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Featured Item

"*Interpreting the Bomb: Ownership and Deterrence in Ukraine's Nuclear Discourse"*. Written by Polina Sinovets and Mariana Budjeryn, published by the Woodrow Wilson International Center for Scholars; December 2017

https://www.wilsoncenter.org/sites/default/files/npihp_working_paper_12_sinovets_budjeryn_ownership_deterrence_ukraine_nuclear_discourse_0.pdf

Nuclear deterrence thinking has become so entrenched in US academic and policy circles that it only seems natural that other states regard nuclear weapons in the same terms. Yet is it necessarily so? In this article, we examine the case of Ukraine to understand how its leaders interpreted the value of the nuclear weapons deployed on Ukrainian territory in 1990–1994.

Ukraine became the host of world's third largest nuclear arsenal following the Soviet collapse in 1991. Its pre-independence intention to rid itself of nuclear weapons soon gave way to a more nuanced nuclear stance that developed into a claim of rightful nuclear "ownership." Western security theories and practices led US leaders to assume that Ukraine sought to keep nuclear weapons as a deterrent against the growing Russian threat. Drawing on Ukrainian and US archival sources and interviews, we reconstruct Ukrainian deliberations about the meaning of their nuclear inheritance and find that deterrence thinking was conspicuously lacking. Our investigation demonstrates that deterrence thinking, far from being a "natural" or systemically determined way of regarding nuclear weapons, is a socially constructed and historically contingent set of concepts and practices.

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US NUCLEAR WEAPONS

United Press International (Washington, DC)

BAE Building Weapon Testers for U.S. Bombers

By Richard Tomkins

December 18, 2017

The company will build systems to test the operational readiness of weapons aboard U.S. bombers, including the B-1B, B-2A and B-52H aircraft.

BAE Systems on Monday announced receipt of a U.S. Air Force contract to build armament testers for the weapons systems of the U.S. bomber fleets.

A total of 90 BAT systems, to be built in three increments over a nine-year period, will test the operational readiness of bomb ejector racks, rotary launchers, and pylon assemblies on B-1B, B-2A and B-52H aircraft.

The contract carries a value of more than $64 million, the company said.

"The BAT system provides critical verification that the aircraft's weapon systems are operating as specified," Kevin Malone, vice president of Analytics Systems at BAE Systems, said in a press release. "Our team, which includes Marvin Test Solutions and the Air Force Air Logistics Complexes, has extensive experience developing flight-line qualified armament testers and test program sets."

Work on the program will be performed primarily at BAE Systems' facilities in San Diego, Calif., and Fort Worth, Texas.

BAE Systems has designed and manufactured test solutions for military use for more than 40 years. The company provides stores system testers for more than 3,000 F-16 aircraft flying today.

https://www.upi.com/BAE-building-weapon-testers-for-US-bombers/1891513611316/

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The Guardian (New York, NY)

US Could Broaden Its Use of Nuclear weapons, Trump Administration Signals

By Julian Borger

December 17, 2017

Wider role for weapons to counter 'non-nuclear strategic attacks' unveiled as part of Trump's new security strategy, which also failed to address climate change

The Trump administration signaled that it could broaden the use of nuclear weapons as part of a new security strategy, unveiled by the president on Monday.

The wider role for nuclear weapons against "non-nuclear strategic attacks" was one of several ways in which Trump's approach differed from his predecessor. The threat of climate change went unmentioned. The word "climate" was used only four times in the National Security Strategy (NSS), and three of those mentions referred to the business environment. Americans were instead urged to "embrace energy dominance".

Announcing the NSS, Donald Trump depicted his election victory and his presidency as an unprecedented turning point in US history.

"America is coming back, and America is coming back strong," the president said. "We are rebuilding our nation, our confidence, and our standing in the world … [W]e will stand up for ourselves, and we will stand up for our country like we have never stood up before."

On the same day of the NSS launch, however, the US found itself isolated at the UN security council, where the other 14 members, including Washington's closest allies, voted to rescind Trump's recognition of Jerusalem as Israel's capital.

The US envoy, Nikki Haley, called the vote an "insult" that "won't be forgotten".

Piling on the insults, the French foreign minister, Yves Le Drian, said on a visit to Washington that US isolation on several global issues "forces President Trump to have a position of retreat on most topics rather than making proposals".

Under the slogan of "peace through strength", Trump emphasised the military buildup he had ordered, involving what the president described (wrongly) as a record in defence spending, $700bn for 2018.

"We recognise that weakness is the surest path to conflict, and unrivaled power is the most certain means of defence," he said.

The NSS policy document criticises the downgrading of the role of nuclear weapons in the US security strategy by previous administrations since the cold war, and suggested it had not prevented nuclear-armed adversaries expanding their arsenals and delivery systems.

"While nuclear deterrence strategies cannot prevent all conflict, they are essential to prevent nuclear attack, non-nuclear strategic attacks, and large-scale conventional aggression," the NSS said.

"Non-nuclear strategic attacks" represents a new category of threat that US nuclear weapons could be used to counter, and points towards likely changes in the Nuclear Posture Review expected in the next few weeks.

In September, the deputy assistant secretary of defence, Rob Soofer, included "cyber-attacks against US infrastructure" in the category of non-nuclear strategic threats.

"This is a very strong hint. It matches a lot of rumours we have heard over the past few weeks," said Hans Kristensen, the director of the nuclear information project at the Federation of American Scientists. "It's a taste of what will come in the Nuclear Posture Review. What is interesting is the broadening of the nuclear weapons mission against non-nuclear attacks. The question is – are we creating more pathways to potential nuclear war?"

Much of Trump's speech launching the NSS was devoted to denigrating his predecessors, who he portrayed as having let their country down.

"They lost sight of America's destiny. And they lost their belief in American greatness. As a result, our citizens lost something as well. The people lost confidence in their government and, eventually, even lost confidence in their future," the president said.

With its language about national resurgence and competition with other states, George Lopez, emeritus peace studies professor at Notre Dame University, said the NSS "sounds a lot like the 1980s revisited".

"In casting a world of competition in which everything is focused on nation states, it doesn't account for biological pandemics or climate change," Lopez said.

He noted the dissonance between the White House and the Pentagon on climate change. The NSS directly contradicts the National Defence Authorisation Act the president signed this week, which called climate change a "direct threat to the national security of the United States".

https://www.theguardian.com/us-news/2017/dec/18/nuclear-weapons-trump-national-security-strategy

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Digital Trends (Portland, OR)

Drone Ban – FAA Adds to the List of Places Where You Can't Fly Your Bird

By Trevor Mogg

December 18, 2017

While it seems unlikely that everyday drone hobbyists would want to make a beeline for their nearest nuclear facility to grab some aerial shots, the Federal Aviation Administration (FAA) has nevertheless announced a ban on drone flights over such locations in the U.S., namely:

- Hanford Site, Franklin County, WA
- Pantex Site, Panhandle, TX
- Los Alamos National Laboratory, Los Alamos, NM
- Idaho National Laboratory, Idaho Falls, ID
- Savannah River National Laboratory, Aiken, SC
- Y-12 National Security Site, Oak Ridge, TN
- Oak Ridge National Laboratory, Oak Ridge, TN

As you can see, they're mainly labs, while the Hanford Site, for example, is a mostly decommissioned nuclear production complex. Another of those listed, the Pantex Site, is an active nuclear weapons assembly and dismantlement plant. The restrictions, which come into force on December 29, have been put in place "to address concerns about unauthorized drone operations over seven Department of Energy (DOE) facilities," the FAA confirmed on its website.

It added that "operators who violate the airspace restrictions may be subject to enforcement action, including potential civil penalties and criminal charges."

The FAA's ban follows others that have been put in place over the last year as the government plays catch-up with a technology that has become hugely popular with consumers over the last couple of years.

Following an FAA regulation earlier this year banning drone flights over 133 military facilities in the U.S., the Pentagon said over the summer that it would be OK for personnel at the facilities to destroy any drones flying into restricted areas if they were deemed a threat to security. In other words, they can shoot the flying machines down.

Continuing to gradually broaden the restrictions, the FAA then issued flight bans around 10 famous tourist sites, among them the Statue of Liberty in New York City, Hoover Dam in Nevada, and Mount Rushmore National Memorial in South Dakota.

Flights near locations such as airports, prisons, and sports stadiums are also off-limits for drone pilots.

Millions of people are likely to be firing up their very first drone over the holiday season, and the FAA is encouraging them to download its B4UFLY mobile app (iOS and Android), which offers information on safe flying as well as areas that are out of bounds for drone flights. The FAA also has a comprehensive FAQ page on its website offering advice for new and current drone owners.

Finally, if they haven't already done so, drone owners need to register their details on a national database. The database has been in place for two years, but mandatory registration was paused in May over a legal issue. But since last week, it's now necessary for anyone with a drone weighing between 0.55 pounds and 55 pounds to once again submit their details via the FAA's registration page.

https://www.digitaltrends.com/cool-tech/faa-bans-drone-flights-over-nuclear-sites/

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Business Insider (New York, NY)

Newly Declassified Videos of Cold War Atomic Blasts Reveal the Terrifying Power of Nuclear Weapons

By Dave Mosher

December 16, 2017

Nuclear weapons researchers and archivists working for the US government have declassified 62 never-before-seen films of atomic explosions.

The new batch of videos joins 63 other clips of Cold War-era test-blasts, bringing the total to 125 declassified films now available to watch on YouTube. (We've embedded the playlist at the end of this story.)

Hundreds more of these decaying films could reach the internet as high-definition videos in the coming months as the team tracks the videos down in warehouses, digitally scans them, and re-analyzes them for crucial data. Then, if they don't reveal any secrets that North Korea or other adversaries might not have, they release the videos on YouTube.

"The public has a right to see this footage," Greg Spriggs, a nuclear-weapons physicist at Lawrence Livermore National Laboratory (LLNL), said in a press release.

Enormous blasts were recorded on tape — then hidden away

Weapons researchers recorded about 10,000 films of above-ground test blasts from 1945 through 1962, which were analyzed to determine a device's explosive yield, then locked away in high-security vaults.

No one saw the footage for decades, yet Spriggs said it's helping characterize how modern bombs will behave, since they aren't detonated anywhere except as a computer simulation.

"These films are priceless to us. Absolutely priceless," Spriggs told Business Insider in March. "But they're very, very fragile, brittle, and old. They've shrunk about 2%."

One of the films in this second and latest batch shows the "Tesla" test shot on March 1, 1955. Like most of the films, it was recorded at about 2,000 frames per second. The test yielded a seven-kiloton blast — about half as powerful as the bomb detonated over Hiroshima. It was one of 14 total tests in a series called Operation Teapot, which the military set up to refine its tactics for using nuclear weapons on the battlefield.

This test, called "Housatonic," was one of 31 nuclear blasts in Operation Dominic.

The device was detonated about two miles above the Johnston Atoll in the Pacific Ocean and yielded a blast of 8.3 megatons — more than 400 times as strong as the Hiroshima bomb blast.

Scanned in the nick of time

Since 1945, the US government has detonated more than 1,000 nuclear weapons. Researchers blew up the nuclear devices on the ground, in ocean atolls, and in space.

Some 210 test blasts were set off in Earth's atmosphere; that is, before the grave risks of radioactive fallout — soil and other material that's sucked into a blast and becomes irradiated — were acknowledged. A series of treaties with the former Soviet Union moved nuclear-weapons testing underground. The Comprehensive Nuclear-Test-Ban Treaty entirely banned nuclear tests, but the US has yet to ratify the agreement.

By studying the aging films with modern tools and software, Spriggs and others have learned that some manual measurements taken during the Cold War were off by sometimes 20-30%.

"Not only are we preserving history, but we're getting much more consistent answers with our calculations," Spriggs said in a press release.

The films have decayed because they're made of nitrate cellulose, which slowly decomposes in the air while releasing a vinegar smell. Seeing the potential loss, Spriggs and others began a rescue effort more than five years ago.

"This is it. We got to this project just in time," Spriggs said in a video about the digitization effort. "We know that these films are on the brink of decomposing, to the point where they will become useless."

This data they gather will play a vital role in the US government's $1 trillion effort to modernize its nuclear weapons stockpile.

"It's been 25 years since the last nuclear test, and computer simulations have become our virtual test ground. But those simulations are only as good as the data they're based on," Spriggs said in the release. "Accurate data is what enables us to ensure the stockpile remains safe, secure, and effective without having to return to testing."

'Maybe people will be reluctant to use them'

It took LLNL roughly five years to locate about 6,500 of the 10,000 estimated films, then scan 4,200 of those. The largest-format, 70-millimeter films are digitized as 8K ultra-high-definition video — a format that's 16 times as large as high-definition 1080p video.

Although Spriggs said the team can scan about one film per hour, it takes much longer to re-analyze the movies. So far, the team has finished assessing more than 500 films.

"In order to declassify it, someone ... has to go through it frame-by-frame. It's a very intensive process, and there hasn't been enough of a demand," Spriggs said in March. "But it's now a race against time."

The project is important to "help certify that the aging US nuclear deterrent remains safe, secure, and effective," LLNL wrote in its YouTube playlist description.

Jim Moye, a rare-films expert and movie-industry veteran, is helping rescue the footage.

"It is going to be gone at some point, and we don't have forever to do this," Moye said in a video about the project.

Spriggs said the team was learning new details about the detonations — lessons he hopes to pass on to future generations.

"It's just unbelievable how much energy's released," Spriggs said in the release. "We hope that we would never have to use a nuclear weapon ever again. I think that if we capture the history of this and show what the force of these weapons are and how much devastation they can wreak, then maybe people will be reluctant to use them."

http://www.businessinsider.com/nuclear-explosion-youtube-video-playlist-llnl-2017-12

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US COUNTER-WMD

Homeland Preparedness News (Washington, DC)

Department of Defense Develops Plant Biotechnology Program as Latest Surveillance Tool against CBRN Threats

By Terri Williams

December 11, 2017

Plants serve a variety of purposes ranging from food and medicine to clothing and furniture. And now they have a new use – in the Department of Defense (DOD).

The U.S. Defense Advanced Research Projects Agency (DARPA) is working on a plan to use plants to gather intelligence information.

While this may never be the plot of an espionage thriller, “plant spies” are on the way to becoming a very real part of homeland security. DARPA’s Advanced Plant Technologies (APT) program aims to direct the physiology of plants to detect a variety of hazards, including chemical, biological, radiological and nuclear threats, according to Dr. Blake Bextine, the DARPA program manager for the Advanced Plant Technologies.

While other types of APTs study crops, pests, diseases that invade them, and ways to increase crop yield, the goal of DARPA’s APT program is more ambitious, seeking to “sniff out” chemical weapons and bioweapons.

“Plants respond to stimuli in their environment – think about roots growing toward a water source,” Bextine told Homeland Preparedness News. “Because plants naturally respond to many categories of stimuli, we believe that they can serve as sensitive detectors for many DOD-relevant threats.”

Bextine notes that there is a world of possible applications. “If plants have the ability to detect explosives and can then signal landmine location through changes in leaf color, people can avoid hazards and the danger can be removed.”

It is already known that plants respond to such stimuli as temperature, touch, pests and moisture. They also respond to light and darkness, gravity and chemicals.

”We simply want to modify what they are capable of detecting and link it to an output that can be recognized by someone that is looking for it,” Bextine says. These modifications include engineering plant sensors and trigger mechanisms that can be observed remotely and discreetly.

Plant sensors also could be used outside of the military. “Humanitarian efforts will likely benefit from this program,” Bextine says. “Such sensors could make it possible, for instance, for

communities to safely identify landmines or unexploded ordinance leftover from past conflicts or testing grounds."

However, there are several challenges that must be overcome. For example, how can the plants' genomes be modified to achieve the desired goal without compromising the health of the plants – particularly as it relates to being able to stave off competition from other plants, insects and other stressors? Also, if the plants were monitored remotely, they would need to survive on their own for extended periods of time ranging from a few months to a few years.

Achieving both the sensor and other technical goals of the APT program will require implementing the latest plant genomics technologies, gene editing tools and unique ways of engineering new sensing capabilities and physiological responses, according to an overview of the Advanced Plant Technologies program.

DARPA hopes to get one step closer to meeting its program goals at its APT Proposers Day, which will be held on Dec. 12 in Arlington, Virginia. Participants will be able to pitch ideas proposing plant modification strategies, detection capabilities and output phenotypes.

They will also be expected to explain approaches for accomplishing the project's technical goals and address any risks, in addition to providing a team organization chart, cost summaries and project schedule. DARPA will award contracts to selected proposers. Attendance at the event is not mandatory to submit a proposal or be considered for a DARPA contract.

The first phase of the program will be conducted in DARPA-based labs and greenhouses, with testing occurring in simulated environments. Once the program is proven to be safe, the U.S. Department of Agriculture's Animal and Plant Health Inspection Service will monitor the plants to ensure they don't present a public safety hazard.

https://homelandprepnews.com/stories/25698-department-defense-develops-plant-biotechnology-program-latest-surveillance-tool-cbrn-threats/

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Popular Mechanics (New York, NY)

The U.S. Army Is Training to Explore, Fight in North Korea's Maze of Tunnels

By Kyle Mizokami

December 18, 2017

The secretive country would hide its leadership, weapons of mass destruction underground in war.

Units of the U.S. Army are training to map out, and if necessary fight in, North Korea's underground complexes. Soldiers from the Army's 1st Cavalry Division are training in underground tunnels to prepare for the mission of securing North Korean tunnels in the event of war. North Korea is estimated to have thousands of tunnels and underground facilities that would shelter the regime leadership and possibly chemical and nuclear weapons, in the event of war with the United States and South Korea.

During the four day exercise described by Stars and Stripes, dubbed Warrior Strike IX, troops from the 1st Battalion, 5th Cavalry regiment, 1st Cavalry Division practiced breaching and entering tunnel complexes at the U.S. Army's Camp Stanley in South Korea. The soldiers conducted the exercise wearing chemical protective suits and night vision goggles to see in the dark.

North Korea is estimated to have between 6,000 and 8,000 underground facilities. Meant to preserve the country's leadership and armed forces from air attack, the facilities are also thought to store stockpiles of chemical weapons. In 2012, South Korea estimated the North had between 2,500 and 5,000 metric tons of chemical arms, including mustard gas, hydrogen cyanide, and highly lethal nerve agents including sarin, soman, and VX. In 2017, North Korean agents assassinated leader Kim Jong-un's half brother in Malaysia with a lethal dose of VX, making it seem even more likely the country might use such weapons in wartime.

Stars and Stripes, reporting on the exercise, says the soldiers negotiated a half-mile long horseshoe-shaped tunnel equipped with the Mobile Ad Hoc Networking Unit system, or MPU5. Described by the manufacturer as the "World's First Smart Radio," it creates a peer-to-peer Wi-Fi relay network capable of relaying signals from deep underground to the surface. MPU5 is based on the Android OS and can handle voice, data, and video. The device was also linked to trackers attached to soldiers' boots, like horseback riding spurs, allowing the Army to keep track of troops underground.

In the event of war on the Korean peninsula South Korean soldiers will do the bulk of the fighting, both above and underground. Still U.S. forces would likley do a considerable amount themselves, and must be ready to fight and communicate hundreds of feet underground in the dark. In the meantime, U.S. troops must train for every contingency.

http://www.popularmechanics.com/military/weapons/a14456933/the-us-army-is-training-to-explore-fight-in-north-koreas-maze-of-tunnels/

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Asia Times (Hong Kong)

Tokyo, Seoul Attentive Yet Restrained as Trump Proposes Weapons Sales

By Peter J. Brown

December 19, 2017

Deals with US defense contractors are expensive and highly sensitive with regional rivals; but they could be limited to niche capabilities due to local limitations and a range of technical problems

As US President Donald Trump departed from Northeast Asia last month, he appeared to set the stage for a significant uptick in sales of US military hardware. Both in Tokyo and Seoul, Trump's emphasis on bilateral trade agreements has apparently spawned one solution to the current trade imbalance, which is to sell lots of advanced weapons to both countries.

This would achieve both long-term security objectives for the US and the region, as well as ensure a steady income for US defense contractors – but Japan and South Korea may not embrace this plan. Any expanded role for the military in each nation is a very sensitive undertaking, and, above all else, setting off alarm bells in Beijing is to be avoided. At the same time, both nations are pursuing 21st Century weaponry with its emphasis on robotic autonomous platforms, advanced networking and battlespace saturation via cyber warfare, and both nations may not share President Trump's vision entirely.

According to Professor Narushige Michishita, director of the Security and International Studies program at the Tokyo-based National Graduate Institute for Policy Studies, readers need to be aware of a series of decisions made long before Air Force One brought Trump to Asia.

"Japan had decided to procure an advanced version of the SM-3 Block IIA sea-based ballistic missile system, F-35 fighter aircraft, V-22 Osprey tiltrotor aircraft, and AAV-7 amphibious vehicles before

the Trump visit," Prof Michishita said via email. "What's new are the Aegis Ashore missile defense system and anti-ship/ anti-ground cruise missiles, which had also been discussed before the Trump visit. Japan decided to buy what it was going to buy anyway, timing it to Mr Trump's visit in order to maximize the political impact of the decision."

The question of what funding is available, among other things in Seoul and Tokyo, is also very relevant. Dr Swee Lean Collin Koh, a research fellow with the Maritime Security Program at the S Rajaratnam School of International Studies at Nanyang Technological University in Singapore says "the strategic motivations of Japan and ROK [Republic of Korea/South Korea] to beef up their defenses are there, and both countries have evinced interest and demonstrated some will to proceed with those plans."

"We see that evident in Seoul's potential quest for nuclear-powered attack submarines and advanced C4ISR capabilities from the US. And most recently, besides seeking US Aegis Ashore and possibly even THAAD, Tokyo is eyeing long-range offensive strike missiles, one of which being the US-made JASSM-ER," said Koh. "These are highly sophisticated, and by that virtue, extremely expensive weapons. Not just the systems themselves, but also the costs associated with long-term supporting infrastructure, training and associated elements of the sales package."

Because of the significant sums of money involved, and the uncertainty surrounding the funding, prioritization is required.

Huge costs and desire for defense self-sufficiency

"Their militaries have a whole range of areas to modernize and enhance on," said Koh. "For ROK, there's also the added domestic pressure to focus on building defense self-sufficiency by grooming its indigenous defense industrial base, which means buying local than to American, unless absolutely necessary."

Meanwhile, Japan is wrestling with the fact that each Aegis Ashore set would cost up to US$1 billion, something Tokyo can barely afford.

"Immediate acquisitions may not be feasible [so we may see] phased acquisition plans stretching over a longer period of time, spreading out the expenses across fiscal years. This would apply similarly to ROK as well," said Koh.

Another issue involves the apparent reluctance of the US to share its advanced AN/SPY-6 radar system with its allies in Asia.

"The SPY-6 case reminds me of the reticence against selling the F-22 Raptor. Japan initially was interested, but could only settle on the F-35 Lightning II," said Koh. "However, thus far, while SPY-6 has been withheld, Japan and ROK have been offered Ballistic Missile Defense upgrades to their existing Aegis combat systems, with the current priority plausibly to focus on building BMD interoperability than to achieve systems commonality. It is only a matter of time before SPY-6 would be released to these allied navies, [and it would be] perhaps easier to do so than to release the F-22 for sale."

When it comes to other US naval weapons purchases, both countries might end up seeking a limited number of niche capabilities for a few reasons.

"Japan and ROK use American systems and sub-systems (mounted on warships which each country now produces). Both have steadily made progress in indigenization, such as sensors (radars, sonars, etc – especially in the case of Japan) and kinetic weapons, especially anti-ship cruise missiles and torpedoes," said Koh. "This leaves open prospects for future naval purchases/tech cooperation in areas such as warship propulsion, anti-air warfare and shipboard missile defense systems, as well as in areas of acoustic/infra-red/radar signature reduction (i.e. stealth)

capabilities. These are areas that continue to be ripe for further collaboration, and potentially would feature in future naval tech collaboration between these allies."

As for Japan's recently announced plan to jointly develop a missile with the UK, this would present Japan "with more options to pursue military technology links and cast this net wider, but generally it would continue to view the US as a primary partner in this realm," said Koh. At the same time, Seoul values its relationship with Germany, which has been a major weapons supplier for some time.

"Indeed, key purchases such as the Taurus air-launched standoff weapon and Type-214 diesel-electric subs count as crown jewels of German-ROK defense relations. ROK is unlikely to only turn to the US for future defense purchases. Perhaps American-ROK links would remain extremely important in niche areas such as missile defense, but for other aspects of conventional warfare capabilities, there remain substantial areas of cooperation for the two countries, such as in naval technology (sonars, torpedoes, for example) and possibly follow-on cooperation in air-launched standoff weapons after Taurus KEPD," said Koh.

"Germany continues to lead in several major mil-tech areas and it would be foolhardy for the ROK to abandon or overlook its established links with Germany in favor of just with the US," Koh added.

At the same time, Japan and South Korea represent two completely different mindsets. Pacifism remains deeply embedded in the core of Japanese politics, for example.

"Korea has made significantly increased defense investment plans. Less so in Japan, where pacifism is not just a vague idea but an aspirational goal for many. (There have been many) calls for Japan to double its defense spending, and there are good reasons for this call, but it simply is unlikely to happen unless the Japanese people come to believe that such a radical step is required. That hasn't happened yet," said Garren Mulloy, Associate Professor of International Relations at Daito Bunka University in Saitama, Japan.

"Japan has already bought a great deal of defensive equipment from the US. The whole Aegis system was a massive investment for Japan's Maritime Self-Defense Force, augmented by SM-3, and PAC-3 (missiles). Aegis Ashore would be the obvious development of this, but I have long warned that the scale of BMD investment required to attain the degree of missile defense that Japan desires is essentially a bottomless pit of defense investment that Japan is unwilling or unable to double defense budgets for," said Mulloy via email.

Japanese finances 'not in great shape'

Japanese public finances are not in good shape, and depend upon "running massive public spending deficits propped-up by yen-denominated soft loans," said Mulloy. "This is clearly unsustainable, and requires a massive economic growth spurt."

As far as the decision to buy F-35's in 2011, "despite its obvious qualities, the selection process failed to address basic Air Self-Defense Force (ASDF) operational and service requirements (which included among other things) twin-engines for long-range operations over vast maritime domains. They don't seem to have got any of that," said Mulloy. So the F-35's cannot be modified and developed within Japan for evolving ASDF requirements yielding a highly capable air-combat system.

Meanwhile, the latest Japanese "incredibly advanced AAM-4 missile", which Mulloy describes, is about a meter too long for the F-35 internal weapons bay, and "there is a research project with BAe and other European partners to marry the best features of the Meteor BVM AAM with the AAM-4. Not exactly fitting into the overall 'Buy USA' picture," Mulloy said.

For this and a number of other reasons, Japan is focusing a lot of its attention on building ties to Europe.

"(In the case of the SM-3 missile for example), Japan will develop a missile very similar to those recently developed by Korea, the UK, France, and overlapping with US capabilities. This is insurance for Japan, as the US is possibly less dependable, and also US companies less reliable partners," said Mulloy, pointing to a decision by US companies to withdraw support from older versions of weapons systems. "Many allied countries were left with good missiles that would not be supported. The UK has now been left with a capability gap. Japan has not."

Japan's Advanced Defense Technology Center, part of the Acquisition, Technology & Logistics Agency (ATLA) underscores Japan's determination to explore a wide array of solutions to its defense challenges in the future. Japan wants to proceed with the current US umbrella in place, but also wants to lay the groundwork for a more flexible defense infrastructure with more Japanese-built components.

"ATLA and its predecessor TARDI support Japanese manufacturers, but it isn't as simple as drip-feeding corporations. It is about developing and retaining domestic capabilities. Japanese radar and seeker-heads are now among the best in the world, and they are seeking partners, and finding lots of interest in Europe. The US is looking for importers. That is a significant difference," Mulloy said.

http://www.atimes.com/article/tokyo-seoul-attentive-yet-restrained-trump-proposes-weapons-sales/

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USNI News (Annapolis, MD)

Missile Defense Agency Looking to Intercept Ballistic Targets Earlier during Boost Phase

By Ben Werner

December 13, 2017

WASHINGTON, D.C. — Taking out incoming missiles during the boost phase – the period just after launch – is something the military's missile defense leadership is confident will occur in the not too distant future.

Speaking Wednesday at the Center for Strategic and International Studies, Rear Adm. Jon Hill, deputy director of the Missile Defense Agency, said the continental U.S. is safe for the moment, but his team is focusing on how to defend against an ever-evolving threat. Hill's talk, part of the Maritime Security Dialogue series, was co-hosted by CSIS and the U.S. Naval Institute.

"The defense system we have in place today will defend against the threat as we understand it today," Hill said. "What we're concerned about is tomorrow's threat as it continues to increase."

With countries such as North Korea and Iran continuing to enhance their missile technology, Hill said the Missile Defense Agency's goal is building and maintaining a robust layered defense system as ship-based and land-based radar and interceptors coordinate with satellites. Hill said gathering enemy missile launch data early is vital for the defense system to be effective. With the Aegis radar system aboard guided missile destroyers, Hill said his agency has the ability to receive very early looks at when an enemy launch is occurring.

"If that ship is based is properly placed up forward, it gets an early detection, and can cue the ground-based missile defense," Hill said.

"It allows them to detect a lot earlier and shoot a lot earlier."

While parking ships off the coast of threatening nations provides missile defense operators a decisive advantage in calculating a missile's track, Hill conceded doing so comes with a cost to the fleet's operational tempo.

Following a year when two deadly collisions between guided-missile destroyers and merchant ships, the Navy is currently reassessing how its ships are deployed. Putting the Aegis system on shore, Hill said, offers a partial solution.

While ships can go where we need them to go and bring a variety of weapons, Hill said it might make sense to put Aegis on land in a region where the threat is static and near a friendly chain of islands.

News reports have stated Japan is considering asking for Aegis Ashore systems, similar to what's been deployed to Romania and being brought to Poland, but Hill said a decision has not been finalized. Other nations have also inquired about Aegis Ashore.

The remarkable thing about Aegis, Hill said, is the system was developed four decades ago, primarily as an air defense system. But the system proved to be very adaptable, which is why it's still used today, and why friends and allies are interested in being a part of the missile defense system.

"We did not think back in the '70s and '80s we'd be tracking objects in space and that we'd be shooting objects in space," Hill said.

https://news.usni.org/2017/12/13/missile-defense-agency-looking-intercept-ballistic-targets-earlier-boost-phase

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US ARMS CONTROL

RT (Moscow, Russia)

US Wants to Amend Arms Control Agreement to Ease Export of Military Drones – Report

Author Not Attributed

December 20, 2017

Washington is seeking an amendment to an agreement limiting the proliferation of delivery systems that could be used to deploy WMD. If successful, it would remove a formal hurdle blocking the global sales of US military drones.

The Missile Technology Control Regime (MTCR) aims to limit the proliferation of delivery systems and sensitive technologies that could potentially be used to launch chemical, biological and nuclear attacks. It was formed in 1987 by the G-7 industrialized countries (Canada, France, Germany, Italy, Japan, the UK, and the United States), currently has 35 nations as members, and is described as an "informal political understanding among states."

Most restraints are applied to the Category I items, which along with ballistic missiles, space launch vehicles and sounding rockets, also include "unmanned air vehicle systems" that can fly faster than 300km an hour with a 500kg payload.

The limitations, however, are non-binding and countries are only obliged to show "restraint" and expected to behave on a "strong presumption to deny" any transfers of such sensitive technologies.

Nevertheless, the US wants to amend the MTCR agreement to reclassify UAVs that are capable of flying under 650 km per hour under Category II, multiple government sources told Defense News. American officials have reportedly circulated such a proposal in a white paper during the latest plenary session on the MTCR in October, a State Department official confirmed to Defense News.

"I can't confirm any specific numbers because it's treated — inside the MTCR — as proprietary, particularly because there's a deliberative process," the unnamed official said, declining to comment on the exact speed under consideration. "But I can tell you that speed is the thing that we, based on industry input and all, have looked at. And that's what we have discussed with partners. And I know other governments are also looking at speed as well, so we're all sort of coming to a similar conclusion."

"We don't want any unintended consequences, so it has to be crafted carefully. We don't want to inadvertently drop something else out like a cruise missile," the State Department official added.

If the American proposal is adopted, it will clear the hurdles holding up sales of its military drones to foreign powers. Apart from the drones currently in service, including the MQ-1 Predator, MQ-9 Reaper, and Northrop Grumman's RQ-4 Global Hawk, the UAVs reclassification would also benefit the development of "cutting-edge rotorcraft that could be modified in the future to be unmanned – a key request of the companies involved in the Future Vertical Lift consortium," one industry source told the news outlet.

Bell Helicopter and a Sikorsky-Boeing team, who are engaged with US Army's Joint Multi-Role technology demonstrator program would also benefit from such an amendment. The reclassification, however, would not affect Boeing's Phantom Ray and Northrop Grumman's X-47B unmanned combat air vehicles, which are designed to fly at almost supersonic speeds.

While being informal and voluntary, MTCR participation urges self-restraint and obedience to export control policies. Thus, before the US can openly add more drones to its global sales pitch, all 35 members of the Regime will have to consent to the amendments.

https://www.rt.com/usa/413700-drones-export-mtcr-amendment/

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The National Interest (Washington, DC)

Russia and NATO: Headed for a Missile Arms Race in Europe?

By Dave Majumdar

December 17, 2017

The NATO alliance is urging Moscow to return to compliance with the 1987 Intermediate-range Nuclear Forces bilateral U.S.-Russia treaty, which bans land-based missiles that have ranges between 500km and 5,500km.

"Allies have identified a Russian missile system that raises serious concerns," reads a statement from the alliance. "NATO urges Russia to address these concerns in a substantial and transparent way, and actively engage in a technical dialogue with the United States."

The alliance says its welcomes "continued efforts by the United States to engage Russia in bilateral and multilateral formats, including the Special Verification Commission, to resolve concerns about Russia's compliance with the INF Treaty."

The alliance—where European members would have to host any new American INF class weapons—considers alleged Russian violations of the treaty to be a serious problem.

"Allies emphasize that a situation whereby the United States and other parties were abiding by the treaty and Russia were not – would be a grave and urgent concern," NATO said in a statement. "The Alliance is united in its appreciation that effective arms control agreements remain an essential element to strategic stability and our collective security."

NATO member states are taking actions to incentivize Russia to return to compliance with the treaty. "In this spirit, our actions, including national measures taken by some Allies, seek to preserve the INF Treaty, strengthen the Alliance, and incentivize Russia to engage in good faith," the NATO statement reads.

However, the NATO statement does not specify what measures the alliance is taking to coax Russia back into compliance with the 30-year-old treaty. The United States has said is taking "economic and military measures" to force Russia back into compliance according to State Department spokeswoman Heather Nauert. Those measures include the development of a new American cruise missile that falls within the class prohibited by the INF treaty.

At issue is Russia's development of the Novator 9M729 land-based cruise missile, which is likely a development of the Kalibr-NK naval cruise missile. Though the United States has been accusing the Russians of violating the INF treaty since 2014, it was not until late this year that Washington publicly named which of the Kremlin's new weapons was the problem. Many analysts like Jeff Lewis have long suspected that the INF-busting weapon in question was the 9M729, but there was no official word from the United States government until this month.

At this point, the INF treaty is essentially dead. It is very unlikely that the Kremlin will return to compliance with the treaty anytime soon. Indeed, in many ways the treaty was outdated—the most obvious drawback is that it is a bilateral treaty.

"INF treaty was bilateral, although it did involve, in an indirect fashion, a number of European countries where the United States and the Soviet Union deployed their intermediate-range missiles," as former arms control negotiator Nikolai Sokov, a senior fellow at the James Martin Center for Nonproliferation Studies, wrote for The National Interest. "This made sense not only because the two countries were the two protagonists of the Cold War, which was at that time drawing to an end, but also because few countries in the world had or could have missiles in that category. That has changed—plenty of countries in Eurasia have such missiles today—North Korea, China, India, Pakistan, Israel, Iran, etc. This has been an important concern for Russia for quite a long time."

Perhaps the best option is to negotiate a new treaty that includes other parties such as China. "Instead of allowing it to die quietly, we could negotiate a new agreement—one that addresses nuclear weapons rather than delivery vehicles and one that includes other nuclear states," Sokov wrote. "One is left to hope that the sad fate of the INF treaty will serve as a lesson, not as an example."

http://nationalinterest.org/blog/the-buzz/russia-nato-headed-missile-arms-race-europe-23693

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The Interpreter (Sydney, Australia)

The UN Nuclear Ban Treaty is Historic on Five Counts

By Ramesh Thakur

December 19, 2017

Nuclear weapons are the ultimate weapons of war and therefore the ultimate weapons to prevent and avoid war. This two-axis struggle is captured in competing treaties for setting global nuclear norms and policy directions. This also reflects the mantra of realism - amended to include the importance of good governance in the modern world - that international politics consists of the struggle for ascendancy of competing normative architectures. Military muscle, economic weight and geopolitical clout stand arrayed against values, principles and norms.

For almost half a century, the normative anchor of the global nuclear order has been the Nuclear Non-Proliferation Treaty (NPT). On 7 July, 122 states voted to adopt a new Nuclear Weapons Prohibition Treaty (or ban treaty). This new treaty was opened for signature in the UN General Assembly on 20 September and so far four countries have ratified and another 49 have signed. The ban treaty will come into effect 90 days after ratification by 50 states.

As John Carlson among others has argued, the ban treaty has its technical flaws and even its advocates concede it will have no operational impact as all nuclear weapon possessing states have stayed away. Yet this treaty inspired by humanitarian principles is historic on five counts.

It is the first treaty to ban the possession, transfer, use and threat of use of nuclear weapons. This completes the legally binding prohibition of all three classes of weapons of mass destruction, after biological and chemical weapons were banned by universal conventions in 1972 and 1993 respectively. Like the NPT, the ban treaty is legally binding only on signatories. Unlike the new treaty, which applies equally to all signatories, the NPT granted temporary exemptions for the continued possession of nuclear weapons by the five nuclear weapon states that already had them in 1968, but banned proliferation to anyone else.

Second, the ban treaty's adoption marks the first divergence between the UN and the NPT that hitherto have had a mutually reinforcing relationship. The NPT has its origins in several resolutions adopted in the General Assembly. Instances of non-compliance with binding NPT obligations require enforcement measures by the UN Security Council. But while almost two-thirds of NPT parties voted to adopt the ban, a strong one-third minority, including the five permanent members of the Security Council (P5) – who coincidentally are the five nuclear weapons states – rejected the new treaty.

Third, this is the first occasion in which states on the periphery of the international system have adopted a humanitarian law treaty aimed at imposing global normative standards on the major powers. The major principles of international, humanitarian and human rights laws have their origins in the great powers of the European international order that was progressively internationalised. Ban treaty supporters include the overwhelming majority of states from the global South and some from the global North (Austria, Ireland, New Zealand, Switzerland). The treaty's opponents include all nine nuclear weapons possessing states (the five nuclear weapons states, plus India, Israel, North Korea, and Pakistan), all NATO allies, and Australia, Japan and South Korea. Thus for the first time in history, the major powers and most Western countries find themselves the objects of an international humanitarian treaty authored by the rest who have framed the challenge, set the agenda and taken control of the narrative.

Fourth, this is the first time that the like-minded liberal internationalist states find themselves in the dissident minority in opposing a cause championed by the Nobel Peace Committee. Between

1901 and 1945, three-quarters of the prizes were awarded to those who promoted interstate peace and disarmament. Since 1945 social and political causes have attracted the prize as well and in the last decade a majority of laureates have been activists and advocates for human development and social justice. The Nobel Peace Prize has increasingly functioned as the social conscience of liberal internationalism.

The disconnect between an internationalised social conscience and a national interest-centric security policy is especially acute for Norway, host of the first humanitarian consequences conference in 2013 and part of the negotiation that led to the ban treaty. While other Nobel prizes are determined by the Swedish Academy, the Peace Prize is awarded by a Norwegian committee. On December 10 Norway faced visual embarrassment when the glittering Peace Prize ceremony in Oslo recognised a treaty it opposed and honoured a non-government organisation – the International Campaign to Abolish Nuclear Weapons (ICAN) – to which it cut funding after the election of a conservative government in October 2013.

Fifth, reflecting the second and third arguments, this is the first occasion in the UN system when the General Assembly, where all 193 Member States have one vote, has asserted itself against the permanent five. Previously the Assembly has occasionally acted in the face of a deadlock in the 15-member Security Council.

The ban treaty embodies the collective moral revulsion of the international community. Because the nuclear-armed states boycotted the ban conference and refuse to sign the treaty, it will have no immediate operational effect. But because it is a UN treaty adopted by a duly constituted multilateral conference, it will have normative force. (My recently published article in The Washington Quarterly that highlights the normative force of the ban treaty can be found here.)

The ban treaty will reshape how the world community thinks about and acts in relation to nuclear weapons as well as those who possess the bomb. It strengthens the norms of non-proliferation and those against nuclear testing, reaffirms the disarmament norm, rejects the nuclear deterrence norm, and articulates a new universal norm against possession.

Critics allege that another landmark agreement in history was the war-renouncing Kellogg–Briand Pact of 1928 that proved utterly ineffectual. True, but there is one critical difference. That pact was entirely voluntary, whereas the ban treaty is legally binding – that is the whole point of the treaty. Once in force, it will become the new institutional reality, part of the legal architecture for disarmament.

https://www.lowyinstitute.org/the-interpreter/un-nuclear-ban-treaty-historic-five-counts

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Real Clear Defense (Chicago, IL)

Additional Russian Violations of Arms Control Agreements

By Mark B. Schneider

December 18, 2017

Recently, a number of additional Russian arms control violations have come to light. Just retired Commander of the Russian Air Force (now called the Aerospace Force) Colonel General Viktor Bondarev has revealed that Russia has the "Skif bottom missiles." The "Skif" is the nuclear-armed intercontinental-range SS-N-23 SLBM. Emplacing nuclear missiles on the ocean floor is prohibited by the "Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof," which, according

to the Department of State, "…prohibits parties from emplacing nuclear weapons or weapons of mass destruction on the seabed and the ocean floor beyond a 12-mile coastal zone."

Most of the newly revealed Russian arms control violations involve the INF Treaty which prohibits ground-launched ballistic and cruise missiles with a range between 500-5,500-km. In November 2017, Russia's Chief of the General Staff, General of the Army Valery Gerasimov, stated that Russia has "set up full-scale units of vehicles capable of delivering precision-guided missiles to targets located up to 4,000 kilometers away." Not only is this a clear violation of the INF Treaty, but the range number is well in excess of previous reports. While the Obama administration found Russia in violation of the INF Treaty in 2014, it never revealed which missile was involved. In June 2017, an unclassified intelligence report by the National Air and Space Intelligence Center (NASIC), a part of the U.S. Air Force, indicated that Russia had the 3M14, a ground-, sea- and submarine-launched cruise missile with a range of 2,500-km. The 3M14 is the Russian nuclear-capable Kalibr cruise missile. The Kalibr, while very capable, obviously does not have the 4,000-km range mentioned by General Gerasimov. The apparent reason is that there is another Russian cruise missile that violates the INF Treaty. In a December 2017 speech at the Wilson Center, senior National Security Council official Christopher Ford said that the missile which violates the INF Treaty is known in Russia as the 9M729. This confirms some earlier press reports. This apparently is the missile that Bill Gertz first reported and characterized as the SSC-X-08, which is a NATO designator.

According to Russian expert and arms control enthusiast Pavel Podvig, "…the 9M729 missile is almost identical to a missile that was tested at the INF range, probably to the sea-launched Kalibr." He provides no source for this or any explanation why the 9M729 if it is "almost identical" to the Kalibr, has a completely different Russian designator number. At a minimum, it would suggest that it is a major upgrade of the Kalibr which could be consistent with General Gerasimov's range number. The 9M729 could be the 5,000-km range nuclear capable cruise missile which Ria Novosti (the English version is now called Sputnik News), an official Russian Government news agency, repeatedly reported but never identified by name or number. For example, in 2013 Ria Novosti stated, "The Project 885 vessel [the Yasen class submarine] is designed to launch conventional or nuclear warhead-bearing missiles up to 3,000 miles (5,000 kilometers), as well as effectively engage other submarines, surface warships and land-based targets."

Thus, we apparently now face two very long-range nuclear-capable Russian ground-launched cruise missile types that violate the INF Treaty. A second Russian long-range ground-launched cruise missile could explain Gerasimov's 4,000-km range number. Multiple nuclear-capable missile types in each range band are now the norm in Russia.

Earlier in 2017, the Trump Administration confirmed a New York Times story by Michael Gordon which said that the missile that violated the INF Treaty had been deployed by Russia. Worse still, recent reports are saying that the 9M729 is being launched from the Iskander-M launcher. Russia has a large Iskander-M force and is expanding it to ten brigades by 2020. Podvig accurately noted, "If 9M729 was tested from an Iskander launcher even once, all these launchers will have to be eliminated. And that seems to be the case." This simply is not going to happen because Russia has no intent to reverse its violations of the INF Treaty.

In addition to the 3M14 and the 9M729, there are two other shorter ranged Russian ground-launched cruise missiles that are reportedly violations of the INF Treaty because of their range. These are the R-500 missile, part of the Iskander-M system, and the Bastion. Both are operationally deployed.

In November 2007, Ria Novosti reported, "The flight range of a new cruise missile adapted for Iskander and successfully tested in May 2007 could exceed 500 km (310 miles)." In November 2008, it revealed that the potential range of the R-500 "can exceed 2,000 kilometers…" In 2008,

Russian arms control expert Viktor Myasnikov wrote that the R-500 exceeded the limit of the INF Treaty on its first test and its range could be expanded to 1,000 kilometers. Kommersant, a major Russian publication, maintained that the range of the R-500 "can amount to 1,000 kilometers." Pravda.ru reported it has a range of 2,000-km. Writing in Ria Novosti and for the UPI, noted Russian journalist Ilya Kramnik said that the range of the R-500, and possibly a second missile type, could be between 1,200 and 3,000-km. In RIA Novosti, Kramnik concluded the R-500 was a violation of the INF Treaty. In January 2009, he stated that "Iskander can be equipped with cruise missiles with a range of up to 2,000 km (1,243 miles), and even 3,000 km (1,865 miles) that will allow it to destroy targets anywhere in Western Europe." Mikhail Barabanov, chief editor of the Moscow Defense Brief, wrote that the R-500 range could be more than 1,000-km. The difference in reported ranges could be explained by the existence of two versions of the R-500. In 2014, noted Russian journalist Pavel Felgenhauer "…said the missile (R-500) has been tested at a range of 1,000 km," but the "range could be extended up to 2,000-3,000 km by adding extra fuel tanks."

Russia also has a supersonic ground-launched cruise missile system called Bastion which carries the Onix missile. It is mainly an anti-ship missile but also has a land-attack capability which was used in Syria. In July 2016, Interfax, Russia's main unofficial news agency, reported, "The Bastion coastal defense system has an operational range of 600 kilometers and can be used against surface ships of varying class and type…" There are other press reports that maintain that the Bastion has a range of 600-1,000-km.

Thus, we now have four different Russian ground-launched cruise missiles, two revealed in U.S. government sources and two reported in both the Russian and Western press, which have reported ranges that violate the INF Treaty. This is not a trivial issue and it is not going to be resolved by negotiations because of a decades-old very weak compliance policy on the part of the U.S. The Obama administration's policy of declaring a serious violation of the core element of the INF Treaty and doing absolutely nothing about it is an egregious example of our failed compliance policy.

In December 2016, TASS, Russia's main government news agency, reported that a new Russian "ICBM," the RS-26 Rubezh "was accepted for service in late 2016." If true, this is a very important development because there are outstanding compliance issues relating to the missile under both the INF Treaty and the New START Treaty. A recent TASS report raises the issue of a covert deployment of the RS-26 because there is no indication that Russia has conducted the required New START Treaty demonstration of the missile and its launcher. This treaty requirement involves viewing, measuring and photographing these items before deployment. Indeed, respected Russian journalist Alexander Golts has observed in an article entitled "Russia's Rubezh Ballistic Missile Disappears off the Radar," that, "Moscow postponed the demonstration of the new missile to US inspectors from 2015 to 2016. But this exhibition has still not been conducted to date." Deploying the missile without the required demonstration would be a major violation of the New START Treaty verification regime. It would require that the deployment be covert, which would mean it not being counted against the New START Treaty limits.

According to Kommersant, former Duma Defense Committee Vice Chairman Alexsey Arbatov, said, "…judging from the unofficial assessments of the experts, this system [the RS-26] is also designed for intermediate-range targeting, which de facto corresponds to the category of missiles eliminated under the [INF] Treaty…" A June 2017 NASIC report indicated, "Russia claims it will deploy the RS-26 Rubezh for shorter-range targets…" Under a Treaty interpretation provided to the Senate by the Reagan administration during the INF Treaty ratification process, the RS-26, because of the way it has been tested, is a violation of the INF Treaty.

The New START Treaty compliance issue relates to the fact the RS-26 apparently uses the first two stages of the SS-27, which is an ICBM maintained, stored and transported as an assembled missile

in a launch canister. If so, this is a violation of the New START Treaty because the first stage of the missile is coming out of a production facility in two different upper stage configurations (the two staged RS-26 and the three staged RS-24). A demonstration of the RS-26 would conclusively prove compliance or noncompliance. This may be the reason for the Russian reluctance to stage a demonstration of the RS-26. The Department of State has completely ignored the RS-26 compliance issues.

In November 2017, state-run Russia Beyond the Headlines confirmed reports that the range of the Iskander-M is in the INF Treaty prohibited zone. It stated that there were eight different types of rockets for the Iskander-M and, "Each [of the] various missile[s] can be charged with a warhead packed with up to 500 kilo[s] of high explosive, which can destroy enemy military bases and ground forces up to 600 km away." Because of the INF Treaty range definition for ballistic missiles, this may be a circumvention rather than a violation.

The latest Russian arms control violations add to a long list of previous noncompliance. If the State Department continues to ignore most Russian violations of its arms control commitments, there will never be an arms control agreement that will achieve its supposed objectives and enhance U.S. national security. Fortunately, there are indications that the Trump administration will respond to the INF Treaty violations. Heather Nauert, a State Department spokeswoman, has said, "The administration firmly believes, however, that the United States cannot stand still while the Russian Federation continues to develop military systems in violation of the treaty." This constitutes a revival of the Reagan approach to arms control compliance, which has been the only approach pursued by the U.S. that has ever worked.

https://www.realcleardefense.com/articles/2017/12/18/additional_russian_violations_of_arms_control_agreements_112795.html

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ASIA/PACIFIC

Daily Express (London, United Kingdom)

Australia Still 'TOTALLY Radioactive' Following British Nuclear Tests in 1950s

By Sean Martin

December 13, 2017

PARTS of Australia are still "totally radioactive" some 60 years after Hiroshima-type nuclear bombs were tested nearby, leading to numerous birth defects and a higher cancer rate, according to one fallout survivor.

During the 1950s and 60s, the British carried out testing of 12 nuclear bombs which were comparable to the one dropped on Hiroshima at Maralinga and Emu Field in South Australia, and Monte Bello in Western Australia.

Some Australians say that there are still high levels of radiation around the area which are having an effect on locals.

Sue Coleman-Haseldine claims that in the area where she grew up in Kokatha, radiation poisoning is still giving people cancer and leading to serious birth defects.

Ms Coleman-Haseldine told News.co.au: "Australia is totally radioactive.

"There're so many deaths from different cancers. Myself and my granddaughter don't have thyroids as they've been removed. The defects in newborn babies are heartbreaking.

"If you ask one of the young ones [in her South Australian community], 'What do you think you'll die from?' they'll say 'cancer' because that's what everyone else dies from. The Government is doing nothing at all. They don't want to know.

"As people of Australia, we all need to join forces — everybody: black, white and brindle — and shame the government to sign this treaty to ban nuclear weapons."

As a result of the claims, the Australian International Campaign to Abolish Nuclear Weapons (ICAN) has called for a global ban on nuclear weapons, particularly in the current political climate.

ICAN's Asia-Pacific director Tim Wright said: "In many ways the world is more dangerous today than it was back then.

"The question for the Australian public is, 'Do you feel safer knowing that President Trump has his finger on the trigger for 7000 nuclear weapons or does that make you feel less safe?'

https://www.express.co.uk/news/science/891887/nuclear-war-tests-australia-radioactive-cancer-britain

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The Diplomat (Washington, DC)

Japan's Shinzo Abe Approves Ballistic Missile Defense Expansion

By Franz-Stefan Gady

December 20, 2017

Japanese Prime Minister Shinzo Abe's Cabinet approved the procurement of two Aegis Ashore batteries.

Japan is set to expand its ballistic missile defense capabilities with Japanese Prime Minister Shinzo Abe's Cabinet approving the procurement of two land-based Aegis Ashore missile defense systems on December 19, according to local media reports.

The two Aegis Ashore batteries, the land-based variant of the Aegis combat system, will strengthen Japanese defenses against China's and North Korea's growing ballistic and cruise missile arsenals. The government plans to deploy the two batteries by 2023 but has yet to make a decision on the locations of the new missile defense systems.

North Korea's nuclear and missile development programs pose a particular threat to Japan's national security. "North Korea's nuclear missile development poses a new level of threat to Japan and as we have done in the past we will ensure that we are able to defend ourselves with a drastic improvement in ballistic missile defense," Japanese Minister of Defense Itsunori Onodera told reporters in Tokyo today.

The cost for the two Aegis Ashore missile defense systems could exceed $2 billion.

"We cannot say what the final costs will be, but we will move ahead (to introduce Aegis Ashore) on the fastest possible schedule, given public calls that the government should deal as swiftly and urgently as possible with the ballistic missile defense issue," Onodera said.

The Japanese government is still evaluating other options, including the possible acquisition of six Terminal High Altitude Area Defense (THAAD) batteries. However, the government concluded in an

in-depth study earlier this year that the Aegis Ashore system is more cost effective for missile defense than THAAD.

The Aegis Ashore batteries will be armed with SM-3 Block IIA and SM-6 interceptors.

"Manufactured by U.S. defense contractor Raytheon, SM-6 is a supersonic (Mach 3.5+) missile interceptor with an estimated range of over 180 miles [289 kilometers]," I explained elsewhere. "The missile was originally designed for anti-air warfare and anti-surface warfare missions."

The SM-3 Block IIA has been under joint development by Raytheon and Japan's Mitsubishi Heavy Industries since 2006.

"It is designed to destroy short- to intermediate-range ballistic missile threats. The SM-3 has been successfully flight tested in February of this year when it destroyed a medium-range ballistic missile target," I reported previously. "However, the missile failed another intercept test in June."

According to some reports, the Aegis Ashore sites, however, will not be fitted with a powerful new air and missile defense radar, Raytheon's AN/SPY-6(V), expected to be installed aboard U.S. Navy warships in the early 2020s.

This would mean that Aegis Ashore batteries would not be able to utilize the extended range of SM-3 Block IIA interceptors estimated to have a maximum operational range of 2,500 km (1,350 miles).

"In order for either missile to intercept a North Korean ballistic missile, the Aegis combat system would have to start tracking the missile in its ascent phase and launch interceptors before it overflies the Aegis ashore site," I noted elsewhere. This all depends on the early detection of the missile.

The Aegis Ashore sites would supplement Patriot batteries capable of engaging short- and medium-range ballistic missiles in their terminal phase and Aegis-equipped guided-missile destroyers, of which the Japan Maritime Self-Defense Force (JMSDF) currently operates four, a number that is expected to increase to eight in the future.

https://thediplomat.com/2017/12/japans-shinzo-abe-approves-ballistic-missile-defense-expansion/

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The New York Times (New York, NY)

A Tillerson Slip Offers a Peek into Secret Planning on North Korea

By David E. Sanger

December 17, 2017

WASHINGTON — Secretary of State Rex W. Tillerson let slip last week a few tantalizing details about one of the nation's most secret military contingency plans: how the United States would try to race inside North Korea to seize its nuclear weapons if it ever saw evidence that Kim Jong-un's government was collapsing.

For years, American diplomats have been trying to engage their Chinese counterparts in a discussion of this scenario, hoping to avoid a conflict between arriving American Special Forces — who have been practicing this operation for years — and the Chinese military, which would almost certainly pour over the border in a parallel effort.

And for years the Chinese have resisted the conversation, according to several former American officials who tried to engage them in joint planning. The Chinese feared that if news of a conversation leaked, Beijing would be seen as conspiring with the United States over plans for an eventual North Korean collapse, eroding any leverage that Beijing still held over Mr. Kim.

So it was surprising to Mr. Tillerson's colleagues in the White House and the Pentagon when, in a talk to the Atlantic Council last week, he revealed that the Trump administration had already provided assurances to China's leadership that if American forces landed in North Korea to search for and deactivate nuclear weapons, the troops would do their work and then retreat.

North Korea has defied past predictions of collapse, and one does not appear imminent. But if a collapse were to occur, the aftermath could present grave dangers. American officials have envisioned that North Korean officers, fearing the end of Mr. Kim's government, might lob a nuclear weapon at South Korea or Japan as a last, desperate act — or detonate it on North Korean territory to make occupation impossible.

On Tuesday, speaking from note cards, Mr. Tillerson said at a conference on the Korea crisis that the United States and China "have had conversations about in the event that something happened — it could happen internal to North Korea; it might be nothing that we from the outside initiate — that if that unleashed some kind of instability, the most important thing to us would be securing those nuclear weapons they've already developed and ensuring that they — that nothing falls into the hands of people we would not want to have it."

A celebration this month in North Korea of the nation's status as a nuclear state. North Korea has defied repeated predictions of government collapse. Credit Kim Won-Jin/Agence France-Presse — Getty Images

He added, "We've had conversations with the Chinese about how might that be done."

He repeated his past assurance that the administration was not seeking "regime collapse" or "an accelerated unification of the Korean Peninsula."

"We do not seek a reason to send our own military forces north of the demilitarized zone," the dividing line between North and South, he said.

But if America's hand is forced, he added, "we have had conversations that if something happened and we had to go across a line, we have given the Chinese assurances we would go back and retreat back to the south of the 38th parallel" when conditions allowed.

In other words, the United States would essentially cede North Korean territory to the Chinese military, or let China and South Korea figure out who would control 46,500 square miles of territory and take care of its 25 million occupants, many of whom already do not have enough to eat.

In an interview on other national security issues on Friday, a senior administration official who has been deeply involved in the North Korea contingency planning declined to speak about the issue, even to confirm that the conversations the secretary described had taken place.

The White House has been more focused on the beleaguered Mr. Tillerson's public offer to begin talks with North Korea on any issues, even "the weather," from which he backtracked on Friday in a presentation to the United Nations.

But the reference to planning for North Korean collapse, while not drawing wide notice, caught the attention of those who have been drawing up military plans for a number of possible scenarios, including American pre-emptive strikes. Asked whether Mr. Tillerson had referred by mistake to

entreaties to the Chinese that previous administrations kept secret, Steven Goldstein, the new under secretary of state for public diplomacy and public affairs, said it was quite deliberate.

“The secretary reiterated the position he has taken in meetings with Chinese counterparts,” he said. “He would like the U.S. and Chinese military leaders to develop a plan for the safe disposition of North Korea’s nuclear weapons were the regime to collapse.” He added: “While the secretary has never advocated for regime change, we all have an obligation to be prepared for any scenario.”

There is no indication that the Chinese have responded, or that military officials have met — though Beijing would almost certainly keep that secret if it occurred.

According to current and former American officials, the contingency plans to seize North Korea’s nuclear arsenal have grown in complexity in recent years, largely because the North Korean arsenal has grown.

There are competing estimates among American intelligence agencies over how many weapons the North possesses. Most estimates range from 15 to 30 nuclear devices, but the Defense Intelligence Agency, which is responsible for protecting American troops on the Korean Peninsula, projected this year that the number could be in excess of 50.

The North is presumed to have undertaken an elaborate effort to hide the weapons. The result, one senior military official said recently, is that even if dozens of weapons were seized and deactivated, there would be no way to determine whether many more were still hidden away, perhaps under the control of surviving members of Mr. Kim’s military.

In the secret American rehearsals of how to execute a seizure of the North’s weapons — more of which are planned for the first half of next year, officials say — speed is of the essence.

Finding those weapons, landing “render safe” teams to disarm them and airlifting them out of the country would be a difficult enough task in peacetime. But the American planning assumes a three-way scramble to seize both weapons and territory, involving Chinese troops who may find themselves facing off against the United States and its South Korean allies.

“Washington should assume that any Korean conflict involving large-scale U.S. military operations will trigger a significant Chinese military intervention,” Oriana Skylar Mastro, a professor of security studies at Georgetown University, wrote this month in the journal Foreign Affairs, in a provocative article titled “Why China Won’t Rescue North Korea.”

China, she wrote, “will likely attempt to seize control of key terrain, including North Korea’s nuclear sites,” most of which are within 60 miles or so of the Chinese border. Because of geographic advantage, they would probably arrive long before American forces.

In the past, American planning was based on an assumption that China would come to the aid of North Korea, as it did during the Korean War nearly seven decades ago. But Ms. Mastro, who also advises the United States Pacific Command, wrote that today “the Chinese military assume that it would be opposing, not supporting, North Korean troops.”

Her analysis mirrors what is increasingly becoming the dominant thinking among American military planners. That has made the secret discussion that Mr. Tillerson alluded to all the more vital. Curiously, some Chinese academics have begun writing about the need for the United States and China to prepare a joint strategy. Such public airing of the issue would have been banned in Chinese publications even a few years ago.

Mr. Tillerson’s public comments prompted memories of a lengthy conversation between the American ambassador in South Korea and a senior South Korean official in 2010. The details were revealed by WikiLeaks in a trove of 250,000 State Department cables that included secret

discussions about how to deal with China's ambitions for North Korean territory in the event of a collapse.

Over a lunchtime conversation, the South Korean diplomat confidently predicted to the American ambassador at the time, Kathleen Stephens, that North Korea would collapse "two to three years" after Kim Jong-il, the dictator at the time, died.

In fact, he died in 2011, but the predicted collapse never came. The diplomat then described plans to assure that Chinese companies would have plenty of commercial opportunities to mine minerals in the northern part of the peninsula. Ms. Stephens's description of the lunch, sent back to Washington, included the caution that "China would clearly 'not welcome' any U.S. military presence north of the DMZ."

There is no indication that those discussions included the sensitive issue of disposing of nuclear weapons. At the time, the North had only a handful.

https://www.nytimes.com/2017/12/17/us/politics/tillerson-north-korea-china.html

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Xinhua News Agency (Beijing, China)

DPRK Nuclear, Missile Developers Vow to Continue Bolstering Nuke Force

By Zhou Xin

December 14, 2017

PYONGYANG, Dec. 14 (Xinhua) -- Nuclear and missile developers of the Democratic People's Republic of Korea (DPRK) have vowed to continue bolstering the country's nuclear force "in quality and quantity," the state media said Thursday.

"National defense scientists and technicians will ... further strengthen the state nuclear force in quality and quantity," the DPRK's nuclear and missile developers said in a pledge letter, according to the Korean Central News Agency (KCNA).

The letter was addressed to the country's top leader Kim Jong Un and read out at an oath-taking ceremony during the national conference on arsenals construction on Wednesday.

The DPRK said it has completed building a nuclear strike force with the successful test firing of a new type of intercontinental ballistic missile called "Hwasong 15," which is said to be capable of striking the entire mainland of the United States.

The DPRK is under tough United Nations sanctions for its nuclear and missile programs and Pyongyang has blamed the United States for trying to stifle its economy and deprive it of its right of existence through the sanctions.

http://news.xinhuanet.com/english/2017-12/14/c_136826290.htm

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EUROPE/RUSSIA

U.S. News & World Report (Washington, DC)

How Europe Helped Preserve the Iran Deal

By Laura Rozen

December 14, 2017

Concerted European diplomatic efforts have helped persuade Congress to not pass legislation that would violate the Iran nuclear deal, for now.

WASHINGTON — European diplomatic efforts have helped persuade Congress to hold off on passing legislation that would violate the Iran nuclear deal, at least for now. In the wake of US President Donald Trump's decision to not certify the Iran nuclear deal in October, a 60-day window for Congress to vote to reimpose Iran nuclear sanctions with only a simple majority closed Dec. 12 with no action.

Meanwhile, once-discussed alternative draft legislation spearheaded by Sens. Tom Cotton, R-Ark., and Bob Corker, R-Tenn., has stalled in part because the Democrats have stood firm in opposing it and also because European diplomats have extensively consulted with members of Congress about how elements of it could violate the Joint Comprehensive Plan of Action (JCPOA).

So what happens next? Proponents of the deal, while welcoming Congress' restraint, say it is too soon to celebrate. Fundamental uncertainty over Trump's intentions and unpredictable decision-making continues to undermine confidence that the United States will come around to being persuaded to stay in the landmark 2015 accord.

"I think we are in a very precarious position," former US nuclear negotiator Richard Nephew told Al-Monitor. "Personnel and developments and even Trump's mood might determine if we stay in this thing."

If the United States wants to continue to comply with the deal, at least for the time being, Secretary of State Rex Tillerson has to reissue the waivers for the relevant sanctions relief on Jan. 15-16.

"For the time being, we're in the agreement," Tillerson told State Department employees at a town hall meeting Dec. 12, of the JCPOA. "Congress is examining the agreement to see if there are things they'd like to ask us to do."

"We have not announced any intention to leave the JCPOA at this time," a State Department official, speaking not for attribution, told Al-Monitor. "And we will continue to uphold our JCPOA commitments."

"We won't comment on any draft legislation, but we will continue to work with Congress to address the JCPOA's serious flaws," the State Department official added.

"The United States has been working with its allies for decades to counter the full scope of Iran's malign activity," a National Security Council spokesperson told Al-Monitor. "Now, this administration is doubling down on its commitment to combat Iran's behavior, and this includes intensifying cooperation with European allies in all areas. Our European counterparts have made clear their unwavering support for the JCPOA. At the same time, they have made it clear, based on their own judgments, that a concerted transatlantic effort is necessary to reduce regional instability, halt ballistic missile development, and address human rights violations. We look forward to deepening this collaboration in the coming months."

European allies have urged the Trump administration to commit to the accord, suggesting it would bolster their confidence as they discuss cooperating with the United States to address other shared concerns about Iran's destabilizing actions in the region, from Syria to Yemen to ballistic missile tests.

"We hear a lot of people telling us their aim is not to destroy JCPOA," a senior European diplomat said on a visit to Washington earlier this month. "If we start from that premise, we can talk with the administration about various ways we can improve what is already on the table and talk with Congress about ways we can address ballistic missiles or regional activity."

"The Europeans are trying to secure the administration's commitment to the deal in return for cooperation to counter Iran on other fronts," Ali Vaez, a senior Iran analyst at the International Crisis Group, told Al-Monitor. While it is not an explicit quid pro quo, there is perhaps an implicit one, he said.

"If you don't keep the deal, you are going to be isolated," Vaez said. "On the Hill, that has been pretty effective."

European diplomats and veteran arms control negotiators say it is quite common to make successor arms control agreements over the lifetime of an accord, but not by disrupting it in the beginning, when it is being implemented.

"In arms control agreements, you very rarely have everything you want, and the way of addressing that is to work over the course of time on successor agreements," the senior European diplomat said.

The Trump administration has reluctantly conceded that Iran is abiding by the JCPOA, but said that it finds the accord inadequate. Trump, in announcing his decertification decision in October, cited as his rationale not that Iran was in violation of the accord, but that he could not certify that the sanctions relief the US provides in the deal is proportionate to Iran's actions to curb its nuclear program. But, in fact, the International Atomic Energy Agency (IAEA) verified that Iran had, in the run-up to implementation day in January 2016, poured concrete into the core of its unfinished Arak plutonium reactor, stopped all enrichment and removed centrifuges from the underground Fordo facility, which is being converted into a scientific research site. The IAEA also verified that Iran removed thousands of centrifuges from its main Natanz enrichment facility, shipped out all but a few hundred kilograms of its low enriched uranium stockpile, ended 20% enrichment for medical isotopes and provisionally implemented the Additional Protocol, which granted the IAEA the most far-reaching monitoring and verification access of any arms control deal in the world.

"At present, Iran is subject to the world's most robust nuclear verification regime," IAEA Director General Yukiya Amano said Oct. 13.

The Trump administration has said that in particular, it wants the nuclear deal to be modified so that Iran cannot expand its enrichment capacity after 10 years, when restrictions on Iran's enrichment capacity begin to be loosened, or "sunset."

A European official compared the logic of withdrawing from an accord because of dissatisfaction over sunsets in 10 years to a starving family refusing to eat food in a refrigerator because the food's expiration date is in 30 days, and they would still need to eat in 90 days.

"That is the logic we look at here," said the European official, speaking not for attribution. "The agreement moved us from two months to a one-year breakout time. We were not able to achieve 20, 30, 40 years. But that is not what gives us any reason to walk away from a quality agreement."

"We have not come to Washington to beg," the European official said. "The way we look at the substance, if we can't convince people here with the best possible arguments, if they decide to walk

away, we will not be able to stop them. But until then, we want to present the most enlightened case."

"For us, it is not a purely military approach, not a pure push-back approach," he said on how his country views policy towards Iran. "We seek an Iran policy that] takes care of our concerns, [and seeks to find] a benign place for Iran in the region. It is something we are ready to engage the administration and the Congress on."

Consultations with diplomats from the UK, France, Germany and Brussels have been very effective and persuasive with members of Congress, congressional aides told Al-Monitor. Sen. Ben Cardin, D-Md., the ranking Democrat on the Senate Foreign Relations Committee, has indicated that he will not support any legislation that crosses two red lines: that it would make the United States be the one to violate the JCPOA or that the Europeans are not on board with the legislation.

"It is the administration's job to bring the Europeans along," one congressional aide told Al-Monitor. "I think [Trump] has taken the pin out of the grenade and thrown it to us. He is poised to blame us if it does not work. But we are still trying to work in good faith."

Even amid uncertainty over what Trump will do on the JCPOA, European diplomats say they, too, are working in good faith to consult with the Trump administration on how to address other concerns presented by Iran (and others) in the region. European diplomats say those consultations have become more productive since the Trump administration completed its Iran policy review in October. They see potential prospects for working together on Yemen, which is suffering a catastrophic famine, and where over two years of Saudi-led airstrikes have failed to dislodge the Houthi rebels, who are alleged to receive support from Iran.

The regional issues are where more of the action is at this point, a second European official said, referring to consultations with the US government.

In the meantime, US officials for now continue to take part in the eight-member Joint Commission overseeing implementation of the Iran nuclear deal. Undersecretary of State for Political Affairs Tom Shannon is leading the US delegation to the Joint Commission meeting in Vienna on Dec. 13, which also includes the political directors from the UK, France, Germany, Russia, China, the European Union and Iran, the State Department said. He is accompanied by the director of the State Department's Office of Iranian Affairs Steven Fagin.

Andrew L. Peek, a former Army intelligence officer who advised then US commander in Afghanistan John Allen and a member of the Trump State Department transition team, started Dec. 11 as the new deputy assistant secretary of state for Iran and Iraq. Christopher Backemeyer, the former deputy assistant secretary for Iranian affairs, has been named the deputy assistant secretary of state for assistance coordination as well as the head of public diplomacy for the department's Near East affairs bureau, a State Department official said. Also recently advising Tillerson on Iran at the State Department's policy planning office is Matthew McInnis, formerly a resident fellow at the American Enterprise Institute, as well as David Tessler, previously at the Treasury Department, officials said. Richard Johnson is serving as the acting coordinator for Iran nuclear issues in the State Department's Office of Iran Nuclear Implementation.

https://www.usnews.com/news/world/articles/2017-12-14/european-diplomacy-helps-sway-congress-to-keep-the-iran-nuclear-deal

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The Brussels Times (Brussels, Belgium)

EU Foreign Policy Chief: "No Sunset Clause in Nuclear Deal with Iran"

By M. Apelblat

December 18, 2017

Federica Mogherini defended the Iran nuclear deal (JCPOA) in her speech last week at the European Parliament plenary session and claimed that Iran has committed never to develop any nuclear weapons.

She echoed Iranian foreign minister Mohammed Javad Zarif who simultaneously wrote in the New York Times that his country's military capabilities are entirely defensive.

In July 2015 the E3+3 powers (US, Russia, China, Britain, France, Germany) and Iran agreed on a Joint Comprehensive Plan of Action (JCPOA) concerning the dismantling of the Iranian nuclear programme. In the preamble to the agreement Iran reaffirmed that it under no circumstances will ever seek, develop or acquire nuclear weapons.

In return the international community lifted most of the economic sanctions against Iran. The arms embargo will continue to be in place for a number of years.

However, as regards concrete actions, the JCPOA specifies how Iran's nuclear programme will be reduced and constrained under the next 10 – 15 years in terms of number of centrifuges, stockpile of enriched uranium and advanced nuclear research. As a result Iran's breakout time for producing a nuclear weapon will increase from two months to one year.

"I meet regularly with Foreign Minister Zarif," High Representative/Vice-President Federica Mogherini said without addressing Iran's destabilizing role in the Middle East. "For more than two years now, we have built a very frank relationship with Iran: we are always open about our disagreements, and there are many, and we always try to find the best way to address them."

"Preserving and implementing the nuclear deal with Iran is an absolute must," she underlined. "We simply cannot afford more tension in the Middle East and another nuclear proliferation crisis. We cannot afford to undermine the credibility of a multilateral agreement, endorsed by the UN Security Council Resolution, and we cannot afford to dismantle a deal that works and delivers on its promises."

The JCPOA significantly reduce Iran's nuclear capacity and will no doubt reduce the risk of Iran producing a nuclear weapon in the short-term. What will happen in the medium- and long term is however uncertain. A crucial factor is the monitoring regime. Mogherini stated that it is the strongest monitoring system ever set up.

But as Mogherini admitted there is not much trust between the parties and Iran cannot be trusted. "It is exactly because it is a country like Iran that you need to have a nuclear deal with Iran. Because you do not want a country like Iran in that region to develop a nuclear weapon."

Unfortunately the on-the spot controls are not water tight. International monitors will not have access to the civilian and military nuclear sites whenever they want. The Iranian authorities will have up to 24 days to delay a control, under which time they might remove nuclear material. Disagreements on the monitoring will be resolved by a complicated dispute resolving mechanism.

In her eager to defend the nuclear deal Mogherini claimed that "there is no sunset clause in the agreement", referring to a clause which says that the whole agreement shall cease to have effect after a specific date, unless further action is taken to extend its duration.

"Read all the 104 pages of the agreement - there is no sunset clause to the agreement. The agreement has different provisions - many different provisions - with many different durations. Most of them last for a long, long, long time. Most of them last forever," Mogherini said.

But considering the fact that some of the key limitations on uranium-enrichment activities phase out between 10 and 15 years after the implementation of the deal, starting from January 2016 – can Mogherini and EU be sure that Iran will not resume enrichment activities?

Asked by The Brussels Times to clarify Mogherini's statement, an EU spokesperson seemed less determined. "There are some provisions in the agreement that have a temporary duration. There are other provisions that have no temporary limit – they are valid indefinitely. And there are the commitments of Iran as a member of the Non-Proliferation Treaty."

According to the spokesperson, Iran will also have to apply the IAEA Safeguards Agreement and Additional Protocol forever, which will give the IAEA a mandate to monitor Iranian nuclear activities and allow it to provide assurances about the peaceful nature of the Iranian nuclear programme.

Currently, Iran is implementing the additional protocol on a voluntary basis. Under the nuclear deal, Iran must ratify the additional protocol by October 2023.

EU hopes that the agreement will pave the way for a normalization of relations between Iran and the rest of the world, including Israel. If indeed the agreement is implemented to the letter and the spirit, and Iran during the first 10 – 15 years opens up to the world and embarks on a peaceful policy in the Middle East, the situation by then might be totally different from now.

In the meantime economic relations between EU and Iran are developing. Trade between Iran and Europe increased 94 percent in the first half of 2017, compared to the first half of 2016, according to Mogherini's figures. Oil exports have reached pre-sanctions level, and billions of outstanding oil debts have been paid back.

http://www.brusselstimes.com/eu-affairs/9838/eu-foreign-policy-chief-no-sunset-clause-in-nuclear-deal-with-iran

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TASS Russian News Agency (Moscow, Russia)

Russia Hopes US Refrain from Sanctions over Alleged Violations of INF Treaty — Diplomat

Author Not Attributed

December 18, 2017

The US' Politico reported earlier that Washington was ready to impose further sanctions on Russia over alleged violations of the INF Treaty

MOSCOW, December 18. /TASS/. Russia hopes the United States refrain from sanctions over alleged violations of the Intermediate-Range Nuclear Forces (INF) Treaty, although experience hints to the contrary, Russian Deputy Foreign Minister Sergei Ryabkov said on Monday.

"We would like to hope that the US side refrains from such sanctions but, regrettably, our experience of work on these matters hints to the contrary," he said.

"The US administration seems to be seriously thinking about possible use of additional sanctions without any grounds whatsoever but just following the logic that has fallen short of the

expectations and will continue to disprove that pressure would be able to force Russian towards concessions the US needs," he added.

"It is not the way with Russia," the Russian diplomat stressed.

The US' Politico reported earlier that the US administration was ready to impose further sanctions on Russia over alleged violations of the INF Treaty. According to the newspaper, the sanctions would be imposed by the US Department of Commerce on Russian companies allegedly involved in the development of cruise missiles banned by the treaty. No official confirmation has come from the White House as of yet.

The United States accused Russia of violating the INF Treaty for the first time back in July 2014. After that, Washington has been repeating its accusations that have been categorically denied by Moscow as being vague. In response, Russia put forwards counterclaims against the United States concerning the treaty's implementation.

The INF, of The Intermediate-Range Nuclear Forces, Treaty was signed between the former Soviet Union and the United States on December 8, 1987 and entered into force on June 1, 1988. In 1992, following the collapse of the former Soviet Union, the treaty was multilateralized with the former Soviet republics - Belarus, Kazakhstan and Ukraine - as successors. The INF Treaty covered deployed and non-deployed ground-based short-range missiles (from 500 to 1,000 kilometers) and intermediate-range missiles (from 1,000 to 5,500 kilometers). In all, the former Soviet Union eliminated 1,846 missiles, while the United States scrapped just 846 missiles.

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Sputnik International (Moscow, Russia)

Moscow Calls on US to Withdraw Nukes from European Territory

Author Not Attributed

December 18, 2017

The statement comes in the wake of a media report, saying that the US is planning to spend approximately $214 million on upgrading and building military structures and installations on its air bases in Eastern Europe, Norway and Iceland as part of a "deterrence" initiative against Russia.

The Russian Foreign Ministry has called on the United States to withdraw nuclear weapons from European territory.

"Russia returned all its nuclear weapons to its national territory. We believe that the same should have been done by the American side a long time ago," Mikhail Ulyanov, director of the Department for Nonproliferation and Arms Control at the Russian Foreign Ministry, told Sputnik.

However, according to him, Washington "continues to keep, according to estimates, up to two hundred aviation bombs in Europe."

"And they plan to modernize them in such a way that they become, according to a number of retired US military, 'more suitable for use' due to increased accuracy and reduction of destructive power. If it really is meant to place an additional number of nuclear warheads in Europe beyond what is available, this can only aggravate the situation," Ulyanov said.

Moscow's statement comes in the wake of a report by the Air Force Times newspaper, saying that the US is planning to spend approximately $214 million on upgrading and building military

structures and installations on its air bases in Eastern Europe, Norway and Iceland as part of the so-called European Deterrence Initiative (EDI).

While the EDI, formerly known as the European Reassurance Initiative initiated under the pretext of the Ukrainian crisis that erupted in 2014, which specifically implies the deployment of 3,000-5,000 NATO soldiers and equipment to European countries along Russia's borders to "deter" Moscow, the Russian Foreign Ministry has repeatedly criticized the alliance's buildup in eastern Europe, saying that it was provocative and could lead to regional and global destabilization.

In 2016, NATO decided to approve sending four multinational battalions to each of the Baltic states — namely Lithuania, Latvia and Estonia — and Poland.

Most recently, NATO Secretary General Jens Stoltenberg said that the alliance would maintain increased presence in the Baltic states and Eastern Europe "as long as necessary" after the alliance's members had agreed on instituting a new adaptive command structure to improve the alliance's ability "to improve the movement of military forces across Europe."

Russia Commited to INF Treaty, Doesn't Aim to Exit it Unless Forced by US

Commenting on allegations of Moscow's violation of the INF Treaty, the high-ranking diplomat said that Russia is commited to the agreement and doesn't aim to exit it unless forced by the United States. "We proceed from the fact that the treaty continues to play an important role in ensuring European security and meets the interests of our country at this stage."

According to Ulyanov, NATO's recent statement, calling on Moscow to actively engage in dialogue with Washington on the implementation of the INF Treaty, "sounds rather cynical taking into the account that three authors of this statement are directly involved in INF treaty violations… This is the United States, as well as Romania and Poland which became complicit in violations by permitting the US side to place Mk 41 launch systems on their territory which should not be placed on land."

He went on to say that Washington's decision to finance the development of a new land-based cruise missile system deepens the rift with Russia over the INF Treaty that has recently celebrated its 30th anniversary.

"It is difficult for them [US officials] to understand that the means of pressure they are now trying to implement with respect to Russia in no way contribute to and will never contribute to finding solutions," the diplomat stressed.

Separately, the issue has been commented on by Deputy Foreign Minister Sergei Ryabkov, who said that Moscow hopes that Washington would refrain from considering new sanctions in connection with alleged violations of the INF Treaty by Russia.

"There is no smoke without fire, and perhaps the US administration seriously weighs the possibility of applying additional sanction measures without any grounds whatsoever, simply acting on a logic that the pressure will force Russia to make concessions that the US needs so much, the logic that has never proved efficient and never will," Ryabkov stressed.

US President Donald Trump signed earlier in December a roughly $700 billion National Defense Authorization Act (NDAA) for 2018, which stipulates allocation of $58 million on the development of a new conventional road-mobile ground-launched cruise missile system with a range of between 500 km (310 miles) to 5,500 km.

The move followed US Secretary of State Rex Tillerson's accusations regarding the alleged violations of the treaty, a claim which has been repeatedly denied and called groundless by the Russian Foreign Ministry.

The 1987 INF Treaty prohibits the development, deployment and testing of ground-launched ballistic or cruise missiles with ranges between 300 and 3,400 miles.

Russia Supports Making Comprehensive Nuclear-Test-Ban Treaty Universal

Speaking about Pyongyang's nuclear issue, the diplomat stated, "Russia is in favor of making the CTBT [Comprehensive Nuclear-Test-Ban Treaty] universal. We call on all states, on which its entry into force depends, to sign and ratify this agreement, as we did many years ago. This fully applies to North Korea, as well as to the US and six other countries, especially since its joining the treaty is an indispensable condition for the entry of this agreement into force."

At the same time, according to Ulyanov, it is currently unrealistic to hope that North Korea will do so, because "Pyongyang considers its growing nuclear potential as a means to deter US hostile policies."

"It can be assumed that this issue will be resolved only within the framework of the settlement of the nuclear problem of the Korean Peninsula," Foreign Ministry's official added.

North Korea, which explains its nuclear program by the need to defend itself from the US, conducted its so far most successful nuclear test in September, prompting the UN to adopt a resolution imposing more sanctions on Pyongyang.

Russian officials, including President Vladimir Putin, have repeatedly emphasized that Moscow opposes North Korea's possession of nukes, while calling on the parties involved to resort to diplomacy in order to ease tensions on the Korean Peninsula that have further escalated this year amid Pyongyang's repeated missile launches, with the latest taking place on November 28, when the DPRK tested its most advanced intercontinental ballistic missile (ICBM) yet, known as the Hwasong-15, capable of reaching any target within the mainland United States.

Amid the further deterioration of the situation on the Korean Peninsula this summer, Russia and China have proposed the so-called "double freeze" plan aimed at settling the crisis that urges Pyongyang to stop nuclear tests, while calling on Washington and Seoul to refrain from joint drills. While Moscow and Beijing have emphasized that the proposal is still on the table, the US has already rejected the plan.

https://sputniknews.com/world/201712181060090755-us-nukes-europe-russia/

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MIDDLE EAST

Times of Israel (Jerusalem, Israel)

Israel Is Not the Cause of Middle East's Problems, US Security Strategy Says

Author Not Attributed

December 18, 2017

Trump document says 'states have increasingly found common interests' with Jewish state; blames Iran, jihadists for regional instability

US President Donald Trump's first National Security Strategy declares that Israeli is not the root cause of Middle East turmoil, while also pillorying Iran as the world's leading exponent of state-sponsored terrorism.

The document — designed to serve as a framework for the Trump administration's approach to the world — says that while the Israeli-Palestinian conflict has long been regarded as the main obstacle to regional peace and prosperity, the rise of jihadist terror groups and Iran have made plain that this is not the case.

"For generations the conflict between Israel and the Palestinians has been understood as the prime irritant preventing peace and prosperity in the region. Today, the threats from jihadist terrorist organizations and the threat from Iran are creating the realization that Israel is not the cause of the region's problems. States have increasingly found common interests with Israel in confronting common threats," the document states.

The hard-hitting text released Monday also says the US "remains committed to helping facilitate a comprehensive peace agreement that is acceptable to both Israelis and Palestinians."

The document — which has been 11 months in the making — is required by law, and is designed to form a framework for how America approaches the world.

Previous national security strategies have been released without much fanfare and served as guideposts, rather than doctrinal commandments.

But in this topsy-turvy administration, the document has taken on extra significance. Allies will now look to it for clarity about the intentions of the world's preeminent economic and military power.

The text slams the Iranian nuclear deal and says Tehran is continuing to destabilize the Middle East.

"Iran, the world's leading state sponsor of terrorism, has taken advantage of instability to expand its influence through partners and proxies, weapon proliferation, and funding. It continues to develop more capable ballistic missiles and intelligence capabilities, and it undertakes malicious cyber activities. These activities have continued unabated since the 2015 nuclear deal," it reads.

The document struck out at Russia and China, using remarkably biting language to frame Beijing and Moscow as global competitors.

"China and Russia challenge American power, influence, and interests, attempting to erode American security and prosperity," the document states — a sharp break from Trump's friendly approach to Presidents Xi Jinping and Vladimir Putin.

Accusing China of seeking "to displace the United States" in Asia, the strategy is a litany of US grievances, from the Chinese stealing data to spreading "features of its authoritarian system."

"Contrary to our hopes, China expanded its power at the expense of the sovereignty of others," it says.

Russian nuclear weapons are deemed "the most significant existential threat to the United States," and the Kremlin is described as a power that "seeks to restore its great power status and establish spheres of influence near its borders."

"Russia aims to weaken US influence in the world and divide us from our allies and partners," it warns.

Trump expanded on the new strategy — based on his trademark "America First" slogan — in a Washington speech Monday.

He said a new era of competition was underway and that the US will follow his 2016 campaign doctrine of "America First." The US, he said, will cooperate with other countries in a manner that always protects our national interests."

Trump also said that the United States "will stand up for ourselves and our country like we have never stood up before." He called for competing "with every instrument of our national power."

Guidepost or diversion?

The text identifies four main priorities: protecting the country and the American people; promoting American prosperity; preserving peace through strength; and advancing American influence.

Foreign officials in Washington often complain that there are effectively "two administrations" — one that they hear from day-to-day in contacts with the State Department and Pentagon, and another coming from Trump, often via Twitter in 280 characters or fewer.

Trump and his advisers often publicly differ starkly on fundamental security issues from the Middle East to talks with North Korea.

But there is little evidence that Trump, who has bucked norms repeatedly in his meteoric rise to power, will stick to the script.

His comments about Russia will be especially closely watched. He has repeatedly played down concerns from the Pentagon, State Department and CIA about Putin's meddling in the 2016 election.

So far, four Trump campaign aides have faced criminal charges as a result of an investigation into possible collusion between Trump's campaign team and Moscow.

Legacy of ashes

Since coming to office, Trump has work to dismantle the legacy of his predecessor Barack Obama on issues ranging from climate change to free trade, sometimes leaving Washington isolated on the world stage.

On Monday, the United Nations Security Council overwhelmingly voted to approve a resolution to reject Trump's controversial recent decision to recognize Jerusalem as the capital of Israel — a move Washington blocked with its veto.

Trump's National Security Strategy also breaks with allies on the threat of climate change, avoiding the term outright and instead calling for "energy dominance."

"America's central position in the global energy system as a leading producer, consumer, and innovator — ensures that markets are free and US infrastructure is resilient and secure," it says.

Ascending to power on a message resolutely skeptical of climate change, Trump said in June that he would pull the US out of the Paris agreement on climate change signed by almost 200 countries.

A year before he left office, Obama said climate change would affect the way America's military must defend the country, through profound adjustments in organization, training and protection of infrastructure.

https://www.timesofisrael.com/israel-not-at-heart-of-middle-east-turmoil-new-us-security-strategy-says/

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Jewish Telegraphic Agency (New York, NY)

Iranian Convicted of Spying for Israel Confesses to Informing on Nuclear Scientists

Author Not Attributed

December 17, 2017

An Iranian researcher convicted of spying for Israel's Mossad intelligence service confessed on Iran state television to providing information to a foreign intelligence service about Iranian nuclear scientists.

The four scientists were later assassinated between 2010 and 2012 in an apparent attempt to sabotage Iran's nuclear program.

In the national broadcast Sunday, Ahmad Reza Jalali said he was recruited to an unnamed country's foreign intelligence service while he was studying in a European country that he also did not name.

The broadcast displayed images of a Swedish ID card and Rome's Colosseum, The Associated Press reported.

Jalali has been held in jail in Iran since April 2016. He was convicted and sentenced to death in October 2017 for working with Israel's Mossad foreign intelligence agency and assisting in the assassination of several senior nuclear scientists. Iran's Supreme Court upheld his death sentence several months ago.

Jalali worked as an emergency medicine specialist resident in Sweden. He was a visiting professor at Belgium's Vrije University when he was arrested during a trip to Iran in April 2016.

https://www.jta.org/2017/12/17/news-opinion/israel-middle-east/iranian-convicted-of-spying-for-israels-mossad-confesses-to-leaking-info-on-countrys-nuclear-scientists

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Kyodo News (Tokyo, Japan)

Middle East Would Be Worse Off without Nuclear Deal: Iran Negotiator

By Mohammad Gharebag

December 15, 2017

VIENNA -- Amid indications that the administration of U.S. President Donald Trump may be ready to walk away from a 2015 deal aimed at curbing Iran's nuclear activities, a senior Iranian official says that Tehran is "fully prepared" for that eventuality, but he warned that its collapse could jeopardize regional stability.

"It's up to the U.S. government and Mr. Trump. If he feels that the Middle East will be a better place without (the nuclear deal), then he can try it," Deputy Foreign Minister Abbas Araghchi, Iran's chief nuclear negotiator, told Kyodo News in an interview Wednesday in Vienna.

Speaking a day after a meeting in Vienna of the Joint Commission of the Joint Comprehensive Plan of Action, as the landmark deal is formally called, Araghchi said his ministry and the Iran Atomic Energy Organization already have instructions on how to react if the U.S. government pulls out.

His remarks came just days after U.S. media reports that Trump, irked at the U.S. Congress for not implementing new nuclear sanctions against Iran, will likely pull the United States out of the deal

entirely when it comes up for recertification on Jan. 13, under a law that requires him to waive such sanctions regularly.

In October, he refused to recertify it, accusing Iran of violating the spirit of the agreement, alleging its support for terrorism across Middle East and vowing never to allow it to acquire nuclear weapons.

Under the painstakingly negotiated agreement that Iran signed in July 2015 with United States, Britain, France, Germany, China and Russia, as well as the European Union, Tehran agreed to curb its nuclear activities such as uranium enrichment in return for the lifting of crippling economic and financial sanctions.

Trump has repeatedly called the deal signed during the preceding administration an "embarrassment." While campaigning for the presidency, he vowed to scrap it if elected -- though other parties dispute his authority to do so unilaterally.

Since taking office in January, however, Trump has suggested it could be renegotiated to include limits on Iran's missile capabilities.

"The nuclear deal is not renegotiable and also it's not possible to open and add anything else to it," Araghchi said, while noting that the deal was unanimously endorsed by the U.N. Security Council and that the International Atomic Energy Agency has repeatedly confirmed Iran's compliance with its obligations.

Regarding ongoing back-and-forth between Trump and the U.S. Congress over the deal and over Trump's push to ramp up sanctions on Iran, the deputy foreign minister said, "This has nothing to do with us. What is important for us is U.S. full compliance."

Araghchi said the U.S. delegation assured the Joint Commission that the United States remains committed to fulfilling its obligations under the deal, even as it has imposed sanctions against Iran since implementation began and is mulling even more.

He accused Washington of also violating the spirit of the deal by creating an atmosphere of "confusion" and "uncertainty" around it, which has rattled foreign companies operating in Iran and frightened off potential investors.

The commission that met in Vienna is responsible for overseeing the deal's implementation, including the sanctions-lifting process, and dealing with complaints raised by the parties.

It was agreed Wednesday to hold the next meeting in April, Araghchi said.

The European Union has rebuffed Trump's call for the deal, which culminated 12 years of EU-facilitated diplomacy, to be renegotiated, insisting it is "working."

EU foreign ministers warned last October that its collapse could have serious security implications, while also undermining efforts to get North Korea to freeze its nuclear and missile development programs.

https://english.kyodonews.net/news/2017/12/e02a454bdb0b-middle-east-would-be-worse-off-without-nuclear-deal-iran-negotiator.html

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The Cipher Brief (Washington, DC)

Iran's "Kitten" Cyber Hackers Poised to Strike If Trump Shreds Nuke Deal

By Levi Maxey

December 17, 2017

Tehran poses an increasing cyber threat to the U.S., in light of the Trump administration's allegations that Iran is violating United Nations Security Council resolutions tied to the nuclear agreement. Iran-sponsored hackers—dismissively referred to as "kittens" for their original lack of sophistication—are bolstering their cyber warfare capabilities as part of their rivalry with Saudi Arabia. But should President Donald Trump take further steps to scrap the nuclear deal, it could mean an uptick in Iranian state-sponsored cyber intrusions into American and allied systems, with the goals of espionage, subversion, sabotage and possibly coercion.

Since 2011, Iran has worked to establish itself as a prominent aggressor in cyberspace, alongside China, Russia and North Korea. Evolving from mere website defacement and crude censorship domestically in the early 2000s, Iran has become a player in sustained cyber espionage campaigns, disruptive denial of service (DDoS) attacks and the probing of networks for critical infrastructure facilities.

Iran wasn't pursuing cyber capabilities with much urgency, experts say, until it was revealed in 2010 that a joint Israeli-U.S. Stuxnet worm sabotaged nuclear centrifuges at Iran's facility in Natanz. As the first-known instance of virtual intrusions resulting in physical effects, the operation demonstrated the potential effectiveness of such an attack and has informed much of Iranian cyber operations since.

Iran often has conducted disruptive cyber operations loosely in response to actions taken by others. It sees offensive cyber operations as an asymmetric but proportional tool for retaliation. For example, following the Stuxnet attack and the imposition of new sanctions on Iran's oil and financial sectors in 2011, Tehran was suspected of retaliating in 2012 by releasing the Shamoon disk-wiping malware into the networks of Saudi oil giant Saudi Aramco and Qatar's natural gas authority, RasGas. It also launched volleys of DDoS attacks against at least 46 major U.S. financial systems.

Iran commonly conducts its state-sponsored cyber operations behind a thin veil of hacktivism. From 2011 to 2013, a group calling itself the Qassam Cyber Fighters launched DDoS attacks that flooded the servers of U.S. banks with artificial traffic until they became inaccessible. In March 2016, the Justice Department unsealed indictments of seven individuals—employees of the Iran-based computer companies ITSecTeam and Mersad Company—for conducting the DDoS attacks — and intrusions into a small dam in upstate New York—on behalf of the Islamic Revolutionary Guard Corps (IRGC), the arm of Iran's military formed in the aftermath of the 1979 Iranian revolution.

While much of Iran's cyber operations have been attempts at asymmetric disruption against its Gulf rivals, Israel and the United States, it has recalculated since the 2015 negotiation of the Joint Comprehensive Plan of Action (JCPOA), the Iran nuclear deal.

Under scrutiny by the international community, Iran has largely reined in disruptive attacks against the U.S., with some operations still deployed against Saudi Arabia. In November 2016, a variant of the disk-wiping malware Shamoon was deployed against Saudi aviation and transportation authorities.

Rather than relying on disruptive attacks against the West, Iran has pursued cyber-enabled information warfare against its regional competitors, namely Saudi Arabia. By utilizing cyber proxies to access and weaponize privileged information, Iran has subtly sought to undermine Saudi

Arabia's political standing in the region and in the eyes of international allies. This kind of grey-zone offensive—an act short of war—is a page right out of the Russian intelligence playbook of active measures in Europe and the U.S.

In April 2015, the pro-Saudi newspaper Al Hayat was hacked by a group calling itself the Yemen Cyber Army, which experts say has loose ties to Iran. The attack replaced the media outlet's front page with threatening messages aimed at dissuading the Saudis from getting involved in the civil unrest bubbling across their southern border. The hack was followed quickly by stories on Iran's state-run FARS news agency and Russia's RT network, citing the Yemen Cyber Army for breaching the Saudi foreign ministry and its threats to release personal information on Saudi officials and expose diplomatic correspondence that allegedly suggested Saudi support of Islamist groups in the region. One month later, WikiLeaks published material likely taken from the trove of stolen correspondence.

In another example, an Iran-linked Hezbollah hacktivist group known as the Islamic Cyber Resistance leaked sensitive material related to the Saudi army, the Saudi Binladin Group and the Israeli Defense Forces, following the December 2013 assassination of Hezbollah leader Hassan al-Laqis, according to Matthew McInniss, an AEI scholar now working on Iran in the Trump State Department . Ties also have been detected between Iran and the Syrian Electronic Army, the hacking wing of the regime of Bashar al-Assad, according to Cipher Brief expert and former CIA and NSA chief Michael Hayden.

The link between Iranian government support and the cyber proxy actors is difficult to prove. But it would follow the pattern of Iranian military assistance given to other types of proxy forces in Lebanon, Syria and Yemen.

The governmental structure in Iran that oversees cyber-related activities is the Supreme Council of Cyberspace, established by Ayatollah Ali Khamenei in March 2012. It consists of representatives from various Iranian intelligence and security services. However, the direct command-and-control structure for engaging in cyber operations remains a mystery, particularly when it comes to cyber proxies. While it could be the responsibility of Iran's Quds Force, the external wing of the IRGC, the lack of a clear command-and-control system could be intentional. Similar to Iran's "mosaic defense" military structure, cyber operations appear more decentralized and fluid than other countries with advanced cyber capabilities—Russia and China, for example—complicating the tracking and attribution of attacks.

The Iranian nuclear deal may have been some cyber-deterrent value, in that it reined in Iranian disruptive attacks against the West, but this could be short-lived. Rhetoric from the Trump administration is stoking the fire, including recent statements by U.S. Ambassador to the United Nations Nikki Haley that Iran is violating the nuclear agreement.

Iran, as a result, is likely to engage in broad-spectrum cyber espionage to alleviate that uncertainty. For example, Operation Cleaver in 2012-14 hit U.S. military targets, as well as systems in critical industries such as energy and utilities, oil and gas, chemicals, airlines and transportation hubs, global telecommunications, healthcare, aerospace, education and the defense industrial base. Earlier this month, reports surfaced of a new Iranian state-sponsored actor—referred to as APT 34—conducting reconnaissance of critical infrastructure in the Middle East.

While the probing of such essential systems is alarming, it is expected as a contingency plan, should relations with adversaries escalate. The New York Times reported that the U.S. had similar plans – known as Operation Nitro Zeus – to disrupt Iranian critical services should the nuclear negotiations have gone sideways during the Obama administration. It is likely the Trump administration is devising similar contingency plans.

https://www.thecipherbrief.com/article/middle-east/irans-kitten-cyber-hackers-poised-strike-trump-shreds-nuke-deal

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INDIA/PAKISTAN

Firstpost (Mumbai, India)

Donald Trump's National Security Strategy Indicates Shift in US View of India and Pakistan over Two Years

By Karan Pradhan

December 19, 2017

The National Security Strategy (NSS) of the United States of America was released on Monday. This 60-odd-page document, the first of its sort by the Donald Trump administration, seeks to outline the US' internal and external challenges and lay out a roadmap for the year ahead. According to the Goldwater-Nichols Defense Department Reorganisation Act of 1986, the publishing of the NSS is meant to be an annual affair. However, barring Ronald Reagan, no president has produced a new NSS every year. In fact, the eight-year tenure of Trump's predecessor, Barack Obama, only saw two such reports being published. And while these documents rarely translate fully into policy, they are indicative of Washington's mindset and shall be examined accordingly.

Getting back to the 2017 edition, there are a number of a notable features of Trump's 'strategy of principled realism that is guided by outcomes, not ideology', like the absence of anything relating to climate change — the document instead dwells on the merits of fossil fuels — and a suspicious view of China and Russia. Most relevant to South Asia, however, are the references to India and Pakistan, particularly when seen as an evolution of how Obama's NSS of 2015 viewed both countries.

On India

In the 2015 iteration of this text, India found itself mentioned six times — half of which referred to the growing bilateral relationship, something that blossomed during the Obama presidency and has the potential to go even further under Trump.

Stating that the US was "primed to unlock the potential of (its) relationship with India", the document listed that there were several areas of strategic and economic convergence — "particularly in the areas of security, energy, and the environment" and the "rebalance to Asia and the Pacific". It went on to add that the US recognised the effect "India's potential" would have on the future of major power relations. Further, along with supporting India's role as a regional security provider, the document backed its "its expanded participation in critical regional institutions".

The most palpable theme to emerge was that Washington saw 'potential' in New Delhi, but largely saw India as a work-in-progress rather than the finished article.

Flash-forward to 2017 and Trump's NSS paints India in a very different light: "We welcome India's emergence as a leading global power and stronger strategic and defence partner," it proclaims and adds that the US will "support its leadership role in Indian Ocean security and throughout the broader region".

For starters and from the language used, it would appear that the US now sees India as less of a work-in-progress and slightly more as an almost-finished article.

The NSS goes on to state, "We will expand our defence and security cooperation with India, a Major Defence Partner of the United States, and support India's growing relationships throughout the region" and "We will seek to increase quadrilateral cooperation with Japan, Australia, and India." And finally, "...we will encourage India to increase its economic assistance in the region."

And having seen India as an almost-finished article and made all the right noises (see: leading global power), it's time for the country to make itself useful. The allusion to quadrilateral cooperation and India's 'growing relationships throughout the region' can be seen as a thinly-veiled reference to the country's role in the US' China strategy. And the bit about economic assistance is unmistakably linked to Afghanistan. More on this shortly.

Donald Trump speaks on national security in Washington on Monday. APDonald Trump speaks on national security in Washington on Monday. AP

On Pakistan

- "We will also work with the countries of the region, including Pakistan, to mitigate the threat from terrorism and to support a viable peace and reconciliation process to end the violence in Afghanistan and improve regional stability."

- "(W)e will continue to work with both India and Pakistan to promote strategic stability, combat terrorism, and advance regional economic integration in South and Central Asia."

These were the only two references to Pakistan in Obama's NSS of 2015 and it's not entirely unthinkable to imagine that Pakistan was still seen — if one goes by the document — as one among a set of countries that could be relied upon to bring about peace to the region. Not, it must be added, as a country responsible for instability or for fostering terrorists.

The NSS of 2017, however, is a very different story. So much so, that it had Pakistani NSA Nasser Khan Janjua up in arms and led to him alleging that the US was showing preferential treatment to India. But what was it that raised his hackles?

The very first mention of the country refers to the threat from "militants operating from within Pakistan" and the very final one to the fact that the US will "insist that Pakistan take decisive action against militant and terrorist groups operating from its soil". The US, the document adds, seeks "a Pakistan that is not engaged in destabilising behaviour". It goes on to add that Washington will press Islamabad "to intensify its counterterrorism efforts" and promises that trade and investment relations will be built "as security improves and as Pakistan demonstrates that it will assist the United States in our counterterrorism goals".

Finally, the document flags a potential India-Pakistan "military conflict that could lead to a nuclear exchange" as an area of grave concern and urges Islamabad "to continue demonstrating that it is a responsible steward of its nuclear assets".

If it wasn't just the insinuations against Pakistan, with which Page 50 of the NSS 2017 is replete, that got Janjua's goat, it's quite likely it was the tone of the statements about the country that did. It appears to be, in equal parts, an admonishment and a threat. Accusing Pakistan of being engaged in 'destabilising behaviour', warning it against being irresponsible with its nukes and 'insisting' that it cracks down on terrorists (something, it is implied, Pakistan has shown no inclination to do so far) and challenging it to show continued responsibility with nukes comes across like a school matron disciplining an errant child. The part about the desire to build trade and investment ties can be read as a threat because the wording of the text implies that this won't happen unless security improves and Pakistan 'demonstrates' that it will be part of the counterterrorism effort.

Contrasting the glowing references to India with the nearly-damning ones to Pakistan goes some way in showing just why Janjua reacted the way he did.

Trump's National Security Strategy dwelt on Russia and China, but its references to India and Pakistan were instructive. APTrump's National Security Strategy dwelt on Russia and China, but its references to India and Pakistan were instructive. AP

So what to make of all this?

The Trump administration — and more specifically, the man at the helm of it — has been talking tough on Pakistan ever since it took over in January this year. For instance, in August, when the US approved a $255-million aid package for Pakistan (having provided nearly $33 billion since 2002), Trump said, "We can no longer be silent about Pakistan's safe havens for terrorist organisations, the Taliban, and other groups that pose a threat to the region and beyond... We have been paying Pakistan billions and billions of dollars at the same time they are housing the very terrorists that we are fighting. But that will have to change, and that will change immediately." Secretary of State Rex Tillerson added, "We're going to be conditioning our support for Pakistan and our relationship with them on them delivering results in this area."

With that in mind, it's unsurprising to see the sort of language used in various public utterances manifest itself on the pages of the NSS. For the near future, it looks like this public war of words between Islamabad and Washington will continue... largely in the press. Trump or a member of his Cabinet will fire off a salvo at Pakistan. Foreign Minister Khawaja Asif or Janjua or someone else will return fire. Frostiness will reign supreme and then a bilateral visit by a secretary or minister will smooth things over until the next salvo. Will this iteration of the NSS make a difference to Pakistan's relationship with terrorism emanating from its own soil? Hard to be certain, but for now, it seems rather unlikely.

What all this means for India is very different. It would be easy for New Delhi to thumb its nose at China — that took a bit of stick in the NSS — and pat itself on the back about how mighty it has become on the world stage that even the US acknowledges its majesty and gives it the proverbial bhaav. Unfortunately, it looks like the reality is very far removed from this interpretation.

Admittedly, Trump — or his NSS at the very least — acknowledges India as a leader and a partner. However, the lines about India that follow and a cursory reading of the rest of the document indicate that there are three clear areas (and one slightly fuzzy one) in which the US now needs India:

First, as a part of the US strategy to counter China: The references to leadership in the region, New Delhi's growing relationships in the region and quadrilateral cooperation make this part very clear. Washington is wary of Beijing's growing clout and using New Delhi as its 'guy on the inside' will ostensibly help the US 'contain' China, particularly in the South China Sea, without getting its own hands too dirty.

Second, as a part of the US strategy to curb terrorism emanating from Pakistan: All that talk of regional and global leadership when read alongside the lines on Pakistan indicate that the US is not too pleased with Pakistan. And by demonstrating this state of displeasure while talking up India — all publicly, the document gives the impression that Washington has picked a side. In doing so, the effort could be to embolden India to carry on with its actions against Pakistan. Once again, this would save the US the effort of actually getting its hands dirty.

Third, the allusion to India's economic assistance in the region clearly refers to Afghanistan: New Delhi and Kabul share cordial, if not outright warm, relations and Washington is not unaware. The US drawdown from Afghanistan has been a nightmare that keeps on giving (grief, that is) and costing American taxpayers millions every year. What better way than to pull out of yet another botched endgame in that country than by getting a willing neighbour to foot the bill?

And the fuzzy fourth, three references to the India-US defence partnership in a document that is fairly critical of Russia, could hint at Trump's willingness to take Moscow (New Delhi's largest source of arms imports over the years) out of the game by striking better defence deals with India. Despite still having a great deal of warmth and positivity, the India-Russia relationship is at its lowest point since Independence. Could the US be planning to replace Russia in India's mind space? Perhaps, but it's far too early to even contemplate the remotest notion of all that.

Of course, there is the fact that India is obviously not going to unquestioningly and obediently follow the US' instructions on foreign policy. But, the NSS is a good indicator of the roles Washington sees other countries playing. To sum it all up, it's true that there's been a major shift in the way the US perceives of India — Washington sees New Delhi as a far more useful player in its game than ever before. It is still too premature and extreme to use the word 'pawn' just yet.

http://www.firstpost.com/india/donald-trumps-national-security-strategy-indicates-clear-shift-in-us-view-of-india-and-pakistan-over-two-years-4265323.html

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Times of India (New Delhi, India)

PAK NSA Blames US on Kashmir: 'Nuclear War a Real Possibility'

By Omer Farooq Khan

December 18, 2017

ISLAMABAD: Peeved at the US for backing India on the Kashmir issue, Pakistan's National Security Advisor (NSA) Lt Gen (retired) Nasser Khan Janjua, warned on Monday that nuclear war in South Asia was a real possibility.

"The stability of the South Asian region hangs in a delicate balance, and the possibility of nuclear war cannot be ruled out," media quoted the NSA (to Prime Minister Shahid Khan Abbasi) saying at a seminar on national security policy in Islamabad.

"India has been stockpiling a range of dangerous weapons and threatens Pakistan continuously of conventional warfare," Janjua said, adding that security in South Asia was under pressure.

Criticising the US role in the region, the NSA said that Washington was "speaking India's language" and that the two nations share identical stance on the Kashmir issue. "The US is following the Indian policy on the longstanding Kashmir dispute," he remarked.

The US, Janjua said, was willing to give India a bigger role in Afghanistan, a claim that most Pakistani authorities have been making ever since US President Donald Trump announced his new Afghanistan strategy.

Washington blames Islamabad for supporting and sponsoring terrorism in the region by retaining its ties with the Haqqani network and the Taliban. But Janjua said terrorism emerged in Pakistan only after the country decided to support the US and the West. "Pakistan has paid a heavy price in its fight against terrorism but the world never recognised its losses," he said.

The NSA claimed that the US, in its opposition to the rise of China and Russia, has disrupted the balance of power in South Asia. "As part of its (US) policy to counter Chinese influence in South Asia, the US is conspiring against China Pakistan Economic Corridor (CPEC) along with the Indians," he said.

https://timesofindia.indiatimes.com/world/pakistan/pak-nsa-blames-us-on-kashmir-nuclear-war-a-real-possibility/articleshow/62123374.cms

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COMMENTARY

Bulletin of the Atomic Scientists (Chicago, IL)

Playing at Nuclear War

By Timothy Westmyer

December 14, 2017

The hallmark of a Norman Rockwell Christmas morning is gathering around the fireplace to drink hot chocolate and open gifts with your loved ones. Depending on what you find in your stockings this year, you might come face-to-face with nuclear war like you never have before. Virtually speaking, that is.

On the Christmas gift list of many children (and geeky grown-ups) these days are the latest virtual reality, or VR, systems for use with a video game console, computer, or smartphone. The PlayStation VR, HTC Vive, Facebook's Oculus Rift, Samsung Gear VR, Google Cardboard, and others give enthusiasts many options to explore the rapidly emerging catalog of virtual reality games and applications.

In a way, this marks the latest iteration of a trend that has been around since the advent of the atomic age. Nuclear science and nuclear weapons have occupied a dominant position in mainstream popular culture, so it should be no surprise that VR has gone nuclear as well.

But virtual reality systems contain something inherently different: They use technology to create realistic images and surround sound to make a person sense that they are physically present in a simulated environment. This feature has the potential to make VR ideal for immersive storytelling and for professional training for emergency situations, as well as for documentaries and for what some refer to as nuclear disaster tourism.

And don't forget video games.

What remains to be seen is whether this brave new VR world could be harnessed to reduce the danger of nuclear weapons—or if it will remain an entertaining gimmick, destined to go the way of drive-ins and hula hoops.

To find out where the technology stood, I decided to try out the different virtual reality applications myself. After telling my wife that it was essential for vital research for an article I was working on, she let me buy a PlayStation VR. What follows is not an exhaustive compendium of all that is out there, but a few highlights—though it does take in virtual reality applications that have been created from around the globe.

Playing nuclear war in virtual reality. A great piece of art—whether it is a film, a painting, or even a video game—has the ability to provoke emotions and push the viewer to see an issue from a new perspective. During the Cold War, the anti-nuclear weapon movement used painting, music, poetry, and film to comment on nuclear risks. Now, that medium may be virtual reality.

First, some background. The VR setup uses a camera to track movements of a headset and two handheld controllers, so that when I turned my head or moved my arms, the 360-degree

environment displayed on the visors moved in nearly perfect unison. Though a long way from the holodeck virtual reality environment featured in Star Trek, it is nevertheless extraordinary how riveting the visuals look and how strong a reaction they evoke.

There are certainly technical limitations in VR systems today. It can be difficult to focus the lens, and the graphics are a step down from what you see on high-definition televisions or the latest gaming consoles. There is a noticeable lack of tactile feedback and some people suffer from motion sickness after using VR for long periods of time. And while there are cheaper options available, high-tech VR systems are still largely cost-prohibitive for the average household.

But these constraints are unlikely to hold back VR systems as long as there is a steady demand for content. And the technology is sure to improve.

In my pursuit of what VR has to say about nukes, I tried out a handful of video games and several VR applications that are akin to interactive documentaries. The first game I tried was Megaton Rainfall, a "superhero simulator" designed by a company in Spain that gives you nearly unlimited power—but also the global responsibility of stopping an alien invasion. Inspired by the movies War of the Worlds and Independence Day, the game allows the player to fly around Earth to fight off intruders with powers such as a "Megaton blast" that can destroy massive spaceships but also inflict city-leveling collateral damage. The first time I missed an enemy and accidentally hit a city center, I was forced to listen to thousands of digital screams as a fireball destroyed people and collapsed buildings, with imagery torn straight from the most iconic nuclear detonations on film. No matter where I turned my head in real life, I was confronted with the verisimilitude of megadeath and needed to take a long break to regain my composure. This was not a situation that I found myself in playing Super Mario Bros.

Using a Google Cardboard VR headset and my smartphone, up next was the mobile game Cold War Nuclear Strike VR, made by a consortium of educators using technology to enrich teaching in schools across London. The game puts you in the backyard of an average early-1980s British home, enjoying your day before the radio advises you to seek shelter in a nuclear fallout bunker because World War III has just started. You only have a couple of seconds to head inside your bunker before the game declares you dead.

There is not much to do once you are underground, but players can look at the piles of recommended bunker supplies and at a survival checklist on the wall that has a reminder to stock the shelter with board games for your family. I suddenly noticed that I was standing alone; my virtual family apparently did not make it into the shelter with me. This realization left me fearing for the safety of my virtual loved ones and feeling a creeping sense of survivor's guilt—something which the National Academies of Sciences' study, Psychological Consequences of Disaster: Analogies for the Nuclear Case, had said might happen. According to the game's creators, the stimulation of such feelings was intentional; their mission was to "create a scenario that presented pupils with a realistic experience of the genuine level of fear" during the Cold War and to "portray how life could change dramatically and instantly in the case of a nuclear strike." They also promised, however, to not "leave students traumatized" and instead "provide just enough jeopardy and threat to leave them feeling they have just experienced something significant."

(It's worth noting that the incredibly popular video game Fallout 4, about life after nuclear war, is also available this holiday season. The Bulletin already delved into the popularity of this game, but playing the expansive story in a VR environment promises to be an entirely different adventure.)

Nuclear tourism with a VR passport. Several virtual reality programs brought me on a tour of the same two key locations in nuclear history. The first was Atomic Ghost Fleet, an application developed by a UK-based company that lets you tag along with a marine research crew as they use

360-degree underwater cameras to film naval vessels sunk at Bikini Atoll by US nuclear tests in 1946. The story starts with you standing on a beach looking at the ocean as an immense atmospheric nuclear test mushroom cloud fills the screen. You then dive further into the narrative as a submarine visits ships that survived World War II, only to later be used as target practice in nuclear tests to measure the impact of atomic weapons against navies. Edited together with contemporary World War II footage, there were several moments where I forgot for a moment that I was not actually there, floating mesmerized past corals as big as the 44mm guns on the sunken USS Lamson destroyer itself, amid abundant schools of fish—showing the resiliency of life in the waters of Bikini Atoll after being laid waste by a nuclear test more than 70 years ago. I involuntarily swayed on my couch with the imaginary ocean current—which seemed as real to me as the sight of the massive submerged aircraft carrier right in front of me.

I turned next to a pair of virtual trips to Pripyat in Ukraine to witness a once-bustling community now largely abandoned in the aftermath of the 1986 Chernobyl Nuclear Power Plant disaster. Frontline partnered with New York University to film a tour of the exclusion zone with a guide who had been evacuated as a child but who now brings visitors to the site to share his experience and teach about what happened. Return to Chernobyl is an amazing look at the human toll of the nuclear disaster that displaced upwards of 300,000 people.

In contrast, the Chernobyl VR Project was a more interactive experience, designed by a studio in Poland, that "combines video games with educational and movie narrative software" to allow players to freely walk around locations and interact with objects on-site. Locations include the nuclear plant, a dilapidated school, an abandoned amusement park, the radiation containment shelter, and others. Players can hear from survivors of the accident and deploy Geiger counters to measure radiation levels at specific areas. The Chernobyl VR Project also lets you visit the Duga-1 radar, an over-the-horizon early warning system built to allow the Soviet Union to detect incoming ballistic missiles and heavy bombers from the US Eastern seaboard—before the system was contaminated by the nuclear accident.

The Chernobyl VR Project is a good example of how virtual reality systems could be used as an interactive learning tool. Walking around the 3D-rendered environment of a music room at the school, you can hear faded memories of instruments and children's laughter, alongside wind blowing through broken windows and the sounds of creaking floorboards. "Playing"—if it may be called that—a piano in the music room cues a narrator to begin talking about what life was like for average schoolchildren in the Soviet Union. These two virtual tours of Chernobyl leave the viewer with a deeper understanding of this tragic event in nuclear history beyond what even the best writers can describe on paper. I felt the sadness of the citizens of Pripyat in being uprooted from their homes, and their frustrations with the government's response to the accident—along with a sense of optimism about what Pripyat citizens were trying to build today.

Possibilities and pitfalls in using VR to teach about nukes. From my own immediate responses to the technology, I got the impression that virtual reality truly does have the potential to let people engage with nuclear topics in innovative ways. A well-made VR application can offer the closest thing to a real-life nuclear accident—making it a great hands-on training tool. Apparently, I am not alone in coming to this conclusion; an official with the International Atomic Energy Agency's Incident and Emergency Center said that VR enabled his team to "conduct large scale [nuclear] emergency simulations" and let participants train "in environments impossible to simulate otherwise, such as emergencies with very high radiation exposure scenarios." Similarly, the Nuclear Futures Laboratory at Princeton University and the nonprofit corporation Games for Change are working together on using VR to demonstrate verification techniques for future nuclear arms control treaties, as well as helping the public understand the risks of keeping large nuclear arsenals ready to launch at a moment's notice.

Virtual reality applications may also be able to update how civil defense planners prepare for a nuclear attack. Instead of Civil Defense pamphlets and public service announcements, VR could help people visualize how to prepare to survive fallout, or what to do in the event of terrorists exploding a radiological dirty bomb. Of course, participating in a virtual reality experience in the comfort of your living room does not approach the horror of a nuclear detonation, but its immersiveness may help bring home the consequences of what happens when large quantities of radiological material or nuclear weapons are left vulnerable around the world.

Once you go beyond using VR as a training tool, however, and start to think about how it can be used in storytelling or as a call to action, the situation becomes much more complicated. It is not enough to just simulate the sights and sounds of nuclear horror. As I discovered, this exposure can leave you feeling overwhelmed and without the ability to do anything about it. I may have sensed a tiny fraction of what it is like to be near ground zero for a nuclear detonation, but what am I to do with this observation? The Doomsday Clock is at two-and-a-half minutes to midnight and my atomic anxieties are already dialed to eleven.

There are several endeavors that use virtual reality to try to deal with this problem of feeling helpless.

One is the Ways of Knowing project undertaken by Lovely Umayam, a research analyst with the Stimson Center and founder of Bombshelltoe, a blog featuring stories about nuclear history, politics, art, and media. This multimedia project uses 360-degree cameras and other VR technologies to better understand the Navajo people's health and traditions via their enduring, traumatic encounters with uranium mining. By sharing these narratives, the project seeks to ask whether there are "steps we can take as individuals or communities to support environmental rehabilitation and remediation caused by nuclear weapons production."

Another, similar project is the Australian VR movie Collisions, which tells the story of indigenous elder Nyarri Morgan, whose first interactions with the outside world were during the Maralinga nuclear tests in the state of Western Australia during the 1950s. Released in 2016 and featured at Sundance Institute, the story tries to come to grips with an often-overlooked part of the history of the land down-under, when British atomic bombs were tested on Australian soil.

What all these projects have in common is that they use the technology of virtual reality to tell powerful, nuanced stories that inspire people toward important causes. They are also evidence of how it is possible to keep the immersive nature of VR from devolving the player experience into atomic voyeurism. (For example, the popular DEFCON series—a real-time strategy game inspired by "the big board" of Dr. Strangelove and WarGames—lets users play a game of global thermonuclear war. Earlier this year, a VR update was added, that allows players to sit in a simulated war room as spectators to the end of the world.)

On a similar note, disaster tourism—travel by curiosity seekers to sites of major catastrophes—can be a real dilemma for those seeking to better the public's understanding of these events. I would enjoy interacting with a simulated missile launch facility or a demonstration of how the president can authorize an attack with the nuclear football, but the application would need to be designed properly to work as an educational tool instead of just a game. Artists are free to create whatever art they wish, of course, and there is definitely a place for escapist entertainment in video games. But if they aim to inspire people to do more than sit in their Adirondack chairs to watch the spectacle of a nuclear bomb exploding, the creators of VR applications will need to think carefully about their craft.

Virtual reality is a cutting-edge technology that empowers storytellers and nuclear policy wonks alike so they can talk about nuclear weapons in imaginative ways. It can help people visit faraway

destinations and engage on topics that remain largely inaccessible to the average person. If nuclear VR is handled irresponsibly, we will miss out on the broader possibilities. In the words of Lovely Umayam, “we need to widen the aperture” on what we envision that VR can accomplish.

As Edward R. Murrow once said about the disruptive new technology of television back in 1958: “This instrument can teach, it can illuminate; yes, and it can even inspire. But it can do so only to the extent that humans are determined to use it to those ends. Otherwise, it’s nothing but wires and lights in a box.”

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Stratfor (Austin, TX)

The Echoes of Reagan in Trump's National Security Strategy

By Rodger Baker

December 19, 2017

> "For tradition tends to invest accepted policy with the attribute of permanency, which only exceptionally can be predicated of the circumstances of this changing world."
>
> A.T. Mahan, 1900
>
> "The world moves, and ideas that were good once are not always good."
>
> Dwight D. Eisenhower, 1956

Geopolitics teaches us that countries have core interests and imperatives, and that their relative importance can shift with time and circumstances. Geopolitics does not dictate the response. This is where politics and policy assert themselves and where personalities become important. If one steps back from the current (contentious) political discourse, it's hard to find a significant gap between the administration of former President Barack Obama and that of President Donald Trump when it comes to identifying the risks to American interests and security posed by North Korea, Iran, the Islamic State or even China. This is not to say that there are no differences, but rather that it's often less about identifying what represents a challenge to U.S. strategic interests than about how to deal with them. In this, the difference between the two administrations appears rather stark.

Obama entered office with the intent to rehabilitate what he and others saw as a damaged U.S. image abroad. They believed that U.S. influence and thus power had been undermined by the Iraq War and by the general impression that the United States was an unrestrained cowboy nation. They saw that United States had lost the cushion of global sympathy that followed the attacks on Sept. 11, 2001. The Obama administration pursued a foreign policy framed in terms of international cooperation and collaboration. It was a policy that the current administration argues led to weaknesses in the overall U.S. strategic position abroad and at home. The Trump administration is calling for a revival of American power, economically and militarily, under a mantra of America First.

The approaches are rather different, though perhaps not quite the polar opposites some would argue. Nor is this a unique situation in American history. While not a perfect parallel, it is instructive to look back a few decades to the 1970s, when U.S. power was seen to be waning due to the failure in Vietnam, domestic social instability and the political crisis of Watergate and the resignation of President Richard Nixon. Under the administration of President Jimmy Carter, the United States pursued a policy of detente with the Soviet Union and sought to rehabilitate the

international U.S. image through a reduction of military forces abroad. Cooperation and collaboration were seen by the administration as the best policies to preserve American influence and international security, particularly given the social and economic problems at home.

The Call of Neoconservatives

But detente was certainly not universally accepted as the "right" path. Both within and on the fringes of the "establishment," there were rising voices warning that detente, that the reduction of U.S. military forces and that arms control agreements with the Soviets were not securing peace, but were weakening U.S. power and giving the Soviets time and space to outpace the United States. Washington was being duped into giving up its military strength, for little reward. This counter to detente was voiced strongly by many of those from the neoconservative movement, driven by the so-called neocons seeking to revitalize America's military, economic and political might, and to reclaim a place for U.S. primacy in the world system.

It was Ronald Reagan who capitalized on this, characterizing Carter as weak, calling for a revival of American greatness and urging a more robust military and stronger nuclear deterrent and ballistic missile defense. The Iran crisis was seen as proof that America had grown weak, that there was little respect for American military might and thus that overall U.S. security was now at risk abroad because others were more willing to challenge and directly confront the United States. Inside the U.S. intelligence community, another contrary line was also underway, and assessments of Soviet missile and nuclear capabilities were radically revised, setting off alarm bells about the pace and scale of Soviet advancements.

There certainly were counterarguments and warnings (in some cases, ultimately proved correct) that these new assessments were far more dire on paper than in reality and that there was a major overestimation of Soviet strength and American weakness. But Reagan and the neo-conservative camp won out, and the response was a fairly significant shift in U.S. international policy, in defense budgets, in trade policies and in Soviet relations. The transition from Carter to Reagan was stark. Rather than offer them detente to ease nuclear tensions, Reagan labeled the Soviets the "evil empire." Rather than further reduce military forces abroad, the United States increased defense spending and attention to nuclear and missile programs. Rather than be a cooperative power, the United States reasserted its own interests, challenged institutions such as the United Nations and set an agenda based on realist views of U.S. national security.

The Carter-Reagan Swing

And the Carter-Reagan transition, with its significant shift in national security focus and in defining the ways to deal with key issues, was in some ways a repeat of a similar dynamic after the discovery of the so-called missile gap with the Soviets two decades earlier. In that case, John F. Kennedy claimed that it was Dwight D. Eisenhower (a general, of all people) who was weak on defense and who had let American power slip. Kennedy came in seeking to shake things up and to invigorate America, launching into the space race as a way to avoid falling further behind the Soviets. It's a recurring pattern in American history, where leaders blame their predecessors for policies that ultimately led to weakening U.S. power and influence. Obama argued that America was less respected because of the perceived unilateralism of the administration of President George W. Bush. Trump has argued — and did so again Dec. 18 in his national security speech — that America is less respected because of the perceived capitulation of the Obama administration to other country's interests and desires.

The Carter-Reagan analogy holds, at least superficially, with the tradition when moving from Obama to Trump. And Trump has, not coincidentally, drawn on many of the same slogans, the same imagery and the same concepts as did Reagan. There is attention to American manufacturing, to tax

reform, to the Make America Great Again slogans, to calls for updated and expanded nuclear arms, to questions of the viability of arms control treaties with Russia, to a push for increased military spending and to challenges to global institutions and agreements that appear to disadvantage the United States. Trump has surrounded himself with the new version of the neocons, has taken a more assertive stance toward North Korea and Iran, and has targeted trade agreements that he and his advisers see as constraining U.S. interests.

The Trump Way

With Trump's speech Dec. 18 on national security, his administration will in many ways be following an expected path. His administration identified an overall weakening of U.S. global security, standing and strength, blamed it on the previous administration's focus on global cooperation to the detriment of U.S. military might, and proposed to redress it. North Korea, Iran and terrorism (Islamic State/al Qaeda) are critical immediate concerns, but the strategic "gap" with the Chinese and Russians is the deeper concern. If there is a view that this gap needs to be narrowed and that past more diplomatic and cooperative efforts contributed to the gap, then we can expect further shifts in how the United States deals with these countries, with its partners, with friends or with just passing acquaintances on the periphery of Russia and China. And perhaps this view will shift how the United States sees the responses of some of its more reticent partners, such as Europe.

At a time of extreme media polarization and of cries of imminent Armageddon, it's a good moment to step back and consider strategically, and to think about the many alternative voices that have been raised over the past eight to 24 years about the direction of U.S. policy and priorities and about how to remedy them. Consider all the cries of too few ships in the Navy, the arguments against additional nuclear missile agreements or the challenges to "appeasement" policies. These voices were always there; they now have a champion in Trump. Assertions that the actions of the current administration go against the national security establishment or against the foreign policy establishment miss the reality that neither of these "establishments" has a singular voice, nor have they historically. There are always dissenting voices, counterarguments and challenges to the accepted methods to address policy challenges.

This is neither a critique of nor an argument in favor of the current administration's assessments of priorities or ways to deal with them. Rather it is a call for sober reflection and for recognizing that the way things were done for the past eight years, or 20 years, or 50 years are not necessarily the only way to do things. Presidents and administrations are often seeking to change things, to differentiate themselves, to refocus the priorities of the nation. And the world system around the United States is constantly evolving. The trick is not to criticize because things are different but to step back and assess policies for what they are, for their risks and opportunities and for their implications at home and abroad. If modern U.S. history teaches anything, it's that change is the norm and that the policies of today may create the problems of tomorrow. But it also shows the overall resilience of the United States and of its underlying political and social systems, even amid wrenching changes.

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38 North (Washington, DC)

Can Diplomacy Work with North Korea?

By Georgy Toloraya

December 13, 2017

Based on recent interviews with North Korean representatives, both senior level foreign establishment representatives and experts, I am persuaded there is still a chance for diplomacy to head off a conflict over the country's nuclear and ballistic missile programs. The latest (visibly premature) declarations by Pyongyang that it has completed its nuclear force signal its readiness for dialogue. Taking advantage of this fleeting opportunity requires stronger leadership from the United States and more effective cooperation among the other key stakeholders.

What Does North Korea Want?

In recent discussions, North Koreans reiterated Pyongyang's standard policy goals: reach "strategic parity" with the US by creating a credible nuclear deterrent and compelling opponents to conclude a peace treaty with the North, recognize the sovereignty and independence of the DPRK, and provide security guarantees to enable the country's further economic development. The North Koreans with whom I spoke with argued that without a "nuclear deterrent," the hostility of the US and many of its allies toward North Korea will sooner or later result in "crushing down" the country. However, they did nothing to dispel the suspicion that, in fact, Pyongyang might also aim at aggression and concessions extortion from South Korea if it gets a deterrent against the US.

It is my impression that policymakers in Pyongyang believe the only purpose of US policy is to liquidate the DPRK as a state or even "physically destroy" the country and its leadership. The regime does not believe that removal of North Korean nuclear weapons per se is very significant to the US, and rather sees this demand as an attempt to undermine the country's deterrence and gain advantage for a military solution of the Korean issue or regime change by other means.

It was clear from my discussions with the North Koreans that internal debates over the country's nuclear doctrine have not yet been settled and there is no clear picture of what a nuclear war-fighting doctrine would look like. Nor did they seem to understand that having an intercontinental ballistic missile (ICBM) capability only gives rise to suspicions that the North wishes to unify Korea by force while using its nuclear capability to protect it from US interference (a common theory among South Koreans and Americans). Going forward, a declaration that North Korea does not have these intentions and a codification of this pledge in official documents might be essential along with an explanation of the country's nuclear doctrine, which seems to have evolved considerably during the last couple of years. But these ideas, from what I heard, have not been considered by the regime.

The North Koreans stressed that unless the "root cause" of the nuclear stand-off—the "hostile policy" of the US—is removed, nuclear weapons will remain the sole guarantee of the country's security. The examples of "hostile policy" cited include exercises aimed at "decapitation," rehearsing attacks on Pyongyang and efforts to undermine the North's "socialist system," including covert activities, psychological warfare and sanctions. Nothing I heard gave any hint that North Korea's nuclear weapons status is anything other than non-negotiable.

All of this is pretty standard fare, but when I asked if denuclearization would be possible if the US ended its "hostile policy," the North Koreans admitted that they are not, in principle, against a "nuclear-free zone" in and around Korea. They stressed that before the early 2000s, their country was the only one in Northeast Asia to not possess or deploy nuclear weapons, and upon achieving nuclear parity with other parties, the balanced reduction and eventual denuclearization of the whole area is not impossible.

Even if these North Koreans were propagandizing, the declaration of a loosely-defined nuclear-free zone on the Korean peninsula or in Northeast Asia as the final goal of a diplomatic process could create space for the eventual denuclearization of North Korea, and such a formula could be on an agenda during "talks about talks" with Pyongyang.

Framework of a Possible Dialogue

In thinking about how a possible dialogue could be structured, there are some important clarifications that will be needed upfront. That includes asking the question of what constitutes a nuclear weapons program. The answer, while it may seem obvious to some, is far from clear. For example, does it include, in North Korean eyes, just the weapons themselves? Or is it the weapons and the fissile material production? Does it include delivery systems—and does that encompass all ballistic missiles or just the long-range missiles? Does that include the "space" program as well? Depending on the answers to those questions, an important proposal might be considered – that is, possible asymmetric concessions between North Korea and the US. This proposal takes into consideration what seems to be the highest priorities for each country, and would suggest capping North Korea's ICBM capability—which enables North Korea theoretically to attack the continental United States—while allowing North Korea to keep its "nuclear weapons"—that is, possibly the charges, but not specific delivery systems—as the "sacred cow."

Although Seoul and Tokyo might not see this proposal as a viable final solution they have been living in the range of a North Korean nuclear strike (possibly delivered by some unconventional means) for years. So bringing down the tensions at least temporarily and giving a chance for diplomacy might be good option—at least as a start. However, the US will have to explain it and chart a clear perspective, should such an option emerge.

It should be understood that North Koreans have not thought about this yet, but their statement of "completing [its] nuclear force" gives room for compromise. If they consider there is no need to further pursue its missile technologies, such as creating a "Hwasong-16," and a pause is possible, why not start something like "strategic arms limitation talks?" It is true, that the North Koreans still have plans to develop submarine-launched ballistic missile (SLBM) systems, such as the Pukguksong-3 that has been referenced, but perhaps a cap on this project could be part of a deal, provided the right return concessions. And it should be taken into account that most experts agree the North does not yet have a working, weaponized ICBM, as the operability of current systems, especially re-entry technology, is still unproven. However, we should do our best not to compel North Koreans to demonstrate such an ability, such as firing a ballistic missile with a conventional warhead to a target somewhere in Pacific.

So far, the discussions in the UNSC do not promise a swift and heavy retaliation for the latest ICBM test, so the time is right to think about a softer approach to North Korea's continued testing. The re-listing of the DPRK by the US as a state sponsor of terrorism and consequent sanctions made news, but were not unanticipated and by no means exclude a quiet compromise.

As additional actors consider the "freeze for freeze" idea as the basis for more extensive agreements down the road, opportunities for incremental steps might be explored. The Chinese concept of "parallel advancement" might begin with some form of voluntary restraint of North Korean missile tests, excluding overflying other countries' territory and airspace. In exchange, the US would refrain from sending strategic assets (like B-1 bombers, aircraft carriers and nuclear submarines) to Korea. And both sides would mute their bellicose rhetoric toward the other.

However, the "window of opportunity" will close once the US and South Korea start preparing for spring exercises. Thus, the upcoming Winter Olympic games in Pyeongchang, South Korea, should be used as a good opportunity for a truce (the Moon administration is already eager to postpone the

exercises till at least end of March). Both sides should exercise restraint and avoid any actions that may be considered provocative. I believe that closed-door quiet contacts should be made to agree on an "Olympic truce," that is, refraining from provocation and hostile propaganda (including, if possible, inflammatory tweets) at least until the successful completion of the games. Such contacts may include not only the US and North Korea, but also South Korea, whom the North, of course, would like to exclude. However, the fact that the issue is the Olympics being held on ROK soil is discussed makes its participation mandatory.

There is No Alternative to Diplomacy

Diplomacy could be effective if only the United States would accept the reality that denuclearization of the DPRK is not possible at this moment. Short of regime change, neither the US nor China can force North Korea to surrender its nuclear potential. Not even the US shooting down a North Korean missile or attacking it on the launch pad would solve the nuclear problem. Some argue that it may still not lead to an all-out war—North Koreans would most likely answer symmetrically by attempting to sink a US ship or destroy another "military asset," after which both sides would stop short of escalation and a frightened North Korea would then be compelled to capitulate. No North Korean I spoke with found this plausible. However, it is unfortunately clear that such a scenario would make negotiations and compromise more urgent and might brush away illusions and help formulate a sober approach.

At the end of the day, a nuclear but peaceful Korean peninsula would be a better outcome than a war-torn Northeast Asia. The need to admit the failure of US policy toward North Korea's nuclear program may be hard to swallow, but it is needed to formulate more realistic policy choices (including, unfortunately, living side by side with a nuclear North Korea). Only American leadership can avoid war and lead toward a diplomatic resolution.

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The New York Times (New York, NY)

Trump's National Security Strategy Is a Farce

By Roger Cohen

December 19, 2017

The Trump Administration has put out its new national security strategy. This is a farce. On any one issue, President Trump and his team have several contradictory positions. That's what happens when your priority as president is to use foreign policy to throw red meat to your base while other cabinet members are scrambling to stop Armageddon.

"It's impossible to know what the United States position is on any number of subjects," a European ambassador told me last week. "We could go sleepwalking into a war."

Let's start with North Korea, whose small but growing nuclear arsenal is overseen by Kim Jong-un, a leader as volatile as Trump. Last week, Secretary of State Rex Tillerson said the Trump Administration's policy toward North Korea is "really quite clear." He said, "We're ready to talk anytime North Korea would like to talk, and we're ready to have the first meeting without precondition."

That was Tuesday at the Atlantic Council. By Friday, at the United Nations, Tillerson was setting conditions.

North Korea must cease "threatening behavior" before talks can begin; it must "earn its way back to the table;" and pressure will "continue until denuclearization is achieved."

Denuclearization is not going to happen in the real world. If that's the condition, there will be no talks. As for Trump, he has said Tillerson is "wasting his time trying to negotiate with Little Rocket Man." He has warned that the United States is "locked and loaded." He has never embraced talks without preconditions, favored by France, Britain and sometimes Tillerson.

Clear enough already?

Oh, I should add that Nikki Haley, the United States ambassador to the United Nations, was not present when Tillerson spoke. Great optics there: Haley and Tillerson are known to be at loggerheads, with the secretary of state (regarded by some as a dead man walking) suspecting Haley wants to succeed him.

Now, effective pressure on North Korea has three components: China, China and China. Trump's new national security strategy identifies China as "a strategic competitor." It suggests the United States will get tough on Chinese "cheating or economic aggression."

Great timing there: Trump is asking President Xi Jinping to cut off crude oil exports to North Korea as his "strategy" lambasts China. Our president believes everyone will do his bidding because he says so. Hello! You want a favor? You don't double down on confrontation.

I mentioned red meat: war with North Korea, tearing up the Iran nuclear deal, recognizing Jerusalem as the Israeli capital and promising to move the American embassy there some day — all this gets the blood up for Trump's base. (Of course, words exceed action and appearance is all, as with everything in Trump's world). I also mentioned Haley, who did not show up for Tillerson but put on quite a show over Iran the day before at a military base in Washington.

Before I get to the Haley show, involving some Iranian-made missiles "on loan from Saudi Arabia," a little background on Iran is needed. The 2015 Iran nuclear deal sent the country's nuclear program into reverse, guaranteed rigorous international inspections, and put the country much further from a bomb than it had been. In return, Iran got sanctions relief. The deal, concluded with the United States and five other world powers, is working. It was not intended to usher in an American-Iranian love-fest or realign Iranian policy in Syria. It was intended to stop Iran going nuclear. Tearing it up would be a colossal strategic error.

Tillerson recognizes this; he's urged preservation of the deal. Trump calls it "the worst deal I've ever seen negotiated" and, in October, declined to recertify it. This kicked to Congress the issue of whether to reimpose sanctions within 60 days. It did not, and from what I hear the White House did not press for sanctions. (Remember, noise without action is Trump's only discernible "national security strategy.")

By mid-January, Trump has to decide whether to sign waivers on Iran sanctions. My guess is he will to avoid blowing up the deal. Meanwhile, the administration is reviewing whether to block Boeing's agreed $20 billion sale of jetliners to Iran. So what's the policy here? Show implacable hostility to Iran, possibly short of destroying the deal, barring a mishap.

Clear enough, already?

Enter Haley with her Iranian missiles of dubious provenance demonstrating no provable infringement of international law. What a performance! "Absolutely terrifying," she declared, before saying that "the nuclear deal has done nothing to moderate the regime's behavior in other areas." It was not supposed to do that.

Iran has a nasty regime that does despicable things from time to time. It also has a substantial moderate wing, headed by President Hassan Rouhani. Moderates have been reinforced by the nuclear deal. The best way to lock in hard-liners for the next two decades would be to tear it up.

On North Korea and Iran, on Israel-Palestine and Syria and Saudi Arabia-Qatar, the Trump administration is all over the place. As Tillerson noted last week, it has no "wins" in diplomacy. That's not surprising. It also has no national security strategy. It has outbursts.

https://www.nytimes.com/2017/12/19/opinion/trump-national-security-strategy-tillerson-haley.html?mtrref=news.google.com&assetType=opinion

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The Strategist (Barton, Australia)

A New Nuclear Pessimism

By Rod Lyon

December 19, 2017

The ANU's College of Asia and the Pacific recently published a small volume of essays titled Nuclear Asia. With North Korea's nuclear exploits featuring prominently in the headlines over the past 12 months, the issue is certainly topical. And in the 17 essays that make up this volume, the ANU's editors have tried to ensure both a broad range of subject matter and a diversity of opinion among their authors. But there's an undeniable bleakness to many of the contributions. Indeed, it's a publication intended to worry the reader. It explores a number of unsettling trends. And, as Michael Wesley makes plain in his opening chapter, the 'main purpose [of the current volume] is to try to bring the dangers of these trends much more public and policy attention'.

True, there are nuclear dangers in Asia. Still, they need to be set alongside the strengths of the Asian nuclear order—the overall story isn't one of unrelieved gloom. Since the late 1990s, the concept of a 'second nuclear age' has helped to paint a depressing picture of Asia's nuclear dynamics. It portrays—in sharp contrast to the first nuclear age—a world of multiple nuclear players: some impoverished or inclined to ready use of weapons of mass destruction, few with robust conventional forces or reliable systems for command and control, and many driven by nationalism rather than game-theory logic. The second nuclear age, forecast Paul Bracken, would see 'fire in the East'.

That might yet prove right. But so far, it hasn't. If we're going to get an accurate picture of the Asian nuclear order, we need to balance that portrayal with an understanding that other forces are also at play. Asia's nuclear order turns heavily upon the notion of voluntary self-restraint. That restraint can be seen in the general slowness of Asian nuclear programs, their small arsenal sizes, the relative absence of nuclear arms races, the recessed character of most Asian deterrence settings, and the fact that most Asian nuclear-weapon states are still developing countries with economic priorities.

The essay by Brendan Taylor and David Envall—on why the arms-race model doesn't fit well in today's Asian nuclear dynamics—is a sober and nicely constructed piece that does pay appropriate regard to the stabilising features of the regional order. Their chapter hews rigorously to a close definition of 'arms racing' and is measured and thoughtful—a useful reminder that even though voluntary self-restraint's under pressure, a valuable residue remains.

So why is the overall mood so much darker? North Korea is obviously a major part of the answer. Kim Jong-un hasn't looked self-restrained in 2017. The pace and scope of Pyongyang's nuclear and

missile programs have been deeply troubling. But President Trump has also contributed to the darkening of the nuclear mood, and the statements of some senior figures in his administration have done little to dampen concerns.

The overall effect has been to make more immediate a set of worries which had previously been seen primarily through a more abstract, academic lens. For example, several of Nuclear Asia's authors take exception to the fact that advanced conventional weapons are increasingly intruding upon the nuclear realm, with destabilising consequences. The claim's true, of course. Ballistic missile defences, long-range precision-guided munitions, and offensive cyber operations are making strategic nuclear balances complex and escalation ladders complicated. But if we're ever going to see nuclear disarmament, conventional weapons have to take over those key deterrence and defensive missions now performed by nuclear ones. Keeping the realms separate—and how do we do that exactly?—isn't going to work.

Besides, accepting the inevitable intrusion of advanced conventional weapons into the nuclear realm is part of the cure for the affliction that Tanya Ogilvie-White, in her essay, labels 'nuclear fatalism'. Nuclear fatalism, she argues, reflects a mood of growing resignation that nuclear weapons are going to be around indefinitely, that disarmament diplomacy is feckless and nuclear war inevitable. If that's the definition, I'm not sure I know many nuclear fatalists. Sure, nuclear weapons won't disappear anytime soon. But arms control remains a valuable exercise—not least in helping to ensure that nuclear war isn't inevitable.

Despite the new nuclear pessimism, we shouldn't succumb to a counsel of despair. The Asian nuclear order is stronger than it looks. The complexities of greater interaction between the nuclear and conventional domains have an upside—they're the inevitable product of a strategic environment in which nuclear weapons have a smaller role. And the human race is not doomed to inevitable nuclear extermination. But—and this is a big but—neither have strategic competition and war disappeared from the world. The struggle for geopolitical pre-eminence and first-mover advantage continues. Strategy is not dead.

It's been a challenging year for those keen to promote the broader nuclear ordering project. Let's hope 2018 brings better tidings.

https://www.aspistrategist.org.au/new-nuclear-pessimism/

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War on the Rocks (Washington, DC)

Invisible Doomsday Machines: The Challenge of Clandestine Capabilities and Deterrence

By Brendan Rittenhouse Green and Austin Long

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Stanley Kubrick's iconic black comedy Dr. Strangelove remains one of the most insightful works on deterrence. The film revolves around the Doomsday Machine, which will automatically destroy all life on earth if the United States ever launches a nuclear attack on the Soviet Union. After a rogue American general does precisely that, the Soviet ambassador reveals the machine's existence and explains what is about to happen. American General Buck Turgidson is skeptical, claiming the machine is "an obvious commie trick, Mr. President!" The titular Dr. Strangelove subsequently delivers the film's biting satirical punch line: "The … whole point of the Doomsday Machine … is lost … if you keep it a secret! Why didn't you tell the world, eh?"

Hidden within Kubrick's dark humor is a very real problem: the challenge of clandestine military capabilities. Modern military operations increasingly turn upon elements of military power that depend almost entirely on secrecy for their battlefield effectiveness. But the very secrecy that drives their battlefield impact can interfere with the political objectives military power is meant to serve, like deterrence. The fictional Doomsday Machine was militarily effective — it ensured retaliation after an attack — but it was politically ineffective because it was kept secret. Yet unlike modern clandestine capabilities, the machine's secrecy was not integral to its military function.

Secrecy can also inhibit the effective integration of foreign policy with military capabilities, detracting from strategic coherence and holding back policy implementation. To succeed in a world of rising military secrecy, U.S. policymakers need to understand the political-military trade-offs posed by clandestine capabilities, develop concepts for when such capabilities should be concealed or revealed, and organize the government internally for managing military secrecy.

The Challenge of Clandestine Capabilities

While military operations generally benefit from secrecy and surprise, most nonetheless retain their utility if revealed. A new tank or missile still functions if an opponent learns about it. Clandestine capabilities, in contrast, may not work at all if revealed to an adversary. Consider alleged U.S. "left of launch" efforts to neutralize North Korean missiles using cyber and electronic warfare techniques. If the North Koreans understand the vulnerabilities these techniques exploit in their systems, they can fix those vulnerabilities — largely or entirely nullifying the left-of-launch capabilities. Similarly, the United States was highly successful in tracking Soviet ballistic missile submarines during the 1960s, but U.S. leaders kept these capabilities secret because of the fear that the Soviets could develop countermeasures (such as making their submarines quieter). When a spy ring revealed this capability to the Soviets, these fears were proved correct. It took years for the United States to recover some of this tracking capability.

The battlefield premium on secrecy makes clandestine capabilities difficult to exploit for political ends such as deterrence, assurance of allies, or shaping a long-term political-military competition. Keeping the capability concealed to protect its military utility makes the capability useless for deterrence — an invisible Doomsday Machine. A middle ground is to simply inform an adversary that you can turn off their missiles or find their submarines while keeping the capability under wraps. But, as Turgidson's skepticism illustrates, such a claim is likely to be met with incredulity from the adversary. Finally, proving the capability's existence by demonstrating it may enhance its deterrent effect, but it can also allow an opponent to develop effective countermeasures, eliminating both its military utility and deterrent value. In short, what makes clandestine capabilities militarily useful may reduce their political effectiveness, and vice versa.

The Department of Defense, recognizing this trade-off and the need for deterrence, has decided to reveal some capabilities, as then-Deputy Secretary of Defense Robert Work announced last year: "We will reveal for deterrence, and we will conceal for war-fighting advantage. There are a lot of things in the budget that we don't talk about because we want to preserve that in case, God forbid, deterrence fails and we do come to a conflict of arms."

Clandestine capabilities also pose challenges for governments related to the implementation and integration of strategy. One common means to ensure protection of secrets is strict compartmentalization, through what are known as "special access programs," to which only a limited number of people have access. As an example, most information about the new U.S. heavy bomber, the B-21 Raider, is protected by a special access program, with restrictions on who can be "read in" to the program details. Yet by leaving some policymakers out of the loop, compartmentalization can reduce the effectiveness and coherence of policies that depend on clandestine capabilities. For example, even in classified war games, many participants will not have

access to all relevant special access programs. At best, such capabilities appear as what one U.S. wargamer called "magic pixie dust" — participants are told nothing about actual capabilities but are asked to simply trust that they exist and will perform. But commanders and policymakers will be poorly prepared to integrate such capabilities into plans and policies if their exposure (and for senior officials, their staff's exposure) is limited.

Compartmentalization makes it challenging to integrate and manage clandestine capabilities for deterrence or other political effects. A limited set of individuals may have access to information on the B-21, for instance. These individuals may or may not overlap with those with access to other special access programs, such as those dealing with offensive cyber and space capabilities. Within the Department of Defense there are a number of so-called "super-users" who have access to all the department's programs, but even these individuals may not necessarily be privy to the intelligence community's special access programs. The converse is true for many in the intelligence community who cannot access restricted programs from the Department of Defense. Thus the number of individuals with a routine and total picture of U.S. and adversary clandestine capabilities is very, very small. These individuals are typically quite senior and therefore very busy. This presents significant barriers to thinking strategically about integrating an array of clandestine capabilities, ranging from stealth to space to surveillance, and then considering what to reveal and to conceal.

We propose two considerations policymakers could use to navigate the political-military trade-offs inherent in decisions to reveal or conceal clandestine capabilities.

First, policymakers should assess the military uniqueness of a particular clandestine capability and the ability of the target adversary to counter the capability.

At one extreme, concealment for war-fighting advantage makes sense in the case of a unique, irreplaceable capability for which countermeasures are relatively inexpensive. This can require extreme compartmentalization of knowledge of the program. In the early 1980s, according to East German intelligence sources, the United States allegedly developed an electronic warfare program known as CANOPY WING, which was intended to interfere with Soviet command and control systems, including control of strategic nuclear forces. This capability was not signaled to the Soviets because it seemed they could fairly easily fix the vulnerabilities the program exploited (which they may have done with strategic nuclear forces in the mid-1980s). The potential military advantage of this capability in a war, combined with its vulnerability to Soviet countermeasures, made concealment an easy and obvious choice.

At the other extreme, capabilities can readily be revealed when they are not unique and adversary responsiveness is likely to be slow or lackluster. This may have been why the United States decided to reveal its signals intelligence intercepts of Soviet air defense after the downing of Korean Airlines Flight 007 in 1983. The low-level voice intercept capability that was revealed was useful but hardly unique. Moreover, not only would it have been expensive for the Soviet Union to change its communications procedures and encryption, the sclerotic but bureaucratically powerful Soviet Air Defense Forces were likely to resist a major overhaul. The Reagan administration thus chose to reveal the capability to gain the political advantage of exposing the Soviets as lying about how the civilian airliner was downed.

Second, decision-makers should consider options for deception that might avoid the political-military trade-off, at least temporarily. Through effective deception, an actor can reveal a capability's military effects while concealing the mechanism by which it functions, potentially bolstering deterrence while preserving military utility.

The United States apparently did this successfully in the 1980s, when it revealed the efficacy of its stealth technology to the Soviets while deceiving them about the exact nature of stealth. After

French intelligence obtained the "Farewell Dossier," which revealed the bulk of KGB intelligence collection against Western technology, the United States was allegedly able to use the information to tailor a counterintelligence and deception campaign to feed the Soviets false information. In 1986, possibly thanks to intelligence revealed in the dossier, a U.S. Air Force officer helped snare a Soviet air attaché seeking information on stealth. Armed with an understanding of what the Soviets were looking for, the United States sought to mislead them. One of the chief architects of this deception campaign for the CIA claims, citing unclassified sources, that the "Pentagon introduced misleading information pertinent to stealth aircraft, space defense, and tactical aircraft."

This misleading information likely contained enough detail on actual capabilities to let the Soviets know stealth was a real and growing U.S. capability without letting them understand enough to negate it. A CIA assessment in 1988 concluded "Soviet knowledge of U.S. Stealth systems … has allowed the Soviets to better anticipate what offensive threats they will face in the future and possibly to focus research on counter low observable (CLO) systems. We have no evidence of a Soviet CLO system, however." Thus, at least through 1988, partial revelation had not led to an effective countermeasure to stealth, yet may have bolstered deterrence.

Organizing and Managing Clandestine Capabilities

As the United States increasingly contemplates acquiring clandestine capabilities for deterrence and warfighting, it should consider rethinking its approach to managing these programs to better avoid trade-offs. While the Department of Defense has made progress in making some special access programs more widely accessible, integration of these so-called "black" capabilities across the government still seems to be a challenge.

As a first step, policymakers should consider unifying and refining the oversight and management of such programs, which are currently divided between committees in the intelligence community and the Department of Defense. While membership of these committees overlaps in some cases, a handful of people with adequate knowledge of clandestine capabilities is not sufficient to integrate policy across the whole of government. A unified committee would need a modest but non-trivial number of full-time staff with broad access to special access programs, since the senior leadership of the committees — including the Deputy Secretary of Defense, Vice Chairman of the Joint Chiefs of Staff, and the Principal Deputy Director of National Intelligence — are far too busy to manage oversight on their own.

While it may be bureaucratically uncomfortable, a unified approach to management would enable government organizations to create a common framework for considering the trade-offs of concealment versus revelation. This unified approach could also improve the ability to integrate clandestine capabilities within government, potentially improving evaluations of capability uniqueness and enemy responsiveness as the government decides whether to reveal or conceal. Moreover, it would help the government consider the possibility of partial revelation through counterintelligence and deception. In short, a unified management approach would go a considerable distance toward meeting the challenges of clandestine capabilities. In a world where emerging technologies are enhancing the salience of "black" programs relative to "white" ones, the U.S. government must adapt its methods.

https://warontherocks.com/2017/12/invisible-doomsday-machines-challenge-clandestine-capabilities-deterrence/

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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.