weapons may find no better targets than sea-based systems with fewer physical safeguards. Moreover, the locations of these weapons would be well-known in peacetime, unlike Pakistan's land-based weapons. The Pakistan Naval Dockyard in Karachi or the Jinnah Naval Base in Ormara — the two known sites capable of hosting Pakistani submarines — are thus prime for attack, infiltration, and even insider risks. While many of the above risks raised by the Babur-3 are far from unique to Pakistan, no other nuclear state faces a similar level of internal militancy.

The Babur-3's introduction presents a classic at-sea deterrent dilemma for Pakistan. It can choose to have its presumed second-strike capability either totally secure or readily usable in wartime. For a range of reasons, Pakistan can be expected to opt for the latter option. This will require real compromises on nuclear weapons security that expose Pakistan's sea-based deterrent to theft and unauthorized use. Combined with the crisis stability implications and the more mundane concerns rising from costs, a sea-based leg to Pakistan's nuclear forces appears to be, on balance, a net negative for its overall security.

<https://thediplomat.com/2017/10/the-risks-of-pakistans-sea-based-nuclear-weapons/>

[Return to top](#)

The Hindu Business Line (Chennai, India)

India Rules Out Joining NPT as Non-nuclear Weapon State

Author Not Attributed

October 13, 2017

India has ruled out the possibility of joining the Non-Proliferation Treaty (NPT) as a non-nuclear weapon state but said it remains "committed" to a unilateral voluntary moratorium on nuclear explosive testing.

"The question of India joining the NPT as NNWS (non-nuclear weapon states) does not arise," Permanent Representative of India to the Conference on Disarmament Amandeep Singh Gill told the UN General Assembly yesterday.

Speaking at a thematic debate on nuclear weapons, he said that India's position on the NPT is well-known and should require no reiteration.

At the same time, Gill said, India supports upholding and strengthening global non-proliferation objectives, in particular the full and effective implementation by States of their obligations arising from the relevant agreements and treaties, including the NPT.

Despite being a non-party, India abides by the principles and objectives of the NPT, including its nuclear disarmament aspirations, he said, adding that India is committed to making its contribution to strengthening non-proliferation.

The NPT is an international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to foster the peaceful uses of nuclear energy, and to further the goal of disarmament.

Nuclear-weapon states parties under the NPT are defined as those that manufactured and exploded a nuclear weapon or other nuclear explosive device before January 1, 1967.

“We have updated our agenda; and hope our friends will renew theirs and focus on the real implementation deficits on non-proliferation and disarmament,” Gill said in an apparent dig at Pakistan.

He said that as a responsible nuclear power, India has a policy of credible minimum deterrence based on a No-First Use posture and non-use of nuclear weapons against non-nuclear weapon states.

“We remain committed to maintaining a unilateral voluntary moratorium on nuclear explosive testing,” he said.

Observing that India did not participate in the negotiations leading to the adoption of the Treaty on the Prohibition of Nuclear Weapons, Gill said as a result New Delhi cannot be a party to the treaty, and shall not be bound by any of the obligations that may arise from it.

“As in the past, India remains ready to work with the signatories to the treaty for progress in multilateral forums on the shared goal of the global elimination of nuclear weapons,” he said.

Referring to the missile tests and nuclear test conducted by North Korea, Gill said it is a matter of deep concern that Pyongyang has acted in violation of its international commitments and against the objective of the denuclearisation of the Korean peninsula.

He called upon North Korea to refrain from such actions which adversely impact peace and stability in the region.

Gill also said India remains concerned about proliferation of nuclear and missile technologies, which has adversely impacted its national security.

The international community should take a united stand against those who indulge in or benefit from clandestine proliferation linkages,” Gill said.

<http://www.thehindubusinessline.com/news/world/india-rules-out-joining-npt-as-nonnuclear-weapon-state/article9902021.ece>

[Return to top](#)

COMMENTARY

RealClear Defense (Chicago, IL)

North Korea: Time to Think Beyond Denuclearization

By Rajan Menon

October 17, 2017

In September, the United Nations Security Council imposed, unanimously, its toughest economic sanctions yet on North Korea. The goal: inducing Pyongyang to dismantle its nuclear weapons program, including the warheads it has accumulated, which are estimated to number between a dozen to 30, perhaps more. Laudable though the goal of “denuclearization” may be, and President Donald Trump’s promises notwithstanding, it has become a pipedream. Kim Jong-un will never part with his nuclear weapons cache, which the regime has developed doggedly, and despite international condemnation and pressure, over decades. It’s time to accept this reality.

It was one thing to try and terminate Pyongyang’s nuclear arms program when it had yet to produce warheads and long-range ballistic missiles capable of delivering them— the goal of the ' negotiated between the Clinton administration and the government of Kim Jong-il, Kim Jong-un’s

father, as well as of the 2003-2007 Six-Party Talks under President George W. Bush— but now that North Korea has nuclear arms, neither pressure nor rewards will work.

Kim Jong-un takes the possibility of the United States attempting “regime change” by military means seriously—and all the more given Trump’s rhetoric. Kim and his senior officials point to the fate of Saddam Hussein and Mu'ammarr Gadaffi as proof that North Korea needs the ultimate deterrent. Pyongyang is doubtless adept at propaganda, but that is not a reason to dismiss everything it says as false, especially because North Korea no longer trusts China to defend it and probably hasn’t in decades—and Saddam and Gadaffi, the latter after he agreed to dismantle his nuclear arms program, are history.

Furthermore, no state that has developed nuclear weapons has been willing to part with them. Pyongyang certainly won’t be the first to do so. Instead, it will weather the economic sanctions and political condemnation: think of India and Pakistan. Moreover, China and Russia cannot be counted on to increase the pressure to the point that Kim’s regime could collapse, leading to unpredictable consequences on their borders.

And for all of President Donald Trump’s rants directed at “Little Rocket Man,” there’s no way to destroy North Korea’s nuclear weapons and missile sites without courting the calamity of Kim attacking South Korea with his numerous artillery pieces and short-range missiles, killing tens of thousands of South Koreans (as well as Chinese and Americans living in Seoul) in minutes. Greater Seoul, let’s remember, has a population of over 25 million, making it the world’s fifth largest conurbation.

Managing a nuclear North Korea means, concretely, maximizing the probability that deterrence will work—that Pyongyang will not use its nuclear arms because it understands that if it does the United States will respond in kind, eviscerating the North Korean state.

Despite the shibboleth that Kim is irrational and thus beyond the realm of deterrence, he has never done anything that suggests that he is prone to suicide. What conceivable political goal would be achieved by launching a nuclear attack on South Korea and Japan, to say nothing of the United States?

One way to strengthen deterrence is to create a hot-line-like system that links North Korea, Russia, and China. It would enable instantaneous communications among the leaders of these countries and reduce the probability that a military crisis on the Korean peninsula could careen out of control and lead to nuclear war.

An additional measure—which would certainly be politically controversial in the West and challenging given Pyongyang’s obsession with secrecy—would involve providing North Korea the technological assistance it needs to avert the possibility that its leaders, fearing a decapitating first strike, might launch their nuclear weapons because North Korean early warning systems falsely reported an incoming nuclear attack. If you think this is the stuff of sci-fi novels and movies, peruse Scott Sagan’s *Limits of Safety*, a chilling account of the erroneous warnings from American detection systems about a Soviet nuclear strike.

As a third step, the United States would make clear that, while it will not pursue regime change, any attack launched by North Korea on Japan, South Korea, or an American territory would be met with an overwhelming military response.

These three measures could be supplemented with an end to patrols over South Korea and international waters off North Korea by American nuclear-capable B-1B bombers, a reduction in the frequency of U.S.-South Korean military exercises, the normalization of political relations between Washington and Pyongyang. The timing and sequencing of these steps would, of course, be hammered out in negotiations and can’t be formulated a priori. To set the stage for the difficult

talks that achieving all this will surely require, calming the now-stormy waters by accepting the Chinese and Russian freeze-for-freeze (Pyongyang suspends its ballistic missile tests in exchange for Washington and Seoul suspending their military exercises) would make sense: It is hard to see a downside.

The measures should be supplemented by efforts to reduce the chances of a non-nuclear war between North and South Korea. These could include verifiable agreements under which each side pulls its forces further back from the Demilitarized Zone (DMZ), refrains from deploying armaments in the vacated zones, provides advance notification for military exercises and troops movements above a certain size, reconfigures its forces so that initiating standing-start attacks becomes more difficult, and reduces the number of tanks, artillery pieces, and short-range missiles. Given that the numerical balance (though not when it comes to the quality of weaponry) favors the North, it would undertake steeper reductions, save in combat aircraft (and frigates and destroyers, but the focus of the cuts would be on land and air forces), where South Korea has the quantitative edge. But other parts of the deal should provide Pyongyang incentives to accept deeper cuts in its forces.

To be sure, getting talks going on implementing these measures, let alone actualizing them, won't be easy, not least because of the longstanding animosity between North Korea and the United States. Yet Washington has conducted talks and normalized relations with more than one dictatorship before (think of Mao's China in the early 1970s, when the blood-drenched Cultural Revolution has not yet concluded), so it is senseless to refuse negotiations with North Korea on the grounds that its human rights record is appalling.

North Korea has advanced toward an operational nuclear capability much faster than experts had anticipated. True, it needs to take additional steps, such as the miniaturizing its warheads and ensuring that they are not destroyed by the heat and vibration they will encounter upon reentering the earth's atmosphere. But it is a safe bet that Pyongyang will clear these hurdles, so it is more realistic to abandon the objective of getting North Korea to renounce nuclear weapons and to ensure military stability in a world that, like it or not, will feature a nuclear-armed North Korea.

To coming around to this strategy, Washington will have to abandon the maxims that have long governed official thinking—under Democrats and Republican administrations alike. That will be tough, but then we are in a tough spot and the stakes are high—and the old remedies just won't work.

<https://www.realcleardefense.com/articles/2017/10/17/north-korea-time-to-think-beyond-denuclearization-112481.html>

[Return to top](#)

The Washington Post (Washington, D.C.)

Trump May Be Kicking Off a New Age of Nuclear Weapons

By Adam Taylor

October 12, 2017

Last week, the Nobel Peace Prize was awarded to the International Campaign to Abolish Nuclear Weapons, or ICAN, a group that works to promote nuclear disarmament around the world.

Berit Reiss-Andersen of the Norwegian Nobel Committee said during the announcement that the group had been successful in “engaging people in the world who are scared of the fact that they are supposed to be protected by atomic weapons.” But the award was not just for work already

done: Reiss-Andersen said the prize was intended to be a "great encouragement" for ICAN and groups like it.

A story published by NBC News on Wednesday showed just how necessary that encouragement may be.

Officials told NBC that President Trump, during a July meeting about worldwide U.S. military operations, was shown a picture of how the country's nuclear weapons stockpile has declined since the 1960s. Trump then allegedly suggested he wanted a nearly tenfold increase in the U.S. nuclear arsenal to return it to its highest point of over 30,000 weapons. Other officials in the room were taken aback by Trump's comments, according to NBC, and the meeting allegedly prompted Secretary of State Rex Tillerson's now-infamous labeling of Trump as a "moron."

The president quickly denied making the request, calling it "pure fiction, made up to demean." But Trump's stance on nuclear weapons has long been murky.

On one hand, Trump has long recognized the threat of nuclear annihilation. In the 1980s, he worried about Libya and other rogue nations obtaining nuclear weapons, and even told *The Post* in 1984 that he wanted to help negotiate nuclear treaties with the Soviet Union. Just last year, he called nuclear proliferation "the single biggest problem we have."

Yet he's also said that the United States "must greatly strengthen and expand its nuclear capability," allegedly asked advisers why he couldn't use nuclear weapons and seemingly suggested that other nations should consider having their own nuclear weapons. Worryingly, those other nations seem to have noticed.

Writing for *The Post* this week, former Singaporean diplomat Bilahari Kausikan suggested it was now only a matter of time before South Korea and Japan developed their own nuclear weapons in response to the growing threat posed by North Korea's rapidly advancing nuclear program. "A six-way balance of mutually assured destruction — among the U.S., China, Russia, Japan, South Korea and North Korea — will eventually be established in Northeast Asia," Kausikan argued.

At present, there appears to be little political will in either Seoul or Tokyo for this option. But polls show widespread public support for nuclear weapons among South Koreans, and Japanese Prime Minister Shinzo Abe is keen to boost his country's military power. And a future nuclear arms race may not be limited to East Asia. A number of experts have warned that if Trump scraps the Iran deal — and it looks increasingly likely that he will — it may lead to a scramble for nuclear arms in the Middle East.

"What we don't need is for that deal to be scuttled because Iran will then take steps to move in a direction of a nuclear program, and the states in the region will also take into account what they need to do, and it could lead to a nuclear arms race," said John Brennan, then the director of the CIA, during an interview with *Circa* last year.

The other big nuclear worry is in Russia — already a nuclear giant, with an estimated 7,000 nuclear warheads to the United States' 6,800. Russian President Vladimir Putin has spoken recently of the need to "strengthen the military potential of strategic nuclear forces," while Trump reportedly denounced an Obama-era treaty that capped the number of nuclear weapons fielded by the two nations during a February call with Putin. Some people, including former Soviet leader Mikhail Gorbachev, worry that Washington and Moscow may ultimately end up scrapping these agreements.

Much of the blame for this new era of nuclear uncertainty can be laid at the door of the American president. Trump is a man who is clearly fascinated by nuclear weapons and, as *Mother Jones'*

David Corn writes, has frequently made comments that suggest "he believes a nuclear conflict is inevitable and perhaps destined for the near future."

At the same time, though, there are signs that he is spectacularly ignorant of the realities of the same nuclear weapons he obsesses over. Numerous proliferation experts have already chimed in to say that the increase in the number of nuclear warheads that he asked about would not only be counterproductive — it would be impossible.

Of course, not everything can be blamed upon Trump. Ultimately, the world's problems with nuclear proliferation predate him. Neither the United States nor its NATO allies were among the signatories to ICAN's Treaty on the Prohibition of Nuclear Weapons. The Obama administration was in fact a leading voice against this treaty, despite the former president's own hopeful rhetoric about a nuclear-free world.

But Trump is now the man with the nuclear codes, and ICAN's work has now become that much more urgent — a fact the group acknowledged when they spoke to The Post's Michael Birnbaum last week. "We do not have to accept this [risk]," said Beatrice Fihn, the Swedish executive director of ICAN. "We do not have to live with the kind of fear that Donald Trump could start a nuclear war that would destroy all of us. We should not base our security on whether or not his finger is on the trigger."

https://www.washingtonpost.com/news/worldviews/wp/2017/10/12/trump-may-be-kicking-off-a-new-age-of-nuclear-weapons/?utm_term=.a2936a7dd868

[Return to top](#)

Foreign Policy (Washington, DC)

Seven Reasons Why Putting U.S. Nukes Back in South Korea Is a Terrible Idea

By John Wolfsthal and Toby Dalton

October 11, 2017

South Korean officials announced last month that the United States would begin to routinely deploy strategic assets on the Korean Peninsula to help deter North Korea's nuclear capabilities. The South Korean demand for tangible signals of America's defense commitment is unlikely to stop there, and prominent South Korean politicians are publicly pushing for the United States to return nuclear weapons to the peninsula. Some American politicians, like Sen. John McCain, have made similar suggestions.

If there were real military or political benefits to redeploying nuclear weapons in South Korea, this idea would be worth a serious review, but redeploying them today makes no sense, and indeed could exacerbate the current crisis over North Korea's nuclear threats.

Here are seven reasons why the United States should not seek to deploy nuclear weapons in South Korea.

1. Our military does not need them. The United States can hit any target in North Korea from within the United States or elsewhere with precision conventional weapons. If a conflict escalates and requires the use of nuclear weapons, these can be delivered from a variety of existing, secure platforms far from North Korea — and both North and South Korea know it. Stationing nuclear weapons in South Korea would not deter North Korea from periodic tactical provocations, but could increase pressure on North Korea to use nuclear weapons first in a crisis. They would also make tempting targets for North Korean missiles, which can hit all of South Korea.

2. They make our conventional weapons seem less credible. Putting nuclear weapons in South Korea might be useful as a political signal of our commitment to the alliance, but could also lead Seoul and Pyongyang to doubt U.S. military commitment or capabilities. If U.S. conventional capabilities are so superior, then why do we need nuclear weapons? It is also not clear how the deployment of nuclear weapons will provide more assurance of America's commitment to South Korea than the deployment of 28,000 American troops and the residency of nearly 200,000 American citizens. During the Cold War, the United States deployed hundreds of nuclear weapons in Europe and that never calmed the concerns of nervous European allies about our commitment to them.

3. We don't have them. There is no ready U.S. stockpile of nuclear weapons that could be redeployed in South Korea. President George H. W. Bush ordered the last U.S. nuclear weapons removed from South Korea in 1992 as part of a global initiative to put tactical nuclear weapons in storage to prevent their theft. The nuclear weapons we used to deploy in South Korea have mostly been dismantled, and the rest are out of service and awaiting destruction. Any weapons the U.S. opted to deploy would have to come from elsewhere, namely from the small arsenal deployed in Europe, thus causing political problems and strategic challenges with European allies. Other options might include returning nuclear weapons from retired to active duty, something we have not done before and that would take time and money.

4. There is no place to put them. No secure storage facilities suitable for tactical nuclear weapons exist in South Korea. Nuclear storage bunkers are not like gym lockers. They are highly advanced and must be able to protect against unguarded access even in the event of a coup or conflict. U.S. bunkers in South Korea have not been used in 25 years. It would take a few years to rebuild and recertify suitable storage.

5. Why Make North Korea's actions seem more legitimate? American deployment of nuclear weapons in South Korea would be used by North Korea to further legitimize its own nuclear weapons. South Koreans who advocate for nuclear weapons say it would create a symmetrical threat to North Korea and would show Pyongyang that there is a security cost to possessing nuclear weapons. Actually, it would allow North Korean leaders to say, "See, America is threatening us with more nuclear weapons, so how can we get rid of ours? In fact, we need more to maintain credible deterrence." If U.S. nuclear weapons in South Korea were needed for military or political reasons, this concern could be overcome, but otherwise, they do more harm than help.

6. Why help South Korea become dependent on nuclear weapons? U.S. nuclear weapons could become a slippery slope to a South Korean nuclear program. When South Korean leaders realize they don't get to decide if and when U.S. nuclear weapons are used, they may decide they need even more control over their nuclear destiny. The United States has worked for over a decade to demonstrate unequivocally that South Korea and Japan can be secure without the need to have nuclear weapons deployed on their territories. Even with North Korea's threats and provocations, no one, including North Korea's leadership, doubts that the United States and its allies would prevail in a war. Redeploying nuclear weapons would erode this argument and reinforce the belief in South Korea that nuclear weapons are necessary for its defense.

7. We've got better options. There are more effective ways to reassure the South and deter the North. South Korea is understandably concerned about the threat posed by North Korea and the strength of the U.S. defense commitment. European states during the Cold War had similar concerns, never fully resolved. As with European allies, the United States and South Korea could increase the vitality of the alliance by:

— Enhancing missile defense deployments and pursuing integration with other regional forces, including U.S. naval assets in Japan.

<http://foreignpolicy.com/2017/10/11/putting-u-s-nukes-back-in-south-korea-is-a-terrible-idea/>
[Return to top](#)

Der Spiegel (Hamburg, Germany)

Playing with Fire: Trump Risks New Conflagration in Middle East

Author Not Attributed

October 17, 2017

U.S. President Donald Trump made it clear last week that he is close to withdrawing from the Iran accord unless Iran agrees to make changes. His chances for success are slim - and his blustering risks a dangerous escalation.

It helps to imagine Bob Corker as an incurable optimist. The Republican Senator from Tennessee is chairman of the Foreign Relations Committee and thought for eight long months that he would be able to transform U.S. President Donald Trump into a responsible politician. In particular, he had hoped that he could rein in the president's capricious foreign policy through a combination of personal attention and gentle pressure. But now, even Bob Corker has given up.

Last week, Corker referred in a tweet to the White House as an "adult day care center" and said in an interview with the New York Times that the president runs the White House like "a reality show." In the same interview, he also said that Trump could be in the process of setting the country "on the path to World War III." It would be difficult to imagine a more scathing critique coming from a nominal party ally.

Corker is particularly driven by the fear of a military escalation of the kind that could even end in a nuclear exchange. North Korea, which has been a target of steady threats from Trump, is the most obvious possible theater. But the U.S. president now seems to be in the process of heating up an additional conflict that could be much more dangerous: the confrontation with Iran. Ever since the campaign, Trump has repeatedly said that the U.S. nuclear deal with Iran is "the worst deal ever negotiated" and has promised to back out of it.

After 12 years of difficult negotiations, the deal was finally agreed to in July 2015 by the five permanent members of the UN Security Council together with Germany and the European Union. Iran agreed to mothball its nuclear weapons program in exchange for the lifting of sanctions. Since then, almost all of the country's stockpile of enriched uranium has been taken out of the country, two-thirds of the centrifuges, used to enrich uranium, dismantled and 400 inspections performed. "It is a durable agreement that is achieving its target of preventing Iran from developing nuclear weapons," says a high-ranking EU diplomat.

Trump, though, is unimpressed. He needs to show some sort of progress to his voters and with things going poorly on the domestic front, he has focused his efforts on destroying the foreign policy successes achieved by his predecessors. The U.S. looks set to back out of the NAFTA free-trade deal while the country is in the process of withdrawing from the Paris climate deal and UNESCO. Now, the fate of the nuclear treaty is at stake. In a speech on Friday, Trump took an aggressive line on Iran and threatened to cancel the accord - only for the U.S. ambassador to the UN, Nikki Haley, to say on Sunday that Washington would remain party to the agreement for the time being.

Searching for Proof

Every 90 days, the president must certify that the Iranians are adhering to the requirements laid out by the deal and that the suspension of the sanctions are justified by the agreement's contribution to U.S. national security. Trump has twice before grudgingly certified the deal, including in July when it was reported that he was enraged at the prospect of having to approve it. Why, he asked an adviser, should he sign on to a deal that he felt was a disaster? He also threatened that he wouldn't certify it again.

For months, Trump's team has thus been searching for a way out of the deal, issuing threats against Tehran and collecting arguments to justify allowing the agreement to fail. Trump has reportedly even pressured U.S. intelligence to find proof that Iran is violating the nuclear agreement. His government is likewise eager to label Iran as a supporter of terrorism. In early October, the director of the National Counterterrorism Center issued a surprise warning of possible attacks in the U.S. perpetrated by the Iran-sponsored militia Hezbollah.

Simply withdrawing from the treaty is not a simple matter, but a Trump refusal to recertify would almost certainly mark the beginning of the end. Furthermore, Congress would then have the possibility of slapping new sanctions on Iran's nuclear program within 60 days - an opening that many Republicans would no doubt seek to take advantage of. That, though, would almost certainly be interpreted by the Iranians as a violation of the treaty, leading to their own withdrawal.

Iranian Vice President Ali Akbar Salehi recently threatened that Iran has the ability to resume enriching uranium to the 20-percent level within just five days. From there, it's not terribly far to constructing a bomb. And that is something that Israel would like to prevent at all costs, even militarily if need be. Ben Rhodes, formerly Barack Obama's deputy national security adviser, warned in a September interview with U.S. radio station NPR of a "second nuclear crisis" in the Middle East, one that could leave the U.S. facing the decision "as to whether to allow Iran to go forward with its nuclear program or to start another war in the Middle East."

Yet instead of new sanctions, a renegotiation of the deal is likewise a possibility - and that appears to be the plan being pursued by moderates in the Trump administration, a trio made up of the national security adviser, the secretary of state and the secretary of defense, all of whom are in favor of keeping the deal. They are trying to walk the fine line of allowing Trump to symbolically distance himself from the deal while at the same time keeping the agreement alive.

The 'Spirit' of the Deal

The strategy will be that of portraying Iran's Revolutionary Guard as the villains who are spreading terror and destabilizing the region as a way of pressuring Europe into tightening the treaty and adding requirements. U.S. Congress could even decide to list the Revolutionary Guard as a terrorist organization.

The primary criticism Trump and his hardliner allies level at Iran is that the country is violating the "spirit" of the deal - by testing missiles, for example, or by supporting terror groups like Hamas and Hezbollah and sending fighters into Iraq and Syria to expand its influence in the region.

Virtually everybody agrees that such behavior by Iran is extremely problematic, including those who support the nuclear deal with Tehran. But the deal has no "spirit," it is nothing but a sober, extremely technical agreement. And it doesn't focus at all on Iranian foreign policy or even on its missile program - something that Trump and many other Republicans would like to change.

Trump and his team would also like to tighten certain clauses in the accord, such as those pertaining to where and how often inspections are carried out. Or the fact that Iran will be able to resume enriching uranium once the treaty expires in 2025, if only within the framework of a nuclear non-proliferation treaty.

Iran experts like Ray Takeyh from the independent think tank Council on Foreign Relations, agrees with the Trump administration that the treaty is far from perfect. Takeyh, too, is critical of the fact that the accord automatically expires after 10 years and that Iran is even now allowed to partially enrich uranium, albeit to a low level. Furthermore, Iranian researchers are allowed to continue developing centrifuges, with which they can produce fissile material.

But what the Trump administration is planning goes far beyond a few minor adjustments to the nuclear treaty. It marks an attempt to isolate Iran in the region and to stop its expansionary policies and its financing of terrorist organizations. Those are all understandable goals - but there is one thing standing in the way: reality.

William Burns, one of the negotiators of the treaty and deputy secretary of state in the Obama administration, wrote recently in the New York Times that in a perfect world, we could delete Iran's knowledge of the nuclear fuel cycle, eliminate its missiles and transform it into a more docile regional power. "But we don't live in an ideal world. Diplomacy requires difficult compromises. And the nuclear deal achieved the best of the available alternatives."

A Danger of War

The other alternative would be yet another confrontation with Iran.

"There is a danger of war. Not right now, but perhaps in the future," says Foad Izadi, a professor of international relations in Tehran, adding that Iran is not taking the threats coming from Washington lightly. "We don't believe that Trump has a problem with Iran, rather he has a problem with what his predecessors have left for him," Izadi says. The Iranians, the professor continues, are primarily concerned by Trump's close relations with Israel and Saudi Arabia and believe that both of them are a negative influence when it comes to Iran.

Iranian President Hassan Rouhani has consistently said that the Iranians still want to remain in the deal despite the fact that the country's economy has not benefited to the degree expected from the lifting of sanctions. One reason is that it remains difficult to do business with Iran, with the U.S. government continuing to pressure banks to refuse to carry out money transfers to or from Iran. Almost all financial institutions adhere to these informal instructions out of concern that they might otherwise be slapped with painful penalties. The result is that it is almost impossible to find banks willing to finance large projects in Iran, meaning that necessary investments in aging infrastructure have not yet been made.

If the Americans were to reimpose sanctions or seek to renegotiate elements of the deal, Tehran would presumably try to isolate Washington by working together with the Europeans, Russia and China. But Iran likely wouldn't accept any limitations to its missile program or on its involvement in the region. At his first press conference following his re-election in spring, Rouhani announced that he would be carrying out additional missile tests. "American officials should know that whenever we need to technically test a missile, we will do so and we will not wait for their permission," he said.

Were the U.S. to list the Iranian Revolutionary Guard as a terror organization, it would bring trade relations with Iran to a virtual standstill, says former U.S. diplomat Wendy Sherman, who was the Obama administration's lead negotiator for the Iran nuclear deal. Experts believe that the Revolutionary Guard directly or indirectly controls up to 40 percent of the Iranian economy. As such, Sherman warns against taking this step. "Sanctions on the Revolutionary Guards already exist. We would be setting a far-reaching precedent were we to label a part of a state as a terrorist organization."

Domestic Debates in Iran

The head of the Revolutionary Guards has threatened that such a step would be met with attacks on U.S. bases in the region. Though the threat is likely little more than aggressive posturing, it serves to demonstrate the potential for conflict.

Ultimately, the chances for making significant changes to the deal are thus extremely slim. Indeed, any attempt to reopen elements of the deal could result in the collapse of the entire accord, even if it could be months before that happens. That would strengthen the radicals in Tehran who feed off anti-American animosity and who were against the deal from the beginning.

That helps explain why Iranian Foreign Minister Mohammad Javad Sharif recently told his European counterparts that it was imperative to take into account the domestic political debates in Iran. Were the U.S. to list the Revolutionary Guard as a terrorist organization, he said, it could increase hardliner pressure on the government to such a degree that Rouhani would have no other choice but to withdraw from the nuclear deal. During a debate in Iranian parliament last Wednesday, for example, the government was forced to defend the agreement from vicious attacks. "We went through hell," an Iranian source said in describing the debate.

The path forward also depends on the Europeans. An end of the nuclear deal would be particularly painful for Europe given that it is widely seen on the Continent as a showpiece of EU diplomacy. Helga Schmid, general secretary of the European External Action Service, is seen as the architect of the agreement and on the sidelines of the recent UN General Assembly, she led discussions aimed at saving it. Furthermore, German Chancellor Angela Merkel and French President Emmanuel Macron have spoken with Trump to argue against withdrawal. German Foreign Minister Sigmar Gabriel has spoken on the phone several times with his U.S. counterpart Rex Tillerson.

Last Tuesday, though, Tillerson told Gabriel that he can't do any more than he already has, indicating that the Europeans would have to approach Trump directly. "We will continue to work to keep the U.S. in the agreement," Gabriel says diplomatically.

On Monday, EU foreign ministers met in Luxembourg and discussed the Iran deal, among other issues. In the statement released following the meeting, they reaffirmed that "the EU is committed to the full and effective implementation of all parts of the JCPOA," referring to the accord's formal name, Joint Comprehensive Plan of Action.

European diplomats are also concerned about the effects of a collapsed Iran accord might have on the conflict with North Korea. The Iran deal, after all, is the only blueprint available for how talks with the regime in Pyongyang might be initiated. "The worst thing you can do is try to dismantle it," the EU high representative for foreign affairs, Federica Mogherini, told PBS in an interview last Wednesday. "The message that America would send to the rest of the world is that America cannot be trusted, because a deal that American voted for just two years ago in the UN Security Council, ... a deal that American helped to shape enormously, would be rejected by the same country."

<http://www.spiegel.de/international/world/donald-trump-risks-escalation-in-iran-over-nuclear-accord-a-1173313.html>

[Return to top](#)

ABOUT THE USAF CUWS

The USAF Counterproliferation Center 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 Director for Nuclear and Counterproliferation (then AF/XON), now AF/A5XP) and Air War College Commandant established the initial manpower 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.

The Secretary of Defense's Task Force on Nuclear Weapons Management released a report in 2008 that 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." As a result, 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 continuing education through the careers of those Air Force personnel working in or supporting the nuclear enterprise. This mission was transferred to the Counterproliferation Center in 2012, broadening its mandate to providing education and research to not just countering WMD but also nuclear deterrence.

In February 2014, the Center's name was changed to the Center for Unconventional Weapons Studies 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.

The CUWS'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.