



## **USAF Center for Unconventional Weapons Studies (CUWS) Outreach Journal**

CUWS Outreach Journal

14 April 2017

**Featured Item:** *"Friendship on the rocks? China, North Korea clash over nuclear and chemical weapons"*. Authored by Sasa Petricic; Published by CBC News; February 2017.

<http://www.cbc.ca/news/world/north-korea-china-weapons-petricic-1.4000631>

The North Korean embassy in Beijing is a squat, beige building behind a well-guarded gate. Only two things seem remarkable here: photos of missiles proudly displayed in a glass case, and the fact that China is the sole major power that actually welcomes North Korean diplomats and officials.

At least, for now.

China's patience may be wearing thin, as frustrations double up over North Korea's development of nuclear weapons and apparent willingness to use chemical weapons.

South Korea has accused North Korean leader Kim Jong-un of ordering the assassination of his half-brother, Kim Jong-nam, and Malaysia suspects several North Korean officials may have been involved in a plot that used the banned VX nerve agent.

It's creating an unprecedented rift between the two neighbours and ideological soulmates. China's support dates back to the 1950s and the Korean war.

Last week, Beijing imposed a ban on coal imports from North Korea that could deprive it of much needed foreign funds until the end of 2017. Pyongyang has replied with one of the nastiest insults one socialist state can throw at another, accusing China of "dancing to the tune of the U.S."

"The hostile forces are shouting 'bravo' over this," says a commentary published by North Korea's state news agency, accusing its neighbour of "mean behaviour."

'North Korea does not have the power to confront China on any comprehensive level.' -  
*Chinese newspaper editorial*

The reaction was so strong that some Chinese experts initially thought the commentary was fake.

"It came as a shock to many Chinese people," says Cheng Xiaohe, professor of international studies at Beijing's People's University. "The response was so strong, it indicates the coal bans will hurt North Korea badly."

"These are not symbolic gestures made by the Chinese government," says Cheng. "The new bans can really bite."

He also says this may be just the first of several tough new actions by China.

The semi-official Beijing tabloid Global Times reacted to the commentary with an editorial of its own, suggesting North Korea just fall in line.

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"There really is no other option," says the editorial. "North Korea does not have the power to confront China on any comprehensive level."

It's a surprising turn for a friendship that has endured the idiosyncrasies of "Supreme Leader" Kim Jong-un, as well as increasing pressure on China from the United States and others to bring North Korea to heel over its weapons program.

China's friendship with North Korea has taken a surprising turn, given how long the country has endured Supreme Leader Kim Jong-un's idiosyncrasies. (Wong Maye-E/AP)

Pyongyang has defied some of the toughest sanctions imposed by the United Nations Security Council, meant to not only deprive North Korea of the parts and expertise it needs to develop a nuclear arsenal, but also to punish the country's leadership by blocking travel and access to luxury goods.

Officially, China endorses the UN sanctions and condemns Kim Jong-un's nuclear and missile sabre-rattling.

But it is walking a fine line, trying to avoid weakening the regime so badly that it collapses, causing unrest in North Korea and a possible flood of refugees into China.

Beijing has been accused of turning a blind eye to a network of North Korean shell companies and middlemen who operate just over the land border in China, working to circumvent sanctions.

An upcoming UN report blames these tactics, along with transactions using bulk gold, cash and sophisticated sleight of hand to evade international banking limits and allow North Korea's weapons program to advance.

"Despite strengthened financial sanctions in 2016, the country's networks are adapting by using greater ingenuity in accessing formal banking channels," the Reuters news agency quotes the unreleased report as saying.

### **Poisoned cloth**

Still, while Pyongyang's ongoing nuclear and missile program worries China, it's the apparent assassination of Kim Jong-un's half-brother Kim Jong-nam that has sharpened the divisions between it and North Korea.

Malaysian authorities say Jong-nam was attacked at the Kuala Lumpur airport earlier this month by two women who rubbed a cloth soaked in poison on his face. He collapsed and died shortly after.

Police identified the toxin as one of the deadliest: the banned chemical nerve agent VX.

That suggests a sophisticated international agency was behind the attack.

North Korea has denied involvement, but South Korean intelligence has pointed the finger at Pyongyang, saying it wanted Jong-nam dead because he was a critic of Jong-un and his regime.

Malaysian police have identified several North Korean suspects, including four that South Korean intelligence officials say work for North Korea's Ministry of State Security, the country's secret police. They say two others work for the North Korean Foreign Ministry. All of them have allegedly slipped out of Kuala Lumpur and returned to Pyongyang.

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On Wednesday police in Malaysia said the two women would soon be charged with murder.

### **Stockpile of deadly toxins**

China is reportedly upset because Jong-nam was under its implicit protection, living in the country's gambling enclave of Macau for years.

It was also rattled by North Korea's apparent ready use of such a potent and prohibited chemical weapon beyond its borders. Pyongyang is known to have a large stockpile of various deadly toxins, and it hasn't signed on to international conventions agreeing not to engage in chemical warfare.

"By using the banned chemicals, it makes things worse," says Cheng. "It further tarnishes its reputation and undermines its credibility and further isolates the country."

He says it also complicates a negotiated solution to any of its weapons programs.

"North Korea would not be perceived as a decent, reliable negotiating partner, but as paranoid and irrational," he says.

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Restricted Data: The Nuclear Secrecy Blog (United States)

### **The President and the Bomb, Part III**

By Alex Wellerstein

April 10, 2017

*This is the third blog post I've written on the question of presidential nuclear authority. If you have unresolved questions, or feel like I'm taking some things for granted, you might first check out Part I and Part II if you haven't already seen them.*

One of the several projects I've been working on for the past several months has, at last, come to fruition. Way back in late November 2016, I got in touch with my friends at NPR's Radiolab, Latif Nasser and Robert Krulwich, right after I had my Washington Post piece on the question of presidential nuclear weapons authority. The final product is now out, as a podcast given simply the title of "Nukes":

Radiolab, as many of you probably know, is a show about science and many other things. The pitches they like tend to revolve around interesting people who, traditionally, need to still be alive to be very effective at radio. (And as such, their concerns are often very different from those of historians, who prefer to traffic in the dead.) Latif and I have been friends for a long time now (we were in graduate school together), and have bounced ideas around for a long time, and he has pushed me in the past to find "living specimens" of the nuclear age that illuminate interesting questions.

One of the cases I mentioned in my Post piece was Harold Hering, the Major who was kicked out of the Air Force for asking a "dangerous question" while training to be a Missile Launch Officer at Vandenberg Air Force Base. Hering had asked, in essence, how could he, in his Minuteman missile bunker, know that an order to launch he received from the President had been a legal, considered, and sane one? (And if you want to know exactly what Harold asked, listen to the podcast, where we worked to make sure we really could nail this down as best we could, four decades after the fact.) The fact that his persistence in asking this question, and his lack of satisfaction with the answers, got him drummed out of the service was, I thought, an interesting comment on the nature of what "reliability" means in the context of nuclear weapons personnel. I had gotten interested in Harold's story because it was discussed in Congressional testimony from 1976, during the only serious hearings that Congress had on this matter, and there was an article from Parade magazine about him appended to the hearings.

It had occurred to me that while Harold was likely quite old, he was probably still alive. I thought it might be worth seeing if I could track him down, and to see if he would be potentially willing to talk about his experiences with me, and to be recorded for the radio. In tracking him down, I thought I might have to utilize all of my Internet-searching, archive-crawling, database-accessing skills. A glance at Ancestry.com's records made it clear he was born in Indianapolis, and helped me pin down his exact age. A good start, I thought, but with the elderly in particular it can be very hard to get further than that, since they are often not very wired into the modern world.

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On a whim, though, before really starting the heavy-duty work, I would put his name into Facebook. Sure enough, there he was: the right age, the right place (still living in Indianapolis), and a Facebook profile photo of him as an USAF officer in the 1970s. So much for my searching skills.

I got in touch with Harold, got in touch with Latif and Robert, and thus started our multi-month process of researching, interviewing, and digging. There were a few issues that we thought would work best for the Radiolab format: the nuclear chain of command, the tensions between automation and human judgment, the question of how one might “remedy” the current situation (assuming one thought it was worth remedying, which I do).

I sat in on a number of the interviews, and provided a lot of additional research. I’ve worked with Radiolab in the past, but never quite this close. It was fun. In the process, I got to talk and correspond a bit with not only Harold — which was a complete joy, as was the fact that he had kept a journal of his troubles in the 1970s, and was willing to provide it to us — but also with scholar and former missileer Bruce Blair, US Representative Ted Lieu, and the estimable William J. Perry, the former Secretary of Defense.

I also tried to see how far I could dig into a few of the lingering questions that had kept coming up after my other pieces. One that I really wished I could nail down more, what exactly is the nuclear chain of command? How many people are in between the President and the actual use of nuclear weapons? Where exactly is the “jump” between the “political” wing of the US government (e.g., the Executive Branch) and the “military” wing that actually implements the order?

This is a place where people still had pushed me after my Post piece. How much could one really say about such things, as someone without a clearance? And on what evidentiary grounds could one say it?

Blair has insisted (in e-mail to me, and in our interview) that the whole “could the Secretary of Defense refuse an order” question was a red herring. The Secretary of Defense, he insisted, was completely dispensable with regards to the deployment of nuclear weapons. As I noted in my Post piece, there are several descriptions of the nuclear chain of command that imply that the Secretary of Defense is necessary, as the “conduit” (my term) between the political and military worlds. But is it true? Blair emphatically said no — but I never felt completely comfortable just taking his word for it. It’s not that I doubted Blair’s sincerity, or his long history of research and experience with this topic (aside from being a missileer himself, he also spent years researching command and control questions), but I’m a historian, I want a document to point to! Collecting good citations is what historians do.

What’s tricky, here, is that there are clear instances where the Secretary of Defense’s job is defined as translating a presidential order into a military result. And there are places in the descriptions of various components of the US nuclear command and control organization where the uppermost political “unit” is the National Command Authorities, which is defined as the President and the Secretary of Defense. Which has led a lot of authors to insist that there is a big role there, of some sort. And even I entertain the possibility in the Post piece, and in the Radiolab piece (my specific interview was recorded some months ago). The reason is pretty clear — DOD Directive 5100.30 states:

*The NCA [National Command Authorities] consists only of the President and the Secretary of Defense or their duly deputized alternates or successors. The chain of command runs from the President to the Secretary of Defense and through the Joint Chiefs of Staff to the Commanders of the Unified and Specified Commands. The channel of communication for execution of the*



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*Single Integrated Operational Plan (SIOP) and other time-sensitive operations shall be from the NCA through the Chairman of the Joint Chiefs of Staff, representing the Joint Chiefs of Staff, to the executing commanders.*

Which seems to set up the Secretary of Defense as an essential part of the chain. The directive in question is not especially recent (the unclassified version of the directive dates from 1974), and it doesn't clarify exactly how important the Secretary of Defense might be.

But over the last few weeks, while working on this episode and my own further digging into the matter, I have become convinced that the weight of the open evidence points to the idea that Blair is correct — the Secretary of Defense is not just unnecessary, but not even in the nuclear chain of command. What convinced me?

First, I found perhaps the only piece of military doctrine that actually explained, in a clear and concise fashion, how a nuclear order would be carried out. And it's not some ancient Cold War archival document... it's from 2015! On the website of the USAF's (appropriately named) Curtis E. LeMay Center for Doctrine Development and Education, one can find ANNEX 3-72 NUCLEAR OPERATIONS, last updated in May 2015. It states, in a clarity that (after reading a lot of DOD doctrine) makes me want to weep with joy, despite the message:

*The President may direct the use of nuclear weapons through an execute order via the Chairman of the Joint Chiefs of Staff to the combatant commanders and, ultimately, to the forces in the field exercising direct control of the weapons.*

Which seems pretty definitive. The order jumps immediately from the President to the military, in the form of the Chairman of the Joint Chiefs of Staff, and from there percolates through the system of command, control, and communication to the various people who actually turn the keys and put the "birds" into the air.

Could the doctrine be wrong? Presumably such things are carefully screened before being offered up as official doctrine, and it seems about as clear as can be, but it's always possible that something got mangled. But one other useful piece of evidence is that we asked Perry, the former Secretary of Defense, at point blank whether the Secretary of Defense was in the chain of command. The answer was a clear "no." Perry explained that while, presumably the Secretary of Defense would express opinions and given counsel, the President was under no legal obligation to take such counsel, and the objection of the Secretary of Defense had no bearing either legally or practically.

I don't know what your standard of evidence about such a question might be, but personally I find the testimony of a former Secretary of Defense, combined with a reasonably up-to-date piece of Air Force doctrine, to settle the case for me (at least, pending more evidence). No other assertions about the nuclear chain of command that I've seen have quite that kind of weight behind them.

Does this change our initial question, about who might say no? It shifts the attention away from the civilian Secretary of Defense (which is a civilian job, whether or not the person in the role is a retired General, as is currently the case) to the military position of the Chairman of the Joint Chiefs of Staff. Could such a person disobey the order? Perry suggested they might in practice try to, but there would be legal consequences (e.g., a court martial).

I gave a talk on these issues last week at the Belfer Center for Science and International Affairs at the Harvard Kennedy School (where I was a postdoctoral fellow in the Managing

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the Atom Program some years ago, and where I maintain an active affiliation), and two members of the audience (one an Air Force officer, the other my grad school colleague Dan Volmar, who works on the details of nuclear command and control history) pointed out that when doctrine says “the Chairman of the Joint Chiefs of Staff,” it is usually referring to a staff and not an individual person. Which is to say, it doesn’t necessarily indicate an individual personage, but instead indicates a web of people that are connected to the authority of that personage. I am not sure what would apply in this kind of extraordinary situation, but I thought it was an interesting point to bring up.

I have even less faith than before in the idea that an order of such would be disobeyed. Not that I think the military is eager to deploy nuclear weapons — I’m sure they are not, and in fact I tend to feel that they have in the post-Cold War come to realize at some deeper level the risks associated with such weapons and the difficulties they impose on their services. But I do think that the nuclear command and control system is set up, both practically and doctrinally, to avoid asking the questions that are seen as being in the purview of the “political” side of the equation. From the same “Annex 3-72” (my emphasis):

*The employment of nuclear weapons at any level requires explicit orders from the President. The nature of nuclear weapons — overwhelmingly more significant than conventional weapons — is such that their use can produce political and psychological effects well beyond their actual physical effects. The employment of nuclear weapons may lead to such unintended consequences as escalation of the current conflict or long-term deterioration of relations with other countries. For this reason above all others, the decision whether or not to use nuclear weapons will always be a political decision and not a military one.*

Now, obviously conditions would dictate varying responses. I have faith that an “obviously bonkers” order would be somehow avoided (e.g., a frothing, “nuke them all, ha ha ha,” sort of thing). I’m not worried about that situation (it’s not outside the realm of human possibility — all humans are fallible, many develop various forms of mental illness, etc.), but I am worried about what I consider to be “ill-advised” orders, or “bad idea” orders, or “spur of the moment” orders that are considerably less apocalyptic (at least on their surface) than, say, a full nuclear exchange.

What would the military do in such a situation, if a correctly authenticated, correctly-formatted “execute order” came to them on their secure channels? I don’t have faith they’d abort it. Maybe you do — that’s fine, and I appreciate the company of optimists. But I just want to point out, the notion that the system won’t work as intended is not a real “check.” It’s just hoping things will break in a way that would be convenient. I think we can do better, and I think that the consequences associated with the possibility of the rash use of nuclear weapons by an American President — any President — large enough to warrant trying to make a better (if not perfect) system, even if one thinks the probability of such a thing happening is low.

<http://blog.nuclearsecrecy.com/2017/04/10/president-bomb-iii/>

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The Japan Times (Japan)

### **G-7 nuclear abolition resolution could be challenged by Trump**

Author Not Attributed

April 9, 2017

Foreign ministers from the Group of Seven major developed countries plan next week to uphold their goal of achieving a world without nuclear weapons, according to a Japanese source, but the move could be challenged by the United States.

Ministers and officials from the G-7, which includes Japan, the U.S., Britain, Canada, France, Germany and Italy, will meet Monday and Tuesday in the central Italian city of Lucca with a focus on whether their foreign ministers can maintain the group's resolution toward nuclear abolition expressed last year in Hiroshima.

It remains unclear how the U.S. will respond. President Donald Trump has signaled he will strengthen U.S. nuclear capabilities after reviewing former President Barack Obama's efforts toward the elimination of such weapons.

Trump has also said the superiority of states having nuclear weapons should be maintained, as North Korea has claimed it can launch intercontinental ballistic missiles, apparently threatening to strike the U.S. with a nuclear-tipped missile.

The G-7 foreign ministers are expected to release a joint statement at the end of the meeting.

Their officials are discussing the wording of the communique, which may also mention the alleged use of chemical weapons by Syria in attacking rebels as well as the nuclear and missile development by North Korea that violates U.N. Security Council resolutions.

Foreign Minister Fumio Kishida will attend the meeting.

Japan, which hosted last year's G-7 meetings, led the group's foreign ministers in adopting the Hiroshima Declaration in April 2016 to build momentum toward nuclear disarmament.

The declaration calls for world leaders to visit Hiroshima and Nagasaki, the two cities devastated by the 1945 U.S. atomic bombings. Some Japanese officials say the declaration helped encourage Obama to visit Hiroshima last May, becoming the first sitting U.S. president to do so.

"The Hiroshima Declaration has universal values because it was compiled by overcoming (differences in) the positions of nuclear and non-nuclear nations," the Japanese source said, adding that "the G-7 should inherit it."

<http://www.japantimes.co.jp/news/2017/04/09/national/politics-diplomacy/g-7-nuclear-abolition-resolution-might-threatened-trump-administrations-stance/#.WO2mUablTa>

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## The Warzone (United States)

### **Here's America's Plan for Nuking its Enemies, Including North Korea**

By Joseph Trevithick

April 7, 2017

*When America says "all the options are on the table" when responding to the reclusive Communist country, Operations Plan 8010 is the literal nuclear one.*

The United States had terse and cryptic words for North Korea's reclusive communist regime after it tested yet another ballistic missile on April 4, 2017. Unnamed White House officials said the "clock has now run out" for authorities in Pyongyang and reiterated a previous threat that "all options are on the table."

"The United States has spoken enough about North Korea," Secretary of State Rex Tillerson wrote in an unusual three sentence statement.

The curt remarks were the latest in a string of increasingly tough rhetoric between American and North Korean officials beginning in March 2017, including a Pyongyang spokesman's threat of "a preemptive nuclear attack" if the United States resorted to unilateral military action. But how might the United States actually respond to these provocations and potential doomsday scenarios? Well, we've found some answers inside the U.S. Strategic Command's (STRATCOM) Operations Plan (OPLAN) 8010. While it doesn't explicit allow for an American preemptive strike, it is the literal nuclear option.

"With the end of the Cold War the international landscape has changed," the July 2012 version of the document explains in a section called "framing the problem." "The global security landscape is marked by protracted conflict, constant change, enormous complexity, and increased uncertainty."

"While dynamic security concerns in space and cyberspace evolve, traditional threats to national security continue to be presented by sovereign states, both the peer and near-peer and those regional adversary states with emerging WMD [weapons of mass destruction] capabilities," the authors wrote, adding their own emphasis.

We obtained a heavily redacted portion of this document through the Freedom of Information Act, as well as a similarly censored excerpt from a previous, February 2008 edition. The 2012 version wouldn't otherwise have been up for its first declassification review until 2022.

There is a section that details "countries that present global threats," but the un-redacted portions of the document do not describe North Korea by name. Unclassified text specifically mentions Russia and China, but to does not suggest either one is an imminent danger to Americans.

"The term 'enemy' is used in the singular form throughout this document for simplicity," the OPLAN says. "However, because of the global view of this plan and the varied nature of the adversary set, multiple enemies are addressed."

Though not necessarily surprising, "normally they don't like to list any names," Hans Kristensen, head of the Federation of American Scientists' Nuclear Information Project, told The War Zone in an Email. "It looks like there are now (2012) five adversaries in the plan:



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Russia, China, North Korea, Iran, and Syria,” he posited, based on the number of redacted paragraphs.

This would make sense, given that officials in Washington see all of these as potential adversaries who either have nuclear arsenals or are seeking to obtain them. Russia and China both maintain stockpiles with hundreds of warheads, as well as intercontinental ballistic missiles that can reach the United States. The U.S. government believes Iran’s nuclear program is focused on weapons development, despite repeated denials from their counterparts in Tehran. And in 2007, Israeli warplanes bombed an apparent covert nuclear reactor in Syria’s Deir ez-Zor governorate.

Of course, it’s possible that instead of Syria and Iran, the paragraphs could have mentioned nuclear-armed India and Pakistan, who continue to experience significant tensions, linked in no small part to the continuing disagreement over the final status of the Kashmir region. The publicly released portions only refer to actors seeking WMD, too, which could encompass countries or non-state groups seeking to build up large stockpiles of chemical, biological, or radiological weaponry.

“Rapid technological evolution and the wide civil availability of formerly advanced military capabilities have reduced ‘entry costs,’ making available completely new weapons and enabling actors to access capabilities that would not have been available to them in the past without significant investment,” STRATCOM’s plan says. “Blurred boundaries and overlapping claims to sovereignty in global domains will continue to present national security challenges.”

But it seems unlikely North Korea hasn’t made the list. Under the helm of its young leader Kim Jong-Un, the country routinely declares its intention to build nuclear weapons—ostensibly as a deterrent to the U.S. military and its allies in South Korea and Japan—describes itself as a nuclear state equal to America, and repeatedly threatens to use these arms in a confrontation with its sworn enemies. Since 2006, it has detonated at least five suspected nuclear devices of varying strengths. The fifth test in September 2016 involved a nuclear warhead small enough to fit on a missile, according to North Korean state-run media.

“We don’t really know how big North Korea’s nuclear arsenal is, or will be once the ‘standardized’ warheads are deployed to the missile forces,” Jeffery Lewis, who runs the East Asia Nonproliferation Program at the James Martin Center for Nonproliferation Studies at the Middlebury Institute of International Studies at Monterey, wrote at the time for Foreign Policy. “But its not a small number, and certainly not just a handful. And it’s likely to keep growing.”

On top of its nuclear warheads, North Korea has been steadily improving and expanding its ballistic missiles with an eye toward being able to threaten the United States, or its territories in the Pacific Ocean such as Guam and Hawaii. In the April 2017 instance, U.S. Pacific Command initially said it believed the country had launched an intermediate range ballistic missile (IRBM) called the KN-15. Two months earlier, Pyongyang’s forces had debuted this weapon, known inside the country as Pukkuksong-2, which appeared to be an advanced version of an earlier missile intended for the North Korean navy’s submarines.

Later, other reports suggested the weapon fired just days ago might actually have been a medium range ballistic missile (MRBM) known as the Hwasong-7, also called the Scud-

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Extended Range or Scud-D. In March 2017, North Korea fired four of those weapons toward Japan.

MRBMs generally feature ranges between 1,000 and 3,000 kilometers. IRBM class weapons have ranges between 3,000 to 5,500 kilometers, according to the Pentagon. A missile in this second, longer range category would be able to hit American military facilities in Guam from anywhere in North Korea.

If officials in Pyongyang resort to WMD attacks for any reason, OPLAN 8010 swings from “deter” to “defeat,” stressing in its text the need for American political will to employ “strategic forces if deterrence fails.” As part of a standing mission dubbed Operation Global Citadel, the Pentagon maintains a so-called “Nuclear Triad” of nuclear-armed heavy bombers, land- and sea-based ballistic missiles. Smaller fighter jets can carry the B61 thermonuclear gravity bomb, if necessary.

The United States is deeply invested in a multi-year effort to both upgrade its nuclear weapons and delivery platforms. At separate events in 2016, the Air Force announced it would call its future stealth bomber the B-21 Raider. Northrop Grumman is planning to build dozens of the flying-wing style stealth aircraft, hopefully delivering the first examples sometime in the mid-2020s. The Air Force is also exploring plans to replace its Minuteman III ballistic missiles, amid reports of delays over costs. The U.S. Navy is working toward beginning construction of its new Columbia-class ballistic missile submarines. The service expects to buy the first boat, the first-in-class USS Columbia, in 2021. A new nuclear bomb and cruise missile are also in the works.

Whatever weapons STRATCOM employs, the goal is clear: “attack the appropriate enemy ‘system’ to eliminate the enemy’s capability to fight and influence key decision makers to cease hostilities.”

Unsurprisingly, specific details about the actual missions for any of these weapons, current or planned, are still classified. Reliable deterrence is a balancing act between giving potential opponents just enough information to be scared, but not enough to develop safeguards that would make the strikes ineffective.

That means there are still important elements that are free to share. The most important is that the United States does not have a policy of “no first use” when it comes to thermonuclear war. Most of the specific thresholds are redacted, but the OPLAN specifically says the president can order STRATCOM to respond “in the event of a hostile act or intent.”

“There is nothing in this [OPLAN] that indicates a constraint on potential nuclear use, except that strikes have to comply with the Law of Armed Conflict, etc,” Kristensen explained. “That is in and of itself important, not least because the 2013 Nuclear Employment Strategy explicitly states that the United States does not target civilians.”

But that leaves open a lot of room for interpretation. While the United States does not deliberately target civilians, it still kills them accidentally in conventional strikes, as have been reported in Iraq, Syria, and Yemen. The presence of innocent bystanders is not necessarily enough to abort a strike.

“The implication is nuclear use only in extreme conditions,” Dr. William Burr, who runs the nuclear history documentation project at the National Security Archive at The George Washington University, told The War Zone in an email. “I would say that in such a circumstance, the decision would be left to the president and his advisers. One size would not fit all so to speak.”



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Given the immense power of America's nuclear weapons, one might hope that the danger of causing massive collateral damage would be a major factor, but it's not a given. That's where the OPLAN's specific mention of "proportionality" comes into play.

"The use of any weapon, kinetic or non-kinetic, must comply with the key principles of [the Law of Armed Conflict]: military necessity, avoidance of unnecessary suffering, proportionality, and discrimination or distinction," the document explains. "All of these principles will be taken into account when developing and executing courses of action."

Taken together, these factors "all mean—to the extent they are followed and not watered down by operational considerations—that there is at least an intent to try to limit collateral damage and civilian suffering that presumably is reflected in the strike plans," Kristensen says. "The requirement in OPLAN 8010-12 for "proportionality" raises the issue of how a nuclear response to a conventional attack could ever be proportional?"

However, in 2010 and again in 2013, U.S. government reviews on how and when to employ nuclear weapons concluded that they were not "sole-purpose," meaning the President should only be able to authorize their use during an all-out nuclear conflict. From the parts of OPLAN 8010 that are available to us, the United States has and continues to leave open the possibility of using these weapons in response to a conventional or non-nuclear WMD attack on Americans or allies covered by mutual defense treaties, such as South Korea and Japan. If North Korea were to launch a nuclear-tipped barrage of missiles, a U.S. military strike in kind would hardly be disproportionate.

"The use of WMD by any state has impacts to international security," a declassified portion notes. "Strategies for one adversary will not necessarily be appropriate for another adversary."

In addition, it is possible that STRATCOM's "proportional" strikes could involve conventional rather than nuclear weapons. Though the headquarters has operational control over America's nuclear arsenal, its aircraft in particular could carry conventional payloads. Since 2014, first B-1 and then B-52 strategic bombers demonstrated this dual ability as they pounded Islamic State terrorists in Iraq and Syria. In January 2017, B-2 stealth bombers flew all the way from the United States to drop smart bombs with high-explosive warheads on one of the group's camps in Libya.

In this vein, it's important to note that the official title of the 2008 edition of the OPLAN was "Global Deterrence and Strike." STRATCOM changed this to "Strategic Deterrence and Force Employment" four years later. This change in phrasing could have something to do with plans for the employment of conventionally-armed bombs and missiles, or not.

The handy "classification guide" – a comprehensive table of what is and isn't secret – from the 2008 version says "that OPLAN 8010 consists of various attack options" can be unclassified, secret, or top secret depending on the details. "The fact that OPLAN 8010 consists of various nuclear attack options is unclassified. The number of nuclear attack options is secret. The details of nuclear attack options are top secret," an additional note explains. This would seem to imply the plan covers nuclear options only.

During the administration of President George W. Bush, there was another plan that appeared to cover global, strategic conventional strikes, including pre-emptive operations, called OPLAN 8022. A separate nuclear plan, OPLAN 8044, also existed. Pentagon efforts to create a capability called "Prompt Global Strike" created confusion about whether this

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involved nuclear or conventional arms, or both, and whether it would be dangerously difficult to tell the two apart. A ballistic missile carrying a high-explosive payload wouldn't necessarily look different from one with a thermonuclear warhead at the tip.

"Eventually, the two missions merged to some extent into OPLAN 8010," Kristensen noted. "It is a fuller strategic plan that attempts to incorporate more elements of national power to apply pressure and achieve strategic effects on specific adversaries."

Unfortunately, there's no guarantee North Korea will get the desired message. The pariah state has long defined itself by its opposition to intimidation and pressure and as we at The War Zone have already reported, the stern American rhetoric may only validate their opinions and propaganda, pushing them further toward a rash decision.

OPLAN 8010 specifically mentions this and six other risks. Four of the others are almost completely censored. And what do you do when "adversaries misperceive messages?" The plan recommends nuclear commanders "constantly assess culturally appropriate strategic communication strategy, tightly integrated through the interagency process."

Regardless, "we've always had all options on the table," former Secretary of Defense Ashton Carter said on CBS' "This Week" earlier in April 2017. "I wouldn't take any off."

One of those options available to Trump and his administration is definitely the strike plans inside OPLAN 8010.

<http://www.thedrive.com/the-war-zone/9056/heres-americas-plan-for-nuking-its-enemies-including-north-korea>

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## Wyoming Tribune Eagle (United States)

### **90th Missile Wing prepares for testing**

By Joel Funk

April 11, 2017

Before he was offered the mission, U.S. Air Force 1st Lt. Paul Lee hadn't thought about being a missileer, a service member responsible for firing missiles. But when the opportunity arose, Lee said he took a chance.

"I got my degree in chemistry, and that's what I wanted to do when I came back," he said. "There were no positions available, so they said, 'Well, we need missileers. Would you like to do that?' And I said, 'I don't know anything about it, but it sounds fun.' So it picked me, and I also picked it."

Today at his post at F.E. Warren Air Force Base in Cheyenne, Lee is serving as missile combat crew commander for the 90th Missile Wing Simulated Electronic Launch-Minuteman, or SELM, tests.

The test is a simulated launch of the Minuteman III weapons systems, consisting of intercontinental ballistic missiles, or ICBMs, in service with the Air Force Global Strike Command.

F.E. Warren Air Force Base is one of three silos in the Minuteman III missile system, which makes up one-third of the U.S. nuclear triad. The other two are Malmstrom Air Force Base in Montana and Minot Air Force Base in North Dakota.



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The SELM tests scheduled for today and Wednesday will be a first for Lee and 1st Lt. Kyle Martinez, deputy combat crew commander. But Martinez said he and his colleague are fully confident in their abilities to complete their mission. After years of training and preparation, he said it's simply putting what he and Lee learned into action.

"It's like practicing for the championship game," Martinez said. "It's a little nerve-wracking, but ultimately, you're just really excited and pumped up."

But unlike a sports championship, Martinez said the SELM tests carry monumental weight for the armed forces, United States citizens and people around the world.

"We demonstrate our full capability," he said. "We're out there demonstrating to the world, not just the people we work with."

SELM tests don't actually launch a missile, but verify the critical commands can go from a launch control center to a launch facility. The tests then ensure the launch facility equipment can take those signals and properly initiate a countdown sequence that would launch a missile, said Field Test Manager Capt. Mark Wullschleger.

"A SELM test tests a lot of the infrastructure related to the support equipment in the missile field," he said. "That's why we come up here to conduct those tests. We want to test the operational deployment system to make sure that's credible."

Wullschleger is with the 576th Flight Test Squadron stationed at Vandenberg Air Force Base in California. But before going there, he served as a missile combat crew member with the 90th Missile Wing, commonly known as the Mighty Ninety, at F.E. Warren from 2010-2015.

As a test manager, Wullschleger represents the 576th at all three of the Air Force bases with Minuteman III systems during SELM testing, which typically occurs every six months on a rotational basis. The last test at F.E. Warren took place in February 2016.

Testing the weapons systems, Wullschleger said, is critical to the defense of the United States and its allies. Along with actual missile launch tests that take place at Vandenberg four times each year on average, the SELM tests send a message to the allies and enemies of the U.S. that nuclear weapon systems are ready and effective at a moment's notice.

"One key component to deterrents is having a credible weapon system," he said. "We want to continually test the Minuteman III to verify it is credible to meet that key component of deterrence."

While SELM tests only last a few days, the preparation takes months, involves multiple agencies and requires the work of hundreds of individuals. Critical to that is the 90th Maintenance Group, which makes sure sites are prepped and ready for a simulated launch, said Master Sgt. Christopher Bradshaw, assistant noncommissioned officer in charge of the Missile Maintenance Team at F.E. Warren.

"We dispatch out to the launch facilities and take care of all the guidance propulsion systems and re-entry systems for the Minuteman III weapons system," he said.

All of the key players come together to make the tests work, Bradshaw said. And the magnitude of the work being done by the 90th Maintenance Group isn't lost on the service members performing individual tasks, he said.



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“That’s one of the things we try to instill at the start of technical training is how important this is,” Bradshaw said. “With the SELM test itself ... the technicians see that and it validates that what we have works.”

As the servicemen and servicewomen of the Mighty Ninety prepare to conduct tests that are expected to demonstrate the effectiveness of the nation’s nuclear deterrence, Lee said he wants people in the city, state and world to know he and his comrades are adequately trained and prepared to complete the mission assigned to them.

“Every time you drive onto base, you see the weapons system, and that’s really a good reminder of how important our mission is to America,” he said. “We are defenders on the prairie, as we call it.”

[http://www.wyomingnews.com/news/local\\_news/th-missile-wing-prepares-for-testing/article\\_d6354eb4-1e7b-11e7-b474-cb3369c4642e.html](http://www.wyomingnews.com/news/local_news/th-missile-wing-prepares-for-testing/article_d6354eb4-1e7b-11e7-b474-cb3369c4642e.html)

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Scientific American (United States)

### **Enzymes versus Nerve Agents: Designing Antidotes for Chemical Weapons**

By Ian Haydon

April 11, 2017

*Scientists invented chemical weapons; some are now working to destroy them*

A chemical weapons attack that killed more than 80 people, including children, triggered the Trump administration’s recent missile strikes against the Syrian government. The use of illegal nerve agents – apparently by the Assad regime – violated international law; President Trump said he was moved to act by images of the victims’ horrible deaths.

But there’s another path to mitigate the danger of chemical weapons. This route lies within the domains of science – the very same science that produced chemical weapons in the first place. Researchers in the U.S. and around the world, including here at the University of Washington’s Institute for Protein Design, are developing the tools needed to quickly and safely destroy nerve agents – both in storage facilities and in the human body.

Nerve agents, a class of synthetic phosphorous-containing compounds, are among the most toxic substances known. Brief exposure to the most potent variants can lead to death within minutes. Once nerve agents enter the body, they irreversibly inhibit a vitally important enzyme called acetylcholinesterase. Its normal job within the nervous system is to help brain and muscle communicate. When a nerve agent shuts down this enzyme, classes of neurons throughout the central and peripheral nervous systems quickly get overstimulated, leading to profuse sweating, convulsions and an excruciating death by asphyxiation.

Chemical weapons are often associated with wars of the previous century – mustard gas in WWI, Zyklon B in WWII. But the worst variety, nerve agents, were never deployed in the world wars, though Nazi scientists developed the first generation of these compounds. Gerhard Schrader, the so-called father of nerve agents, didn’t begin life as a Nazi scientist – he was developing new pesticides to combat world hunger when he accidentally synthesized the first organophosphorus nerve agent. Later, he led the research team that produced sarin, or GB, the most toxic of the all the so-called G-series nerve agents. The U.S.

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government stated with “very high confidence” that sarin was used in the recent attack near Idlib, Syria.

Beginning in 2013, teams from the Organization for the Prohibition of Chemical Weapons went to Syria and, with help from the Danish, Norwegian, Russian, Chinese and U.S. government, destroyed all declared stockpiles of Syrian chemical weapons. It seems that either not all of Assad’s stockpiles were in fact declared and destroyed, or that new nerve agents arrived in Syria – either via the black market or chemical synthesis – in the intervening years.

### **CLEARING CHEMICAL WEAPONS**

Twenty-first-century chemists, biochemists and computer scientists are working right now to sap chemical weapons of their horrifying power by designing counter agents that safely and efficiently destroy them.

Sarin sitting in a container – as opposed to in a human body – is relatively easy to destroy. The simplest method is to add a soluble base and heat the mixture to near-boiling temperatures. After several hours, the vast majority – more than 99.9 percent – of the deadly compound can be broken apart by a process called hydrolysis. This is how trained specialists dispose of chemical weapons like sarin.

Nerve agents that make their way inside the body are a different story. For starters, you clearly cannot add a near-boiling base to a person. And because nerve agents kill so quickly, any treatment that takes hours to work is a nonstarter.

There are chemical interventions for warding off death after exposure to certain chemical weapons. Unfortunately, these interventions are costly, difficult to dose properly and are themselves quite toxic. The chemical antidotes pralidoxime and the cheaper atropine were deployed after recent attacks in Syria, but doctors in the area worry their dwindling supplies offer little protection against possible future attacks.

For a medical intervention to work after nerve gas exposure, it has to work fast. If a first responder administers a sarin-destroying molecule, each therapeutic molecule must be capable of breaking down through hydrolysis hundreds of nerve agent molecules per second, one after another.

Enzymes, the genetically encoded catalysts of biology, are up for such a task. Famous enzymes include lactase, which breaks down milk sugars in those who are lactose tolerant. Another known as RuBisCO is vital to the process of carbon fixation in plants. The most efficient enzymes in your body can perform a million reactions per second, and do so under chemically mild conditions.

Aside from their astonishing speed, enzymes often display an equally impressive selectivity. That is, they react with only a small number of structurally similar compounds and leave all other compounds alone. Selectivity is useful in the context of the chemical soup that is the cell but problematic when it comes to xenobiotics: those compounds which are foreign to one’s biology. Man-made organophosphates such as sarin are xenobiotics. There are no enzymes that hydrolyze them well – or so we thought.

When farmers spray pesticides, much of it ends up on the ground. Soil bacteria living nearby are challenged by high doses of these potent foreign chemicals. It turns out that efficient detoxifying enzymes have recently evolved inside some of these microbes as a result.

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Scientists have identified and isolated a small number of these enzymes and tested them on a range of nasty compounds, including nerve agents, which are structurally similar to some pesticides. A select few did indeed show hydrolytic activity.

### **IMPROVING ON THE DISCOVERY**

Researchers have taken these naturally occurring enzymes as raw material. Then, using computer modeling and controlled evolution in the lab, we've bolstered the efficiency of the originally found anti-nerve agent enzymes. Enzymes that initially showed only modest activity have been turned into potential therapeutics against VX – a chemical cousin of sarin and the most toxic nerve agent of all.

In a proof-of-concept study conducted jointly by researchers in Germany and Israel in late 2014, guinea pigs under anesthesia were exposed to lethal doses of VX, followed by optimized VX-destroying proteins. Low doses of the protein drug, even after a 15-minute delay, resulted in survival of all animals and only moderate toxicity.

Despite these promising advances, no enzyme yet exists which is efficient enough for lifesaving use in people. Scientists are refining these microscopic machines, and new paradigms in computer-aided protein engineering are unlocking the door to this and other applications of biomolecular design. We may be only a few years away from developing the kind of therapeutics that would make chemical weapons a worry of the past.

As the world grieves over the latest attacks in Syria, it is worth keeping in mind the awesome and often complex power of science. In trying to combat hunger, one might accidentally invent liquid death. In studying soil microbes, one might discover a tool to prevent atrocities.

<https://www.scientificamerican.com/article/enzymes-versus-nerve-agents-designing-antidotes-for-chemical-weapons/>

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Wired (United States)

### **Why It's So Hard to Wipe Out All of Syria's Chemical Weapons**

By Brian Barrett

April 8, 2017

On Tuesday, the forces of Syrian president Bashar al-Assad unleashed a chemical attack on the civilian residents of Khan Sheikun, a town situated near the rough borderlines between resistance and regime. It was a brutal strike, taking 80 lives and wounding hundreds more. It underscored, also, a painful truth about the nature of sarin gas and other internationally banned nerve agents: If a country wants to produce them, and use them, there's precious little anyone can do to stop it.

Syria's use of sarin gas this week echoes another in 2013, when Assad murdered more than 1,400 residents of a Damascus suburb with the same nerve agent. In response to that attack, the international community faced a choice: Direct military intervention, or wringing a promise out of Assad that he would destroy any remaining chemical stockpiles. After at times heated political maneuvering, the United States opted for the later.



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“Obviously we were dealing with the shock and horror of the attacks,” says Laura Holgate, who served as senior director for weapons of mass destruction in the Obama administration. “We really did feel like there was an important need to respond.”

They accomplished plenty. Syria ultimately signed onto the Chemical Weapons Convention, and voluntarily opened up its chemical weapons program to inspectors, who seized and destroyed 1,300 metric tons of banned material. It unquestionably limited the scope of Assad’s potential destructiveness. The world’s safer for it.

But it couldn’t stop Tuesday’s massacre, just as the Trump administration’s retaliatory airstrike Thursday won’t necessarily stop the next. The reason is as simple as it alarming: Sarin’s too easy to make, too hard to find, and the politics of policing it far too complex.

### **Chemical Reactions**

Few things unify the world’s nations more than their opposition to chemical weapons. As of late 2015, 197 countries had signed onto the Chemical Weapons Convention, with only North Korea, Egypt, Palestine, and South Sudan as holdouts. (Israel has signed, but not ratified.) Almost the entire civilized world has agreed not only not to use them, but to forgo any development, production, or stockpiling as well.

What’s so terrible about these weapons is not merely how quickly and widely they can kill, but the manner in which they do so. There are a variety of categories, but all cause brutal, painful deaths.

Sarin, specifically, falls under the “nerve agent” category, meaning it disrupts the communication between a body’s nervous system and its muscles. “It creates paralysis by muscle spasm, and an inability to control muscles—particularly the muscles of breathing. That’s typically why people succumb to it,” says Tom Inglesby, director of the Johns Hopkins University Center for Health Security. A victim’s diaphragm contracts, and never recovers.

Two other attributes compound sarin’s insidiousness. First, it’s not especially hard to produce, in terms of both resources and expertise. “A competent chemist could make it, and possibly very quickly, in a matter of days,” says John Gilbert, a senior science fellow at the Center for Arms Control and Non-Proliferation, who spent much of his Air Force career assessing countries’ WMD capabilities. Producing sarin doesn’t require any kind of massive facility; a roughly 200 square foot room would do.

Attackers also don’t require much of it to do serious damage. Gilbert estimates that the Khan Sheikun devastation came from roughly 20 liters of sarin. (Remember: At one point Syria had stockpiled nearly 1,300 tons of banned chemical substances.)

“It would be possible to obtain, retain, or make relatively small amounts of sarin that would be hard to detect, if somebody really didn’t want them detected by an international organization,” says Gilbert.

And while sarin garners most of the attention, the Assad regime has also made plentiful use of chlorine gas, a choking agent that can cause just as much devastation. Unlike sarin, though, it’s perfectly legal for companies to stockpile as much of it as they like. “The difficulty with chlorine is that because it has primarily legitimate uses, and it’s ubiquitous, and it’s easier to make, it’s not possible to outlaw it. Nor should it be,” says Inglesby.



Those factors make it nearly impossible to totally extinguish a country's chemical weapon ambitions. After all, they can always just make more.

### **Hide and Don't Seek**

The regime would only need to make more, of course, if the 2013 effort really did clear out all of its earlier reserves of chemical weapons. It didn't. And everyone knew it.

"It was always clear, and always clear in US statements, that we did not believe the declaration of the Syrians was complete," says Holgate. Which to an outside observer sounds strange; what's the point of a disarmament treaty if it doesn't go fully enforced?

In truth, full enforcement was never an option. There are both scientific and political realities that makes assessing a country's entire chemical weapons stockpile virtually impossible. "There is no magic scanner in the sky that can tell you whether there's a chemical weapon in a particular crate, or a particular car, or on a person," says Inglesby. "It requires a very close-in understanding of what's going on in a particular building."

These are not like large munitions, which leave large industrial footprints that a satellite can spy on. A small-scale chemical weapons facility, by contrast, could exist in any warehouse.

The specific language of the Chemical Weapons Convention feeds into this reality as well. The process lets the country declare its chemical weapons stash to outside inspectors, but also puts it on something like an honor system. It could hypothetically—as Syria almost certainly did—house additional material at secret locations. "[Inspectors] don't do a door-to-door search," says Mark Bishop, a chemical weapons expert at the Middlebury Institute of International Studies at Monterey.

The Organisation for the Prohibition of Chemical Weapons, which monitors compliance of Syria's chemical weapon ban, has since 2013 reserved the right to call a "challenge inspection," which allows them to inspect any facility at all with between two and 24 hours notice. But the reality of life on the ground complicates that proposition.

"What's particularly novel about this situation is that it's happening in the middle of a war zone," says Holgate. "There hasn't been a smoking gun. You've got to be really, really, really sure," and not just to make it worth the risk of physical harm to the inspectors. If the OPCW goes into Syria and finds nothing, Holgate says, that just gives Assad-allied Russia ammunition to discredit the organization's efforts.

That's not just an assumption; Russia and China blocked UN sanctioning Syria for using chemical weapons just this past February. And as long as those two giants are in its corner, Assad's regime can act with something close to impunity.

### **Looking Forward**

So no, clearing Syria of chemical weapons—sarin, chlorine, mustard, you name it—won't happen any time soon. Inspections haven't done it. One airstrike won't do it.

"It's not possible to completely stop the creation of a chemical weapons program, or the use of chemical weapons, from afar," says Johns Hopkins' Inglesby.

Syria can either give up its gasses voluntarily, or not at all. And right now, with Russia and China blocking more aggressive UN actions, and the country's civil war having no foreseeable end, the safe bet is that it won't.

<https://www.wired.com/2017/04/syria-sarin-chemical-weapons-chlorine/>

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## ***USAF Center for Unconventional Weapons Studies (CUWS) Outreach Journal***

WHAM TV (United States)

### **Photonics project for Pentagon being made in Rochester**

Author Not Attributed

April 7, 2017

Rochester's photonics industry has a new contract with the Pentagon.

The project brings a \$900,000 investment for the U.S. Department of Defense (DoD) project, along with an additional \$1.41 million in matching funds from AIM Photonics industrial members.

The project will focus on developing manufacturing blueprints for photonics-based transducers. Transducers are the part of a sensor that interacts with what is being detected. After the transducers, their components can be mixed and matched by manufacturers to build systems that identify a wide range of chemical or biological targets.

Environmental monitoring, disease diagnosis, detection of chemical and biological weapons, and ensuring food safety are all expected to be a part of the sensors' applied uses.

"When you consider the impact these sensors will have in immediately diagnosing illness, rapidly detecting foodborne pathogens, instantly assessing water and air quality, and ensuring the security of our citizens, you then realize the significance of AIM Photonics and how the technology we are developing is nothing short of a revolution," said John Maggiore, New York State Photonics Board of Officers Chairman.

All of the work to model, design, and fabricate the sensor components will be performed at the new state-of-the-art AIM Photonics Testing, Assembly, and Packaging facility at Eastman Business Park, the University of Rochester Medical Center, and SUNY Polytechnic Institute.

Senator Chuck Schumer released a statement praising the decision.

"With this DoD's investment, AIM Photonics is harnessing the skill and know-how of Rochester's top photonics and sensor researchers at the University of Rochester to take this technology out of the lab and into real-world applications and devices," Schumer said in a statement. "AIM is focused on leapfrogging the U.S. ahead of overseas competition to corner the market on the next-generation photonic technology that will drive smarter, better, and faster devices and technologies in the decades to come."

The University of Rochester leads the partnership, which includes the U.S. Army, U.S. Navy Research Lab, Ortho-Clinical Diagnostics, Analog Photonics, the University of Tulsa, PhoeniX, the University of California-Santa Barbara, and OndaVia.

<http://13wham.com/news/local/photonics-project-for-pentagon-being-made-in-rochester>

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Foreign Affairs (United States)

## **The Dirty Bomb Threat**

By Pamela Falk

April 7, 2017

### *Too Dangerous to Do Nothing*

As the world braces for a new superpower nuclear arms race, something less flashy keeps security officials around the world up at night: the dirty bomb. The prospect of this radioactive device in the hands of terrorists or madmen is, according to experts, very real and very hard to combat.

The world's post-World War II nuclear nonproliferation commitments are crumbling. Nations large and small, some with stable governments, some with shaky or autocratic regimes, want to join the nuclear club. An unintended consequence of this trend is the creation of global gray and black markets for radioactive material. And terrorist groups such as the Islamic State (ISIS) are ready to buy.

Detection technology is still catching up with the problem, and coordination among international, national, and local counterterrorism officials leaves much to be desired. Of course, despite recurring terrorist attacks in the Arab world and Northern Africa, Europe, and the United States, the odds are still low that terrorists will acquire radioactive materials. But the stakes—large-scale mass death and radiation poisoning—are so high that preventing dirty bomb proliferation should be a first priority.

### **IT'S NOT THE ODDS, BUT THE STAKES**

In one investigation in Chisinau, Moldova, samples of uranium-235 and cesium-135 were seized by police when a smuggler offered an informant who was posing as a buyer for ISIS enough cesium to contaminate several city blocks—and all for \$2.5 million. An in-depth investigation into dirty bombs by the Associated Press revealed four other attempts by criminal networks to traffic radioactive materials through Moldova. Last spring, in a New York federal court, another perpetrator, this time a Colombian national, was convicted for obtaining enriched uranium with the purpose of supplying a South American-based terrorist group with a dirty bomb to attack U.S. military personnel or a U.S. embassy. What investigators from INTERPOL (the International Criminal Police Organization), the International Atomic Energy Agency (IAEA), and various national intelligence agencies have found is that radioactive materials that can be used in a dirty bomb are the new illicit trade of choice.

Advocates of a nuclear ban, such as Max Tegmark, Professor of Physics at the Massachusetts Institute of Technology (MIT), have argued that since dirty bombs are not as powerful as nuclear weapons, they should not be of primary concern. But the issue, most police counterintelligence officials say, is the stakes, not the risk.

Consider, for example, what would have happened if the perpetrators of any of the terror attacks on American soil had involved a dirty bomb. Hospitals would have had to deal with contaminated first responders, leading to delays in emergency treatment. If large amounts of radioactive material were used, the attack could affect several blocks around where the incident took place. Victims would have suffered the effects of radiation poisoning.

Chechen separatists, like those who were linked to the perpetrators of the Boston Marathon attack, have a history of threatening and attempting to use stolen radioactive materials in

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terror attacks against Russia. In one 1995 incident, a Chechen separatist showed containers at an international conference that he claimed contained cobalt-60, cesium-137, or strontium-90, and told a Russian television where to find a container of cesium-137 that he claimed to have buried in Moscow's Izmilovskiy Park. That case merely illustrated the threat, but the IAEA database has thousands of reports from member states about radioactive materials that are unaccounted for or are found in the wrong hands. And on Tuesday, the Commander of U.S. Strategic Command, General John E. Hyten, told the Senate Armed Services Committee that he is worried about drone threats to U.S. nuclear facilities.

### **THE GENIE IN THE BOTTLE**

The IAEA was created in 1957 to marshal the development of radioactive material. It now has 168 members. Its dual goals are to supervise the international development of nuclear weapons and promote peaceful uses of nuclear technology. A related 1968 agreement, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), aims to prevent the spread of weapons technology. Several other treaties have come into effect in recent years, including the 2016 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM), which covers the physical protection of nuclear materials in international transport, including protection of nuclear material and of nuclear facilities against acts of sabotage.

Keeping the nuclear genie in the bottle has been an uphill battle. To be sure, the proliferation of nuclear weapons has been limited, but the spread of nuclear technology has not. For one thing, the vast majority of countries use radioactive materials in hospitals for cancer treatments, in industry for construction, and in research. Some of these materials can be combined with conventional explosives to make a dirty bomb. So, at the December meeting of the IAEA, its director-general Yukiya Amano told member states: "Terrorists and criminals will try to exploit any vulnerability in the global nuclear security system. Any country, in any part of the world, could find itself used as a transit point." And Amano's predecessor, Hans Blix, said during a conversation when he visited the United Nations, "There is a risk of dirty bombs...and not only cesium; you have cobalt, and you have other radioactive substances that are used industrially and in hospitals and can be stolen."

In addition, the consensus around nuclear weapons nonproliferation is waning. Writing in Foreign Affairs, Council on Foreign Relations President Richard Haass explained that part of the problem is the existence of non-state actors. The other issues are a breakdown in the traditional post-World War II assumptions of sovereignty and conflict, and a lack of appetite for preventative military action, even in the case of a dangerous nuclear-equipped rogue state such as North Korea. The NPT, some say, has become a leaky boat taking on water, with rogue states using their nuclear prowess without consequences.

The international community might have learned its lesson with Abdul Qadeer Khan, the creator of the Pakistani nuclear program, who admitted to selling nuclear bomb technology to North Korea, Libya, and Iran. Indeed, a cash-strapped or isolated nation, such as North Korea under Kim Jong Un, poses more of a risk for selling technology or nuclear material than a potential for self-annihilating use of a weapon in an attack.

Former U.S. President Barack Obama made the point at the Nuclear Summit in 2016: 2,000 tons of nuclear materials are stored around the world, he said. They are vulnerable to theft and to being transported across national borders, creating the risk of ISIS or other



extremists getting nuclear material—which remains, as he said, “one of the greatest threats to global security.”

Along the same lines, in November 2016, the IAEA warned that Iran had notified it that highly radioactive material was missing from its Bushehr nuclear power plant, including a supply of iridium-192, an unstable isotope that can be used to manufacture dirty bombs. The material was later recovered, but the event underscored the need for security, particularly at facilities with advanced nuclear technology. Another case of missing material came in February 2016, when Baghdad reported to the IAEA that radioactive material was stolen from a storage facility near the city of Basra.

Indeed, according to the IAEA’s Incident and Trafficking Database (ITDB), which records illicit trafficking involving nuclear and radioactive material outside of regulatory control, as of January 2016, participating nations had reported a total of 2,889 confirmed incidents of unauthorized possession and related criminal activities, reported theft or loss, and other activities and events. The number of incidents reached a peak in the early 1990s; since 2009, the ITDB has received reports of scrap metal shipments contaminated with enriched uranium, an issue of concern, according to the IAEA.

In short, the potential for a dirty bomb strike is real.

### **THE WEAKEST LINK**

“Smugglers are always the weakest link, this is a lucrative business, so those people who are involved in drug trafficking or human trafficking are more likely to get involved,” Amano said in a wide-ranging conversation in IAEA’s New York office. The Moldova seizure, he said, was a “typical example.” In that case, the IAEA trained the customs officers and border guards and provided detection equipment. Amano argues that detection technology is improving: “Detectors are not that expensive, some of them are the size of your cellphone and cost around 1000 euros: the small ones are not that sophisticated—you can just tell whether someone has some nuclear material or radioactive material—but it is still more effective than nothing; the bigger ones are able to determine the nature of the material, but those are much, much more expensive.”

Unfortunately, many vulnerable countries often do not use these tools, partly because of cost, but mostly because of lack of training and technology. Training, Amano said, is particularly important where entry point detection—for example, at the borders into Europe from the Middle East and Eastern Europe—is often limited. The IAEA will, in some cases, pay for the training in and procurement of radiation detection equipment. In other cases, it encourages countries to allocate funds: Armenia was able to strengthen its efforts to combat nuclear smuggling and develop nuclear forensics capabilities, in part through a security mission of the agency; Azerbaijan received IAEA assistance to strengthen nuclear security during the Baku European Games in 2015; and the list includes projects in three dozen countries.

“We need to train people that there exists this danger and they should be familiar with nuclear material, they should be familiar with detection equipment,” Amano said, urging more action. If countries are in need of the equipment, the IAEA provides it, as well as assistance, training, and other equipment, which are all essential to prevention.

Within borders, nuclear facilities are also vulnerable. For example, the IAEA has reported recent attempted cyberattacks on two nuclear facilities. The first attempt occurred as an ISIS plan, uncovered in 2016, to target a Belgian nuclear facility. Two men linked to the Brussels attacks recorded ten hours of secret surveillance video of a top Belgian nuclear





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scientist likely hoping to use his security clearance to try to obtain radioactive material. Amano would not say where the second cyberattack occurred, but said that threats against nuclear facilities are more difficult and, therefore, more infrequent than smuggling. The threat of smuggling, including of highly enriched uranium is real: “Anything they can get their hands on, they will steal.”

Thus, the issue for counterterrorism officials is not just nuclear facilities and not just nuclear weapons-wielding nations. There is nuclear material in many countries, including cobalt, cesium, and uranium and plutonium, which are used for medical purposes or industry and research—materials that smugglers want to get their hands on.

Regardless of whether the fear is justified, some people who can afford it are planning their evacuation. “People come to me to advise them on how to leave the city—fast,” says former New York Police Commissioner Raymond W. Kelly, who, along with former Mayor Michael R. Bloomberg, began the development of a high-tech system of counterterror surveillance after the September 11 attack. These folks want a plan to have a boat ready, a plane after that, and citizenship elsewhere to wait it out if an attack occurs, which explains the spike in citizenship applications to New Zealand, he said.

### **CHAIN OF CUSTODY**

How can the world deal with the dirty bomb threat? One approach is to tackle the development and sale of higher-technology radiation detection systems.

The Domain Awareness System (DAS), developed by Microsoft Corporation and New York City, aggregates global intelligence with local radiation detectors, closed-circuit television, and databases. It also involves outfitting thousands of police officers with radiation detectors: “We have fixed detectors spread throughout the city. All of this rings into a central control center where it shows up on maps that are linked to 9,000 cameras and license plate readers,” New York City Deputy Commissioner of Intelligence and Counterterrorism John Miller told Foreign Affairs.

Kelly said that the system, which has been used in Washington, D.C., and Sao Paulo, Brazil, is available in New York City and for licensing to foreign governments. This is where the UN and the IAEA could provide the means for other nations to acquire the DAS. The IAEA, for example, is already working with New York City “to apply the similar sort of system in Mecca,” Amano said.

The advantage of the DAS is that the cameras and databases are linked, which is not the case in some cities such as London, Kelly said, where there are many cameras but they are not linked. Today, Kelly also noted, most big ports have radiation detectors, and New York City even has a submarine that goes to ships that are coming into ports of entry. But nothing is foolproof, and a radiological element sealed in lead may not be detected. “That is an area of vulnerability, because you can’t check every ship...every container that’s coming in.”

Howard Stoffer, Associate Professor of National Security at the University of New Haven, who served in the Foreign Service of the United States and as the deputy executive director of the Counter-Terrorism Committee Executive Directorate of the UN Security Council, says the new counterterror office proposed by U.N. Secretary-General Antonio Guterres is a good place to develop a global strategy for pooling information and countering violent extremism. Stoffer proposes adding DNA analysis to the data bank: “If you have DNA analysis, you can’t hide; even fingerprints can be faked, but not DNA, so if the DNA doesn’t

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match the passport with someone coming into the country, you know you have to investigate.” Saudi Arabia, he said, built a lab in Djibouti for forensic sciences so they can avoid having terrorists pose as refugees and disappear from the camps.

Networking is also extremely important. Countries need to share information and adhere to the nonproliferation treaty, establish a national regime to report incidents, and cooperate in case of problems—and also to criminalize breaches. The IAEA has its database; countries are supposed to share their own intelligence with the agency when they join the system. Recently, the IAEA and the NYPD have worked together, Amano said. But counterintelligence officials in several cities, including Berlin, have said that information sharing is not yet adequate, and some rogue states such as North Korea do not allow these organizations to monitor its use of nuclear and radiation materials. In any event, North Korea has not allowed inspectors in since 1994.

South Korea is understandably nervous about both an actual nuclear missile attack by North Korea and smuggling of nuclear materials by Pyongyang. When South Korea’s Foreign Minister Yun Byung-se, president of the International Conference on Nuclear Security, spoke at a December 2016 IAEA meeting, he said that the challenges are daunting, citing the arrest of smugglers attempting to sell cesium to ISIS in Moldova, the attempted breach of the nuclear facility in Brussels, and “intense cyber attacks on our nuclear facilities from North Korea.” International cooperation, he said, is key to strengthening nuclear security.

In such cases and in others, drones can also be useful. Smugglers have been known to use them, but security officials can also employ them to detect nuclear materials. Cities in the United States are already doing so: “If you use the drones to fly around the area you suspect, you can detect where there exists a nuclear or radioactive source,” Amano said.

Finally, criminalizing the possession of the materials for dirty bombs is imperative. In the United States, for example, the federal 2004 Radiological Dispersal Device law made it illegal for any person to produce, transfer, or import any weapon designed to release radiation or radioactivity. The first conviction under the statute took place in December 2016. If the world gets its prevention system right—through intelligence sharing, security best practices, and a recommitment for nonproliferation—perhaps there won’t be a next attempt.

<https://www.foreignaffairs.com/articles/2017-04-04/dirty-bomb-threat>

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Popular Mechanics (United States)

## **Russian Military Plane Will Fly Over the U.S. to Take Pictures—and That's Totally OK**

By Kyle Mizokami

April 11, 2017

*The Open Skies Treaty also allows US and Canadians to overfly Russia.*

A modified Russian military passenger jet will overfly the United States next week, taking photographs of the ground below and monitoring U.S. government activities. It's basically spying but it's all completely legal, thanks to the Open Skies Treaty of 1992 that allows the Russians to overfly the United States and Canada—and vice versa.



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The Russian aircraft will overfly the United States on April 10 to 15, and overfly Canada (part of the North American Air Defense Command) April 18 to 22. The aircraft will be looking for signs the United States is violating nuclear arms agreements, such as the New START Treaty and Intermediate Nuclear Forces Treaty. At the same time, U.S. and Canadian specialists will overfly Russia in their own aircraft.

The Open Skies Treaty was signed in 1992 by then-president George H.W. Bush. Designed to boost confidence in arms control agreements, the treaty allows participants to fly over any part of any territory of other participants to make sure everyone is adhering to treaties limiting the numbers and types of weapons.

Member states are allowed to fly unarmed aircraft equipped with a variety of sensors to identify objects on the ground. The United States, for example, flies a U.S. Air Force OC-135B transport, while the Russian Aerospace Forces use a similar-sized Tupolev Tu-154ON transport and a smaller Antonov An-30. Other countries use smaller, shorter range aircraft to get the job done. Technicians and other specialists from the country being overflown are allowed onboard to ensure that the surveillance equipment is being used properly.

Open Skies aircraft carry a variety of electro-optical sensors to do their job. Permissible surveillance systems include "video cameras and panoramic and framing cameras for daylight photography; infra-red line scanning systems, which can operate by day and night; and synthetic aperture radar, which can operate day and night in any weather". All equipment is inspected to ensure that it is allowed under the treaty. For example, installing gear that records radio and radar transmissions as the aircraft flies over a military base is a no-no.

The treaty stipulates that aircraft are allowed to carry surveillance equipment to carry out their task. Not the most sophisticated spy equipment, but enough to tell a truck from a tank. That satisfied the requirements of most participants from Europe, who had a conventional arms control agreement limiting tanks and other weaponry with Russia—before Russia pulled out of the treaty in 2015. Any data gathered by any treaty member is accessible to any other treaty member, so long as they pay for the cost of copying it.

In the United States, Russian Aerospace Force aircraft participating in Open Skies must enter the country through Dulles International Airport on the East Coast and Travis Air Force Base on the West Coast. They may operate from Travis AFB, Dulles, Elemendorf Air Force Base in Alaska, and Lincoln Municipal Airport in Nebraska. They may refuel at air bases and airports in Hawaii, Wisconsin, Montana, Arizona, and Tennessee. Likewise, American planes operating over Belarus and Russia operate under similar restrictions.

Open Skies flights can apparently be undertaken everywhere, at any time, but participants generally announce the flights ahead of time as a courtesy. The only real restriction is the number of flights a participant can undertake, a number that varies due to the size of the country. The United States and Russia are each granted 42 flights a year, while France gets 12 and Portugal gets two. The April flights will be the ninth and tenth Russian Open Skies flights of 2017.

Is Open Skies invasive? Sure, it's a little disconcerting that Russian Aerospace Forces aircraft can fly over our most sensitive military installations—indeed, any point over America.

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But at the same time, we can do the same to them. And without these flights, all parties would be a lot more suspicious that others have something to hide.

<http://www.popularmechanics.com/military/aviation/news/a26026/russian-military-plane-overfly-us-canada/>

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## Arms Control Wonk (United States)

### **Kerr On The JCPOA**

By Paul Kerr

April 7, 2017

In January 2016, Iran completed implementing its nuclear commitments pursuant to the Joint Comprehensive Plan of Action (JCPOA) which Tehran had concluded the previous July with Britain, China, France, Germany, Russia, and the United States. The recent anniversary of this occasion, which coincides with uncertainty regarding the JCPOA's future, provides an opportunity to contemplate the agreement's effects on Iranian efforts to produce a nuclear weapon.

The International Atomic Energy Agency (IAEA) has verified Iran's compliance with the agreement's provisions concerning the country's nuclear program. JCPOA proponents note that, under these restrictions, Tehran will, for at least a decade, need a minimum of one year to produce enough weapons-grade highly-enriched uranium (HEU) for a nuclear weapon. Nevertheless, some observers have expressed concern that the eventual normalization of Iran's gas centrifuge uranium enrichment program, as well as the country's ongoing ballistic missile program, will leave Tehran with the ability to produce a deliverable nuclear weapon relatively quickly.

The expiration dates of the JCPOA's restrictions which place physical limits on Iran's enrichment program are apparently one source of concern. [The JCPOA also contains restrictions of indefinite duration on Iran's heavy-water reactor program.] These limits include caps on Iran's installed centrifuges, number of enrichment facilities, enriched uranium stockpile, and the amount of uranium-235 that this stockpile may contain (weapons-grade HEU contains about 90% uranium-235; the JCPOA allows a maximum enrichment of 3.67%.) All of these provisions, however, expire in 15 years, after which Iran will be free to pursue a civil nuclear program, albeit subject to the nuclear Nonproliferation Treaty's restrictions and the inspection provisions contained in Iran's IAEA comprehensive safeguards agreement. The JCPOA has additional inspection and monitoring requirements of indefinite duration that supplement Iran's safeguards agreement and are designed to increase the IAEA's ability to detect an Iranian attempt to develop nuclear weapons. But these provisions may well be insufficient to allay the fears of those who argue that Iran may use its declared facilities to produce HEU for a nuclear weapon.

Does the JCPOA merely postpone Iran's acquisition of nuclear weapons? Probably not, the best evidence suggests. First of all, even if Iran were to expand its enrichment program in the coming decades, the ability to produce fissile material is not sufficient for producing a nuclear warhead. Iran, however, has likely not completed the additional research necessary for developing nuclear weapons; important JCPOA provisions will prevent the country from filling those gaps. Specifically, the agreement prohibits Iran from engaging in several dual-



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use “activities which could contribute to the development of a nuclear explosive device.” These provisions, which last indefinitely and supplement Iran’s safeguards obligations, include restrictions on computer modeling, certain explosive detonation systems, explosive diagnostic systems, and neutron sources. These restrictions are important because, according to senior U.S. officials who briefed reporters in November 2011, Iran’s nuclear weapons program never “mastered all the necessary technologies” for building such weapons.

### **A weapons program?**

Again, the evidence suggests probably not. Even if Iran were to improve significantly its HEU production capability significantly, the country will not be able to produce nuclear weapons unless Tehran implements a successful program to fill these gaps. Indeed, if Iran were planning to build nuclear weapons upon the JCPOA’s expiration, one would expect the government to possess the requisite organizational structure for building such weapons. But this is not the case; the enrichment facilities governed by the JCPOA are controlled by Iran’s Atomic Energy Organization (AEOI), which is organizationally distinct from both Iran’s past nuclear weapons program and ongoing ballistic missile program.

According to a November 2011 IAEA report, Iran, beginning in the late 1980s, developed “organizational structures and administrative arrangements for an undeclared nuclear programme” that were coordinated by entities connected with Iran’s Ministry of Defense (an entity called the Amad Plan took over these activities several years later). However, according to a 2007 U.S. National Intelligence Estimate (NIE) and subsequent statements from the U.S. intelligence community, Tehran ended the program in 2003 and available evidence suggests it has not revived it. An April 2016 Department of State report which assesses states’ compliance with nonproliferation agreements is illustrative of U.S. thinking on this issue. Previous versions of this report argued that Iran had violated its nuclear Nonproliferation Treaty obligation to refrain from attempting to acquire nuclear weapons. But the 2016 edition stated that the United States has “resolved” these concerns.

According to the November 2011 briefing by U. S. officials, Iran’s nuclear weapons program had been “very well organized” with “sufficient manpower and resources.” After 2003, Iranian entities did carry out experiments that were “sort of related to nuclear weapons development,” but these activities were “relatively uncoordinated and sporadic,” an official added. A 2015 IAEA report supported this assessment, explaining that post-2003 Iranian nuclear weapons-related activities “were not part of a coordinated effort.” After the program’s halt, an individual who had “managed activities useful in the development of a nuclear explosive device” as part of the Amad Plan established an entity in 2011 called the Organization of Defensive Innovation and Research (SPND). According to a 2012 Israeli intelligence document, Iran established the SPND “for the purposes of preserving the technological ability and the joint organizational framework of Iranian scientists in the area of R&D in nuclear weapons.” The SPND’s activities were to “allow renewal of the activity necessary to produce weapons immediately,” should Tehran decide to take this step.

The AEOI did have some connections with entities involved in Iran’s nuclear weapons program. A company called Kimia Maadan “was a cover company for chemical engineering operations under the AMAD Plan while also being used to help with procurement for the [AEOI],” according to a November 2011 IAEA report. Moreover, the AEOI-run centrifuge program had connections to entities controlled by Iran’s Ministry of Defence Armed Forces



Logistics (MODAFL), which controlled the Amad Plan. However, the AEOI's current activities appear to be peaceful. First, the 2007 NIE appeared to exclude the AEOI-run enrichment program, explaining that "Iran's declared civil work related to uranium conversion and enrichment" was not part of the country's weapons program. In addition, the AEOI does not appear in a description of that program's management structure contained in the November 2011 IAEA report. Last, September 2009 U.S. intelligence community talking points indicate that Iran's controversial underground Fordow enrichment site was not part of a nuclear weapons program – an assessment partly based on the fact that the AEOI developed the facility.

Iran's ballistic missile program understandably is of interest because it could produce delivery vehicles for nuclear warheads. But this program is apparently separate from the AEOI; British Foreign and Commonwealth Office official Tobias Ellwood told Parliament in June 2015 that his government was "not aware of any current links between Iran's ballistic missile programme and nuclear programme." MODAFL actually manages the missile program and a subsidiary called the Aerospace Industries Organization oversees missile production, according to a 2012 Department of the Treasury fact sheet. The Islamic Revolutionary Guard Corps also plays a role; for instance, its air force operates Iran's ballistic missiles.

### **Conclusion**

Any individual's confidence in the JCPOA is, to a certain extent, a function of their tolerance for risk. After all, Iran could, conceivably in the future, reconstitute its weapons program and draw on its missile program and JCPOA-permitted enrichment work. Moreover, for some observers, Tehran's past violations of its IAEA safeguards agreement understandably suggest an Iranian reluctance to abide by the JCPOA's restrictions. But the available evidence indicates that Iran is probably not lying in wait to produce nuclear weapons upon expiration of the relevant JCPOA provisions.

<http://www.armscontrolwonk.com/archive/1203033/kerr-on-the-jcpoa/>

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The Sydney Morning Herald (Australia)

### **Australia part of global web to monitor North Korea's nuclear ambition**

By Daniel Flitton

April 11, 2017

In the red dirt of central Australia, what looks to be nothing more remarkable than a rusty steel cable looped across the ground is central to a global effort to monitor North Korea's budding nuclear arsenal.

This jumble of wires is actually a high-tech monitoring station designed to measure shockwaves deep within the earth.

Last September, it became one of six seismic monitoring stations across Australia and its territories that sounded the alarm when North Korea last exploded an atomic bomb underground.



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As tensions spike on the Korean peninsula amid speculation that Kim Jong-un will soon test another nuclear weapon, the monitoring stations are again listening carefully. They are key to understanding the nuclear games played by a notoriously secretive regime.

The stakes could hardly be higher. US President Donald Trump has warned of pre-emptive military strikes and has dispatched a US carrier fleet to sail in nearby waters. North Korea has in recent weeks lobbed long-range missiles into the sea.

Meanwhile, at Warramunga near Tennant Creek in the North Territory, this seismic station is part of a global alert system. It's designed to detect tremors caused by nuclear tests anywhere on the planet - one of four types of technology used to detect atomic explosions.

Another station on the far-flung Cocos Islands can detect ultra-low frequency sound waves – inaudible to the human ear – that result from large explosions, while specialised equipment near Townsville measures for what scientists call the "smoking gun" particles – tiny radioactive "radionuclides" – in the atmosphere, which are blown long distances by the wind.

On the coast of Western Australia, another station is designed to detect long-range sound waves in the ocean. Other detectors are located in NSW, Tasmania and Macquarie Island.

The system has been painstakingly created over the past 20 years to support the Comprehensive Test Ban Treaty, with more than 180 nations involved globally.

The treaty aims to ban nuclear tests by any nation, anywhere, although North Korea is the only country to explode a nuclear device this century, including two tests last year.

The network requires only three stations to confirm a nuclear test, via triangulation, but 120 stations picked up the most recent test last September, providing evidence beyond doubt that North Korea was breaching UN resolutions.

"These actions contribute to making it one of the most isolated countries in the world," said Lassina Zerbo, head of the international organisation charged with monitoring for nuclear tests, during a visit to Melbourne last week.

Dr Zerbo said the stations send data "in near-real time, with unrivalled reliability and precision", and has proved invaluable not only for detecting the North Korean nuclear tests, but also for disaster warning and scientific research.

More than 2000 nuclear tests were conducted during the Cold War, most underground, but some also in the atmosphere, underwater and in outer space.

Maralinga nuclear test site in Australia became infamous for its deadly radiation, but bombs were also exploded at the Monte Bello Islands off Western Australia.

Australia was one of the first countries to sign the test ban treaty in 1996 and now hosts 21 monitoring stations, with another under construction at Davis in Antarctica.

The aim is to build a global web of more than 330 across the world, making it impossible for anyone to carry out nuclear tests in secret.

Not that North Korea is exactly hiding its atomic ambition, boasting it will have the ability to obliterate "imperialist" America.



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Ironically, the US along with North Korea is one of a handful of countries that has yet to sign the test ban, which prevents the treaty from formally becoming part of international law.

<http://www.smh.com.au/world/australia-part-of-global-web-to-monitor-north-koreas-nuclear-ambition-20170411-gvihgn.html>

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Sputnik News (Russia)

### **US Remains Fully Committed to Upholding INF Treaty - Ambassador to Russia**

Author Not Attributed

April 4, 2017

*US Ambassador to Russia said that United States remains fully committed to the Intermediate-Range Nuclear Forces Treaty.*

The United States remains fully committed to the Intermediate-Range Nuclear Forces Treaty (INF Treaty), US Ambassador to Russia John Tefft said Tuesday.

*"We think that the INF Treaty remains a key to international stability. We continue our commitment to the INF Treaty and take very seriously our obligations under the treaty as well as in terms of arms control overall," Tefft wrote on the embassy's Facebook page during an online chat.*

Moscow and Washington have repeatedly accused each other of violating the bilateral agreement, which was concluded between Soviet President Mikhail Gorbachev and US President Ronald Reagan in 1987.

In March, Russian Foreign Minister Sergey Lavrov said that Moscow was in full compliance with the INF Treaty despite US claims that Russia had deployed nuclear cruise missiles in violation of the treaty. The minister said no evidence was ever provided for US claims. The Kremlin had also reaffirmed Russia's commitment to the treaty and stressed that Russia always respected international agreements rather than solely in cases deemed convenient to abide by them.

In turn, Russian fears of US violations of the treaty were stoked when Washington activated its Aegis ashore ballistic missile defense system (BMDS) in Romania last year. The system is equipped with the Mk-41 launcher and Moscow considers the Mk-41 to be capable of launching Tomahawk long-range cruise missiles.

<https://sputniknews.com/world/201704041052284838-us-russia-inf/>

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MilitaryTimes (United States)

### **North Korea says Syria airstrikes prove its nukes justified**

By Eric Talmadge

April 9, 2017

North Korea has vowed to bolster its defenses to protect itself against airstrikes like the ones President Donald Trump ordered against an air base in Syria.

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The North called the airstrikes "absolutely unpardonable" and said they prove its nuclear weapons are justified to protect the country against Washington's "evermore reckless moves for a war."

The comments were made by a Foreign Ministry official and carried Sunday by North Korea's state-run Korean Central News Agency. The report did not name the official, which is common in KCNA reports.

The airstrikes, announced shortly after Trump and Chinese President Xi Jinping wrapped up dinner at a two-day summit in Florida last week, were retaliation against Syrian President Bashar Assad for a chemical weapons attack against civilians caught up in his country's long civil war.

"Some forces are loud-mouthed that the recent U.S. military attack on Syria is an action of warning us but we are not frightened by it," the report said, adding that the North's "tremendous military muscle with a nuclear force as its pivot" will foil any aggression by the U.S.

"We will bolster up in every way our capability for self-defense to cope with the U.S. evermore reckless moves for a war and defend ourselves with our own force," it said.

North Korea has long claimed that the United States is preparing to conduct similar precision strikes against its territory or even launch an all-out invasion. It claims its nuclear weapons are a necessary deterrent to the U.S. military threat.

Washington denies it has any intention of invading the North.

Tensions have been even higher than usual over the past few weeks because annual war games between the U.S. and South Korean militaries are underway. The exercises this year are the biggest ever and have included stealth fighter training and other maneuvers that are particularly sensitive to North Korea.

For its part, the North test-launched a ballistic missile just ahead of the Trump-Xi meeting and has been rumored to be preparing for a possible nuclear test.

The Korean Peninsula remains technically at war since the 1950-53 Korean conflict ended with an armistice, not a formal peace treaty.

North Korea considers Syria an ally. But unlike Syria, experts warn that North Korea has a means of striking back if provoked.

Along with its rapidly advancing nuclear and long-range missile capabilities, the North has its artillery and short-range missiles trained on Seoul, the capital of U.S. ally South Korea and a city of more than 10 million people.

[http://www.militarytimes.com/articles/north-korea-says-syria-airstrikes-prove-its-nukes-justified?utm\\_source=Sailthru&utm\\_medium=email&utm\\_campaign=EBB%2004.10.2017&utm\\_term=Editorial%20-%20Early%20Bird%20Brief](http://www.militarytimes.com/articles/north-korea-says-syria-airstrikes-prove-its-nukes-justified?utm_source=Sailthru&utm_medium=email&utm_campaign=EBB%2004.10.2017&utm_term=Editorial%20-%20Early%20Bird%20Brief)

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South China Morning Post (China)

## **China and South Korea warn Pyongyang of stiffer sanctions over weapons tests**

By Kristin Huang and Laura Zhou

April 11, 2017

*More military 'provocation' by North Korea could lead to tougher action in line with UN Security Council resolutions, envoy says*

China and South Korea have agreed to impose “strong” new sanctions on North Korea if it carries out further nuclear or long-range missile tests, a senior official in Seoul said on Monday.

The commitment comes as pressure on Pyongyang mounts after last week’s summit between US President Donald Trump and President Xi Jinping.

Monday’s meeting in Seoul between China’s Special Representative for Korean Peninsula Affairs Wu Dawei and his South Korean counterpart Kim Hong-kyun also came as a US naval strike group led by the aircraft carrier USS Carl Vinson headed to the region in a show of force.

“In the midst of the growing possibility of North Korean provocations, The latest visit by Wu -Dawei to Korea is very timely in terms of sending a strong warning to North Korea,” Yonhap news agency quoted Kim as saying.

Wu’s trip was the first to South Korea by a senior Chinese official since a diplomatic row erupted between Beijing and Seoul over South Korea’s planned deployment of the US’ Terminal High -Altitude Area Defence system.

Analysts said Beijing appeared to be taking a more active role in warning North Korea not to test Beijing’s bottom line with more strategic military tests.

North Korea has several major anniversaries this month, including the 105th anniversary on Saturday of its founding leader’s birth, and often marks the occasions with major tests of military hardware.

The possibility of US military action against North Korea in response to such tests gained traction after last week’s strikes against Syria. But, Kim said, there was no mention of any military option in his talks with Wu. The two also did not discuss any possible strike against the North by the United States, he said.

“Both sides agreed that despite the international community’s warnings, if North Korea makes strategic provocations such as a nuclear test or an ICBM launch, there should be strong additional measures in accordance with UN Security Council resolutions,” Kim said.

Kim added the two sides agreed that “an even stronger UN resolution” would have to be adopted in the event of additional weapons tests by North Korea.

Wu did not speak to reporters.

Kim said Wu repeated China’s position on the THAAD system deployment, but did not give details. China has previously said the system would destabilise the regional security balance and that its radar’s reach would intrude into Chinese territory.

Meanwhile, Japanese Foreign Minister Fumio Kishida and US Secretary of State Rex Tillerson agreed yesterday on the sidelines of G7 meeting in Viareggio, Italy, to urge China to “play a bigger role” in halting North Korea’s nuclear and missile programmes.

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In an interview broadcast on Sunday, Tillerson told CBS's Face the Nation that when Trump and Xi met at the Mar-a-Lago resort last week, they "had extensive discussions around the dangerous situation in North Korea".

US National Security Adviser HR McMaster also criticised North Korea as a rogue nation engaged in provocative behaviour and said denuclearisation of the peninsula "must happen".

"The president has asked them to be prepared to give us a full range of options to remove that threat," he said on Fox News, apparently referring to Trump's advisers.

Wang Sheng, from Jilin University, said Beijing was sounding another alarm to Pyongyang, its long-time ally.

"It looks like China is trying to take a more proactive role to warn North Korea not to try to cross China's bottom line," Wang said, adding that China could impose tougher sanctions over food or even oil if Pyongyang continued to be provocative.

Lee Kyu-tae, a geopolitical analyst at South Korea's Catholic Kwandong University, said Wu's trip to Seoul might also help repair ties strained by the THAAD dispute.

"China has pressured South Korea over the THAAD deployment for months. It may need [to send someone] to South Korea to assess how to repair its relations with Seoul," Lee said.

Zhang Tuosheng, from the China Foundation for International and Strategic Studies, agreed that Wu's trip also serves to assess the latest development on deployment of the US anti-missile system.

"It is meaningful for Wu ... to reach out South Korean officials, prepare responses for further situations [on the peninsula], and also understand the developments over [THAAD]," Zhang said.

<http://www.scmp.com/news/china/diplomacy-defence/article/2086506/china-and-s-korea-warn-pyongyang-stiffer-sanctions-over>

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38 North (United States)

### **Groundhog Day: Activity Continues at North Korea's Punggye-ri Nuclear Test Site**

By Joseph Bermudez and Jack Liu

April 6, 2017

Over the past four weeks, there have been unusually high levels of activity at the Punggye-ri Nuclear Test Site, especially around the North Portal—the tunnel in which the four most recent nuclear tests have taken place. New commercial satellite imagery from April 2 indicates continued activity in this area and at the Main Administrative Area, while the rest of the facility remains quiet. This pattern of activity could mean a sixth nuclear test is imminent, but the imagery does not provide any definitive evidence of the installation of a nuclear device or the exact timing of such a test.

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At the North Portal, water continues to be pumped out of the tunnel and is saturating the ground to the southeast. The melting snow and resulting visible paths indicate continued foot and vehicle traffic around the portal and what appear to be two small trailers are visible on the side of the road to the south. The probable netting that was installed previously near the support building appears to be suspended over equipment—precisely what equipment can't be determined at present. Additionally, there may have been some new dumping of material excavated from the tunnel onto the spoil pile.

In the northern courtyard of the Main Administrative Area there appears to be either a formation of personnel or rows of equipment or supplies, but the resolution of the imagery is insufficient to make a determination. No recent vehicle tracks are noted in any of the courtyards.

No activity of significance is noted at the West or South Portals, Command Center Area, or the main guard barracks and security checkpoint.

<http://38north.org/2017/04/punggye040617/>

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## The Diplomat (Japan)

### **South Korea Test Fires New Ballistic Missile**

By Franz-Stefan Gady

April 7, 2017

*The new 800-kilometer missile can purportedly hit targets anywhere in North Korea.*

Following North Korea's recent missile tests, South Korea has reportedly successfully test launched a new ballistic missile with an estimated range of 800 kilometers, according to South Korean media reports.

"There was a test firing recently of a Hyunmoo-type ballistic missile with a range of 800km at the Anheung test site of the Agency for Defense Development (ADD) under the wing of the Defense Ministry," an informed source told Yonhap News agency on April 6. "It's assessed that it was successful."

The test site is located near the coastal city of Taean, in South Korea's South Chungcheong Province. The Republic of Korea Ministry of Defense refused to publicly comment on the test citing operational security. According to the source, Defense Minister Han Min-koo personally observed the test launch.

The missile reportedly hit its target, although the ADD shortened the missile's flight range. The source also noted that this was not the first test of the missile, indicating that its development is at an advanced stage.

The South Korean military intends to field the new ballistic by the end of the year. Judging from the missile's range, it appears that the missile tested was an improved variant of the Hyunmoo (which literally means "Guardian of the Northern Sky") missile family.

The Republic of Korea Armed Forces currently operate two variants of the Hyunmoo missile, the Hyunmoo 2A and 2B ballistic missiles, both surface-to-surface missiles with an estimated maximum range of 300 kilometers and 500 kilometers (310 miles) respectively.



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Both weapon systems are capable of carrying a payload of up to 997 kilograms (2,200 pounds). The new 800-kilometer missile will likely be designated Hyunmoo 2c.

I first reported about the South Korean military's intention to test fire a new ballistic missile in response to North Korea's missile tests this February. "There is also an opinion in the military that it will be more effective to unveil the test-firing scene of a new 800 km ballistic missile, which is in the final stage of development," an ADD source said at that time.

As I explained elsewhere (See: "South Korea Tests New Ballistic Missile"):

*Ever since 2012, Seoul has been developing a new ballistic missile after the United States and South Korea concluded an agreement to extend the range of those weapons by up to 800 kilometers (about 500 miles) and carry warheads heavier than the pre-2012 limit of 500kg (1,102 pounds).*

*However, the agreement stipulates that the payload of missiles with a 500-mile range is limited to 1,100 pounds or below, in order to avoid a regional missile arms race with South Korea's neighbors – China and Japan (shorter range ballistic missiles can carry up to 4,400 pounds under the rules).*

The new 800-kilometer variant of the Hyunmoo would put South Korean missile launchers out of range of North Korean missiles. South Korea has also been working on a new submarine-launched ballistic missile, specifically designed for the Republic of Korea Navy KSS-III (aka Jangbogo III)-class diesel-electric attack submarines (See: "South Korea to Develop Submarine Launched Ballistic Missile"). Furthermore, I noted:

*Ballistic and cruise missiles (e.g, the Hyunmoo 3B and 3C surface-to-surface cruise missiles, with an estimated range of 1,000 and 1,500 kilometers respectively) play a pivotal role in South Korea's deterrence strategy, known as the Korea Massive Punishment & Retaliation (KMPR)(...).*

*In the event of a North Korean nuclear attack (or even signs of preparations for one), KMPR specifically calls for surgical strikes against key leadership figures of the communist regime and military infrastructure with the missiles part of a so-called kill chain consisting of integrated information, surveillance, and strike systems, as well as the Korea Air and Missile Defense (KAMD) system.*

The recently compromised OPLAN 5015, a classified US-ROK war plan for conflict on the Korean Peninsula, is part of KMPR.

<http://thediplomat.com/2017/04/south-korea-test-fires-new-ballistic-missile/>

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China Military (China)

### **Russia to start serial production of strategic bomber Tu-160M2 in 2020**

Author Not Attributed

April 11, 2017

Russia will start full-scale production of the upgraded supersonic strategic bomber Tupolev Tu-160M2 in 2020, Russian state-owned news agency TASS reported Tuesday.

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According to the contract with the United Aircraft Corporation, the production of Tu-160M2 has already been launched, and the new model is expected to make its debut flight in 2018 and to realize its serial production in 2020, with two or three aircraft being produced each year, the Russian defense industry was quoted as saying.

The new bomber, equipped with completely new mission systems, can be powered by an upgraded version of the existing Kuznetsov NK-32 afterburning turbofan, it said.

Along with the production of the Tu-160M2, operational long-range combat aircraft, such as the Tu-160 and Tu-95MS, will also be modernized, said the agency.

The Tu-160, or White Swan, is a Soviet supersonic strategic bomber which can be equipped with nuclear warheads, while the Tu-95, a four-engine turboprop-powered strategic bomber and missile platform, has been included in Russian strategic nuclear forces along with ground missile systems and submarines.

The idea to restart the production of Tu-160 airplanes in a modernized version was put forward by Russian Defense Minister Sergei Shoigu in April 2015. A month later, Russian President Vladimir Putin gave instructions to resume the production of the aircraft.

[http://english.chinamil.com.cn/view/2017-04/11/content\\_7558833.htm](http://english.chinamil.com.cn/view/2017-04/11/content_7558833.htm)

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RealClear Defense (United States)

### **Russia Knew Syrian Chemical Attack Was Coming**

By Robert Burns and Lolita Baldor

April 11, 2017

The United States has made a preliminary conclusion that Russia knew in advance of Syria's chemical weapons attack last week, but has no proof of Moscow's involvement, a senior U.S. official said Monday.

The official said that a drone operated by Russians was flying over a hospital as victims of the attack were rushing to get treatment. Hours after the drone left, a Russian-made fighter jet bombed the hospital in what American officials believe was an attempt to cover up the usage of chemical weapons.

The U.S. official said the presence of the surveillance drone over the hospital couldn't have been a coincidence, and that Russia must have known the chemical weapons attack was coming and that victims were seeking treatment.

The official, who wasn't authorized to speak publicly on intelligence matters and demanded anonymity, didn't give precise timing for when the drone was in the area, where more than 80 people were killed. The official also didn't provide details for the military and intelligence information that form the basis of what the Pentagon now believes.

Another U.S. official cautioned that no final American determination has been made that Russia knew ahead of time that chemical weapons would be used. That official wasn't authorized to speak about internal administration deliberations and spoke on condition of anonymity.

The allegation of Russian foreknowledge is grave, even by the standards of the currently dismal U.S.-Russian relations.

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Although Russia has steadfastly supported Syrian President Bashar Assad's government, and they've coordinated military attacks together, Washington has never previously asserted that Moscow was complicit in any attack that involved the gassing of innocent civilians, including children. The former Cold War foes even worked together in 2013 to remove and destroy more than 1,300 tons of Syrian chemical weapons and agents.

Until Monday, U.S. officials had said they weren't sure whether Russia or Syria operated the drone. The official said the U.S. is now convinced Russia controlled the drone. The official said it still isn't clear who was flying the jet that bombed the hospital, because the Syrians also fly Russian-made aircraft.

U.S. officials previously have said Russians routinely work with Syrians at the Shayrat air base where the attack is supposed to have originated. U.S. officials say the chemical weapons were stored there and that those elements add to the conclusion that Russia was involved.

Last Thursday 59 Tomahawk missiles were fired on the government-controlled base in the United States' first direct military action against Assad's forces.

The U.S. has been focusing its military action in Syria on defeating the Islamic State group.

On Monday, Col. John J. Thomas, a U.S. military spokesman, said the U.S. has taken extra defensive precautions in Syria in case of possible retaliation against American forces for the cruise missile attack.

Thomas told reporters at the Pentagon that the increased emphasis on defensive measures to protect U.S. troops on the ground in Syria led to a slight and temporary decline in offensive U.S. airstrikes against IS in Syria.

There has been no Syrian retaliation so far for the cruise missile attack, which destroyed or rendered inoperable more than 20 Syria air force planes, he said.

Thomas said the U.S. intends to return to full offensive air operations against IS as soon as possible.

[http://www.realcleardefense.com/articles/2017/04/11/russia\\_knew\\_syrian\\_chemical\\_ata  
ck\\_was\\_coming\\_111151.html](http://www.realcleardefense.com/articles/2017/04/11/russia_knew_syrian_chemical_attack_was_coming_111151.html)

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AzerNews (Azerbaijan)

### **Armenian president threatens use of nuclear-capable missiles**

By Lloyd Green

April 12, 2017

The Caucasus Mountains run between the Black and Caspian Seas and are the historical bridge between Europe and Asia. But they could soon turn into a nuclear flashpoint because of dangerous saber-rattling by Armenian President Serzh Sargsyan.

Armenia has long and illegally claimed territory in western Azerbaijan, an assertion backed by military offensives against Azerbaijan including a massacre of 600 civilians in 1992.

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Whenever an opportunity appeared to cool tensions and work toward compromise, Armenia has escalated. Now, Armenia may be taking the region to the brink of nuclear war.

Last fall, Armenia received the Iskander missile system from Russia, a major provocation meant to send a message to Azerbaijan and NATO ally Turkey. This is consistent with Moscow's policy of using missile deployments in Eurasia and the Middle East to threaten western interests.

The Iskander short-range ballistic missile system is designed to destroy small targets at up to 300 miles. This means that Iskander missiles deployed in eastern Armenia could reach targets all over Azerbaijan, including the coastal capital of Baku.

In addition and alarmingly, Iskander missiles are capable of being fitted with nuclear warheads.

As if the presence of the missiles were not a clear enough menace, Armenian President Sargsyan visited the illegally held territories and bragged that his government possessed a "state-of-the-art, powerful striking force." He went on to identify potential targets in Azerbaijan – "the most important infrastructure" – and followed up with a chilling pronouncement about his intentions as head of the Armenian military. "If needed, the commander-in-chief of the Armenian forces will without batting an eyelid order volley fire by Iskander," he said.

This new round of war-mongering is troubling in several respects and raises tensions in Baku and throughout the region. In addition to unnerving Armenia's neighbors, Sargsyan's statements raised concerns in Washington, D.C. Washington's Jamestown Foundation recently held a panel discussion on Capitol Hill to address the danger posed by Armenia's deployment of the Iskander missiles, writing that the new weapons "threaten European stability, put U.S. allies at risk and potentially violate the 1988 INF [Intermediate-Range Nuclear Forces] Treaty."

Sargsyan's inflammatory rhetoric destroys the myth propagated by separatists that the Armenian-seized Azerbaijani territory is an independent republic. Rather, the region occupied Azerbaijan and is now a staging area for missiles pointed at the rest of Azerbaijan.

It is also clear that Sargsyan is using the missiles as a political weapon. Armenia's president is seeking to stir his nationalistic supporters against Azerbaijan to increase voter turnout in elections. Sargsyan is rejecting bids from more sober leaders in Armenia, including former president Levon Ter-Petrossian, for a plan that would reduce tensions between the two nations.

And then there's the Russia question. Armenia is the only nation that has received the Iskander system from Russia. Why Armenia? Possibly because "the most important infrastructure" in Azerbaijan that could be targeted by the missiles includes companies owned and operated by Western entities, including American ones, that ensure Europe's energy security.

Natural gas from Azerbaijan flows by pipeline from the Caspian Sea west through Georgia and into Turkey and Europe. Should that flow be disrupted by military conflict, Europe would be at the mercy of Russia for its energy needs.

Another possibility: Russia might be attempting to rebuild its Soviet-era footprint in the Lesser Caucasus as it has done in Crimea and is attempting in Eastern Ukraine. It's no secret that Russia and Armenia recently established a joint air defense pact.





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If Sargsyan's troubling boasts about his willingness to deploy his new Iskander missile system were the only such noise coming from Armenia, it would be worrisome enough. But in the past six months, top members of Sargsyan's administration have made more than a dozen similar statements.

Azerbaijan has more than twice as many people as Armenia yet its Gross Domestic Product is nearly seven times greater. While Armenians have watched their leaders diminish their economy, Azerbaijan has prospered. Much like North Korea, military posturing is all Armenia has left.

This is a dangerous time for Azerbaijan and the entire region because of Armenia's reckless pursuit of offensive weapons and incendiary rhetoric. Azerbaijanis at home and in the U.S. have depended on America as a good friend and strong ally. The world can only hope that that will continue under the new Trump administration.

<http://www.azernews.az/aggression/111283.html>

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The National Interest (United States)

### **Could Syria Spark a Nuclear War Between Russia and America?**

By Geoff Wilson and Will Saetren

April 12, 2017

On April 6, 2017, the 100th anniversary of the United States entering World War I, American warships launched 59 Tomahawk cruise missiles at regime targets in Syria. The base that absorbed the attack, Al Shayrat air base in Homs province, houses both Russian and Syrian troops, who are allies in Syria's bloody civil war.

It was a flawless military operation, popular with American politicians, media and the public. And it is a serious problem.

Much like the geopolitical environment in Europe preceding World War I, Syria is home to a complex web of alliances and support structures. More than a century ago, the assassination of an archduke in Bosnia ignited a chain reaction that saw two blocks of alliances explode into a devastating global world war. The realities in Syria are even more complex [4] and the stakes have never been higher.

Among the myriad of opposing factions in Syria, there are two goliaths. Russia, allied with the Assad regime and provider of troops, warplanes and sophisticated equipment to the pro-Syrian effort — and the United States, which has sided firmly with rebel and Kurdish factions committed to Syrian president Bashar Al Assad's ouster. Between them, they possess 94 percent [5] of the world's nuclear weapons.

It is in this environment that U.S. president Donald Trump's missile strikes have brought us one step closer to a scenario in which two nuclear superpowers could engage in direct combat operations against each other.

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U.S. commandos have been carrying out missions in Syria since at least 2014 [6], and over the past year, the United States has been steadily ratcheting up its involvement in the Syrian civil war.

In March 2017, the U.S. role in Syria changed significantly [7] with the introduction of a force of 400 U.S. Marines and Army Rangers to combat ISIS inside the Syrian border. These are not special operations forces but “regular” conventional troop formations operating inside a foreign, non-aligned nation without invitation.

According to [8] Dan Lamothe and Thomas Gibbons-Neff in *The Washington Post*,

The deployment marks a new escalation in the U.S. war in Syria, and puts more conventional U.S. troops in the battle. Several hundred Special Operations troops have advised local forces there for months, but the Pentagon has mostly shied away from using conventional forces in Syria. The new mission comes as the Trump administration weighs a plan to help Syrian rebels take back Raqqa, the de facto capital of the Islamic State. The plan also includes more Special Operations troops and attack helicopters.

Perhaps even more concerning though, neither deployment was officially announced by the Pentagon. According to [9] *The New York Times*, “the Rangers’ presence became apparent [only after] they were seen driving around the northern Syrian town of Manbij in Stryker vehicles and armored Humvees,” while *The Washington Post* was the first to break news of the Marines deployment.

This fits with Trump’s promise [10] to stay unpredictable and not alert the enemy to his plans. But it is also a serious blow to the civil transparency of our military operations.

Keeping news of U.S. troop deployments in Syria from the Russians might sound good to Trump’s chest-thumping style of military planning, but it is vital that the Russians have at least a somewhat clear picture of where U.S. forces are operating.

If they don’t, the prospect of U.S.-Russian violence becomes very real.

Without proper channels of communication in place, it is entirely possible that U.S. and Russian forces could find themselves in a firefight. With both sides rapidly increasing their presence and commitment to the Syrian conflict, the situation could quickly escalate beyond either party’s control.

This is already happening. Hours after the strike, Russia announced that it is withdrawing from a 2015 memorandum [11] that has significantly decreased the risk of in-flight incidents between U.S. and Russian aircraft operating in Syrian airspace. The Russian withdrawal comes as a direct result of the U.S. missile strikes on its ally, which Russia sees as a “grave violation of the memorandum [12].” The only reason that Russian troops weren’t killed in the attack on Al Shayrat is that the United States notified Russia in advance, using a hotline that was part of the now-defunct memorandum.

The danger should be readily apparent. With U.S. and Russian forces operating on opposing sides of a very contentious and complicated struggle, the risk of a catastrophic mishap is alarmingly high.

Sleepwalking toward nuclear war

Consider this. In 2015 Turkey — a NATO ally — shot down [13] a Russian warplane that had strayed into its airspace, sparking an international incident that strained Russian-Turkish relations to the breaking point. This past November, three Turkish soldiers were



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killed [14] in an airstrike carried out by Syrian government forces while fighting ISIS militants and Kurdish rebels inside Syria.

Things could get much worse.

Following Trump's missile strikes, Al Assad would be operating well within established international norms if he decided to retaliate against U.S. troops operating within his borders. If he were to bomb a U.S. Marine Corps firebase outside of Raqqa tomorrow, what does that mean for Russia and Iran, Al Assad's allies?

According to [15] a Russian spokesman, "Putin considers the American strikes against Syria an aggression against a sovereign government in violations of the norms of international law, and under a far-fetched pretext ... Of course, Syria is our ally, considering that we are helping the Syrian armed forces at the Syrian leadership's request."

Imagine this scenario. Syrian forces, having been bombed by U.S. warships, respond by mortaring U.S. Marine firebases inside the Syrian border. The Marines call for air support to neutralize the Syrian attackers. Russian advisors are killed in the strikes and the Russians order a no-fly zone imposed.

Trump refuses to back down and continues to fly sorties in Syria. Russian fighters try to force U.S. Navy strike craft out of Syrian airspace under the no-fly order, and collide with one of the U.S. planes. Thinking they are under attack, U.S. pilots open fire.

Now you have a shooting war with Russia, and what happens next is anyone's guess.

But with a combined active military stockpile of some 8,300 thermonuclear weapons, this is not a guessing game that anyone should want to play.

Official Russian military doctrine calls for the use of tactical nuclear weapons to control the escalation [16] of a conventional conflict. In other words, if Russia finds itself in a fight that it can't win, a real nuclear option is on the table. Some in the U.S. have mirrored this first-use strategy.

Frank Kendall, the Pentagon's top acquisition chief told Congress [17] in 2014, that low-yield nuclear weapons provide the President with "uniquely flexible options in an extreme crisis, particularly the ability to signal intent and control escalation."

This is becoming a trend. Just this year, the Pentagon's defense science board issued a report urging [18], "the president to consider altering existing and planned U.S. armaments to achieve a greater number of lower-yield weapons that could provide a 'tailored nuclear option for limited use.'" But those weapons already exist, and some are already deployed in theater.

Some 50 B61 gravity bombs [19] are based at the Incirlik air force base in Turkey, just 68 miles north of the Syrian border. Each one is fitted with a "dial-a-yield [20]" nuclear warhead that can be set to explode with a force anywhere between 300 and 50,000 tons of TNT. It could be set to be 3 times more powerful than the bomb that was dropped on Hiroshima, or 98 percent less powerful than the bomb that was dropped on Hiroshima.

These weapons go beyond deterrence. These are weapons that are tailored for use on a battlefield. And they are right next-door.



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In 1914 Europe's monarchs thought they understood battlefield strategy. They quickly lost control of the situation, resulting in a war that lasted 4 years and killed close to 20 million people.

Miscalculating in Syria could have far greater consequences.

<http://nationalinterest.org/blog/the-buzz/could-syria-spark-nuclear-war-between-russia-america-20137>

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The Independent (United Kingdom)

## **Russia and Iran warn US they will 'respond with force' if red lines crossed in Syria again**

By Jon Sharman

April 11, 2017

*Threat comes after UK Defence Secretary demands Vladimir Putin rein in President Bashar al-Assad*

Russia and Iran have warned the US they will “respond with force” if their own “red lines” are crossed in Syria.

Following Friday's cruise missile strike on a Syrian airbase, in retaliation for the chemical attack on Khan Sheikhoun earlier in the week, the alliance supporting Syrian President Bashar al-Assad made a joint statement threatening action in response to “any breach of red lines from whoever it is”.

“What America waged in an aggression on Syria is a crossing of red lines. From now on we will respond with force to any aggressor or any breach of red lines from whoever it is and America knows our ability to respond well,” the group's joint command centre said.

US President Donald Trump said the strike on al Shayrat airbase, near Homs, with some 60 Tomahawk missiles was “representing the world”. The base was allegedly used by Syrian forces to conduct the attack, which killed more than 70 people.

On Sunday the UK's Defence Secretary, Sir Michael Fallon, demanded Russia rein in Mr Assad, claiming that Moscow is “responsible for every civilian death” in Khan Sheikhoun.

Sir Michael said the attack had happened “on their watch” and that Vladimir Putin must now live up to previous promises that Mr Assad's chemical weapons had been destroyed.

Experts have dismissed Russia's claim that a rebel chemical weapons facility caused the deaths.

Britain, the US and France accused Mr Assad's regime of gassing civilians in the opposition-held town, but Damascus claimed it destroyed its toxic stockpiles following an international agreement struck in 2013.

The Russian defence ministry put out a competing version of events claiming legitimate Syrian air strikes against “terrorists” had struck a warehouse used to produce and store shells containing toxic gas, which were allegedly being sent to Iraq.

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The joint command centre also said on Sunday the missile strike would not deter it from “liberating” Syria, and that the US military presence in the north of the country amounted to an illegal “occupation”.

Mr Putin and Iranian leader Hassan Rouhani have called for an objective investigation into the chemical attack.

US Secretary of State Rex Tillerson said on Sunday that Moscow had failed to carry out the 2013 agreement to secure and destroy chemical weapons in Syria.

“The failure related to the recent strike and the recent terrible chemical weapons attack in large measure is a failure on Russia’s part to achieve its commitment to the international community,” he said on ABC’s This Week.

Mr Tillerson is expected in Moscow in the coming days for talks with Russian officials.

He stopped short of accusing Russia of being directly involved in the planning or execution of the attack.

But he said the US expected Russia to take a tougher stance against Syria by rethinking its alliance with Mr Assad because “every time one of these horrific attacks occurs, it draws Russia closer into some level of responsibility.”

<http://www.independent.co.uk/news/world/middle-east/russia-iran-us-america-syria-red-lines-respond-with-force-aggressor-air-strikes-war-latest-a7675031.html>

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USNI News (United States)

### **How the U.S. Planned and Executed the Tomahawk Strike Against Syria**

By Megan Eckstein

April 7, 2017

Senior U.S. defense officials today briefed reporters on the planning and execution of a Tomahawk strike on al-Shayrat Airfield in Western Syria Thursday night, which involved two guided-missile destroyers launching 59 missiles at targets.

The U.S. strike comes after an April 4 chemical weapons attack on the town of Khan Sheikhoun, where several dozen civilians, including many children and women, were killed by what appears to be sarin gas.

The following is a timeline of the April 4 attack and the decision process of U.S. leaders leading up to Thursday’s strike.

#### **The Strike**

“Shortly after the attack, the following day on the fifth, the president directed the Secretary of Defense to come up with military options in response to this attack,” a senior defense official told reporters this morning at the Pentagon. “We came up with military options on the 5th; those options were basically put together into recommendations. It went forward to the National Security Council, multiple meetings with not only the presidential senior advisors but also with the Chairman, the Vice Chairman, the Secretary of Defense.

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Interagency members deliberated, looked at the proposals on the 5th, and then on the 6th of April those proposals were presented to the president.”

The official said that all the options presented to President Donald Trump were also sent to U.S. Central Command, and to destroyers USS Porter (DDG-78) and USS Ross (DDG-71), to begin preparing for any potential decision.

“During that planning period, all the forces, in this case the two ships, had basically options, and then all they had to do was, we just had to tell them the presidential-picked option. And that helps speed up that execution,” the official said. “We prepositioned forces so that if there was an order received we could have that quick response. ... So by the time the options were given to the president, we were in position to execute upon order. And so when the order was given and passed along to the commander, forces were in position in order to launch the missiles.”

On April 6, Trump selected the Tomahawk Land Attack Missile strike option, which military officials have described as both “proportional” but also “our lowest-risk option to conduct the attack” due to the standoff range they allow. Russian military forces operating in Syria have sophisticated integrated air defense systems, and officials did not want to send manned fighters into harms way – though the Russians ultimately did not attempt to intercept any of the TLAMs coming towards the Syrian airfield.

“The president decided on an attack on the al-Shayrat Airfield as the military option. That process was made in the National Security Council yesterday afternoon (on April 6),” the official told reporters. “We got orders from the president around 4:30 yesterday afternoon, who directed the Secretary of Defense and passed down to the Chairman of the Joint Chiefs of Staff down to the [U.S. Central Command] commander to execute those orders. Four hours after those orders were received, there were 59 TLAMs that were launched and hit their target at approximately 8:40 yesterday evening Eastern Standard Time.”

“We developed a proportional response option for the president, which included military response option targets. And what I mean by that are those that are encircled (on initial damage assessment images) – so a military response target would be hardened aircraft shelters, aircraft, fuel that would go into the aircraft, munitions that go into the aircraft, anything that would be a part of a military operation was part of the target area.”

“Between the two of them (Ross and Porter), they launched this salvo of 59 missiles. And we have, with positive confirmation, that each one of those missiles hit the target.”

Targets included various aspects of Syrian regime capabilities – but they steered clear of known Russian assets, including rotary wing aircraft, facilities for between 20 and 100 Russian military personnel and more.

“It’s a fairly large airfield – that runway is almost 10,000 feet long and you can see there are multiple spider webs ... at the end of the runway (that) are hardened aircraft shelters. Also located around this airfield are petroleum and fuel storage areas. Also there’s known chemical storage bunkers, and there’s also surface-to-air self-defense missile systems that are on the outskirts of this airfield.”

The defense official said that initial damage assessments show that all 59 targets were hit, though it is impossible at this point to verify that all the planes that had been inside the hardened aircraft shelters were still there at the time of the attack and were destroyed. Officials are calling the damage “about 20 aircraft,” all of them Russian-made and Syrian-operated fixed-wing aircraft – including those that were involved in the April 4 chemical



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attack. The runway itself was not targeted – the TLAM, based on its size and capability, would have had little impact on the runway and would be “a waste” for that target set, a senior defense official said.

The timing of the attack – around 3 a.m. local time, was chosen to avoid any potential civilian casualties, though the official said there are no towns or homes near the airfield. The official added that there was no indication of civilian or military casualties at this point.

### **The Intel**

A second senior defense official explained to reporters the background of the air strikes, as the U.S. has watched the Syrian regime escalate its chemical-related attacks on its own civilians in recent weeks as opposition forces threatened to take an important military airfield in Homa.

“The Syrian regime has been under intense pressure. There’s a significant opposition offensive in Homa province, and connecting opposition lodgments in Homa province to Idlib province to the north is something that the opposition is trying to do. And they had significant pressure on the regime,” the official said. “So the regime was at risk of losing Homa Airfield, which is a significant airfield for them, where they fly rotary-wing helicopters out of there, it’s suspected to be a barrel bomb manufacturing facility, and so this was a significant risk to the regime. They were under a lot of pressure. We think this attack was linked to a battlefield desperation decision to stop the opposition from seizing those key regime elements.”

On March 25, the Syrian regime dropped chlorine industrial chemicals on Homa.

On March 30, the regime dropped an unconfirmed chemical on Homa, which a non-governmental organization on the ground said was consistent with a nerve agent.

On April 1, the regime dropped a sarin bomb on Khan Sheikhoun, in the in Idlib province, in the worst chemical weapon attack since 2013. The U.S. military has tracks of Syrian aircraft flying from al-Shayrat Airfield to Khan Sheikhoun and being in the area just before 7 a.m. that morning, around the same time that reports of sarin-related casualties started coming in.

“We know the routes that the aircraft took, we know these aircraft were overhead at the time of the attack. The time of the attack was early morning, we suspect it was about 0650, 0655 or so. And reports of nerve agent-exposed casualties began almost immediately, at about 0700 we started to see the first reflections of a potential use of nerve agent,” the official said, adding it would “probably have been an SU-22” that dropped the chemical bomb – a Russian-built plane that the Syrian regime flies.

“This escalatory pattern of using industrial chemicals, to using suspected chemical munitions, to verified chemical munitions caused us, obviously, great concern about the direction this was going and the risk to innocent civilians,” the official said. “We have high confidence that a nerve agent like sarin was used in Khan Sheikhoun; the symptoms are consistent with exposure to a nerve agent.”

Shortly after the chemical attack, “as civilians began to flow into the hospital there in Khan Sheikhoun, a UAV (unmanned aerial vehicle) was seen over the target – a small UAV, either regime or Russian, flying over the hospital during the evacuation of the patients. There was lots of ambulance activity, and clearly people moving into a hospital. Some hours later,

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about five hours later, the UAV returned, and the hospital was struck with additional munitions (from a fixed-wing aircraft). We don't know why, who struck that, we don't have positive accountability yet, but the fact that somebody would strike the hospital, potentially to hide the evidence of a chemical attack ... is a question that we're very interested in," the official said, noting that the plane that bombed the hospital was Russian built but it is unclear at this time if it was operated by the Russian or Syrian military, both of which use similar Russian fighters. The U.S. also has not identified who owned the UAV that collected intelligence for the hospital strike.

The Russian government has tried to claim that opposition forces had a chemical facility in Khan Sheikhoun that was hit by a bomb, but the official pointed to evidence that the bomb hit – and left a massive crater – in the middle of a road, not near any buildings, as shown by multiple open-source video and satellite images of the town. The official said it was clear the bomb was dropped in a location near civilians and contained the sarin gas, and “any obfuscation of whether this was a nerve attack or not is really untenable in the face of the facts. ... There's no credible alternative to Syrian regime air attack as the source of the chemicals .. that killed so many Syrian civilians.”

The U.S. military is now trying to determine the level of Russian complicity in the sarin gas attack. “We have a good picture of how the attack was executed. We know that the regime has a track record of using industrial chemicals, chemical-related attacks, and chemical capabilities, and I think we know they have the capability. We know they have that precedent. We know they have the expertise. And we suspect that they had help,” the official said. “We have a good sense of what happened and where it happened, we have a good sense for who executed the attack. We think we have a good picture of who supported them as well. Obviously, at a minimum, the Russians failed to rein in the Syrian regime activity, and again the continued killing of innocent Syrian civilians. We know the Russians have chemical expertise in country; we cannot talk about openly any complicity between the Russians and the Syrian regime in this case, but we're carefully assessing any information that would implicate the Russians knew or assisted with the Syrian capability.”

Beyond any potential ties to, knowledge of or support for the April 4 attack, the Russians in 2013 had offered themselves as the guarantor that Syria would turn over all its chemical weapons for destruction. The official said the U.S. had taken Russia at its word at the time that all chemical weapons had been removed, but in the aftermath of this attack U.S. intelligence will be paying close attention to sites previously used for chemical weapons attacks to look for further signs of current chemical weapons capabilities in Syria.

<https://news.usni.org/2017/04/07/us-planned-executed-tomahawk-strike>

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RT (Russia)

**Syrian govt has no chemical weapons, 'absolutely no need to use it' – Russian MoD**

Author Not Attributed

April 11, 2017

The Syrian Army has no chemical weapons and has “no need” to use any such arms, as it has already been conducting a successful offensive on militant positions, a Russian General Staff official has said.





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Militants “are suffering one defeat after another and are leaving the territories they once controlled. Under such circumstances, the government of Bashar Assad has no need to use chemical weapons. Moreover, the Syrian Army does not have any [chemical agents],” Colonel General Sergey Rudskoy, the chief of the Russian General Staff’s operations department, told journalists during a news briefing.

The top military official went on to say that Russia demands a “thorough investigation” of the April 4 incident in the town of Khan Sheikhoun located in Syria’s Idlib province. He underlined that US and western claims accusing the Syrian government of being behind the alleged chemical assault are “highly questionable.”

Rudskoy also noted that the “authenticity” of information concerning this attack circulating in the media raises “serious doubts” not only among the Russian military but also “among many respected experts and organizations.”

The general added that Russia is ready to provide experts from the Organization for the Prohibition of Chemical Weapons (OPCW) with access to the Syrian Army air base from which the attack was allegedly launched.

“The experts are aware that it is impossible to conceal the traces of the chemical weapons,” he said. The official said the Syrian government is also ready to grant access to the base for the OPCW experts.

The Syrian Foreign Minister Walid Muallem said recently that that the country’s military had targeted an arms depot in Idlib where chemical weapons could have been stored by Islamic State (IS, formerly ISIS/ISIL) and Al-Nusra Front militants.

### **Remaining chemical weapons production & storage facilities controlled by opposition**

Rudskoy also drew attention to the fact that the Syrian government has fully complied with its obligations under the Chemical Weapons Convention (CWC) and has destroyed all chemical weapons production and storage facilities on the territory it still controlled in 2013 when this process began.

“Out of 12 facilities used for storing and producing chemical weapons, ten were destroyed as confirmed by the OPCW experts. The Syrian government has no access to the remaining two facilities as they are located on a territory controlled by the so-called opposition,” Rudskoy said at the briefing, adding that it remains unclear if the chemical weapons stored at these two facilities had been destroyed.

He said Syria consecutively destroyed all its chemical weapons and related facilities under OPCW control between 2013 and 2016. All chemical weapons stockpiles were shipped from Syria by a US vessel and subsequently destroyed in the US, the UK, Finland and Germany.

Syria also destroyed all missiles and air bombs capable of carrying such weapons. The international experts also conducted additional checks at Syrian government facilities that were not related to the production or storage of chemical weapons.

“No facts confirming production or possession of chemical agents [by the Syrian government] were found,” Rudskoy told journalists. He added “that Syria has no chemical weapons” and this fact was “documented and confirmed by the OPCW representatives.”



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Earlier on Tuesday, the Russian President Vladimir Putin called the attack on Khan Sheikhoun a “false flag” operation aimed at discrediting the Assad government and warned of a threat of similar incidents in the future, possibly targeting a Damascus suburb.

<https://www.rt.com/news/384408-syria-no-chemical-weapons-russia/>

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The Japan News (Japan)

## **U.S., Britain seek sanctions against Russia over Syria**

By Yuki Sato and Futoshi Mori

April 11, 2017

The United States and Britain showed their tough stances against Russia at a meeting of foreign ministers from the Group of Seven industrialized nations, aiming to impose new sanctions against the key backer of Syria.

At the two-day meeting, which started on Monday in Lucca, central Italy, the leaders of the United States and Britain expressed their intention to incorporate additional sanctions against Russia for supporting Syrian President Bashar Assad’s regime in a joint statement to be adopted by the G-7 leaders on Tuesday. The Assad regime has used chemical weapons in the conflict in Syria.

G-7 members Germany and Italy, however, have taken cautious stances toward the move.

U.S. Secretary of State Rex Tillerson stressed the United States will take a firm stance toward Syria’s Assad regime and Russia, which is backing it.

“We rededicate ourselves to holding to account any and all who commit crimes against the innocents anywhere in the world,” he said speaking to reporters prior to the G-7 meeting on Monday.

Also on Monday, Foreign Minister Fumio Kishida met European Union foreign policy chief Federica Mogherini.

The two agreed that the U.S. strike on Syria “changed the course of action by the Assad regime and will lead to a breakthrough in a political process.”

British Foreign Secretary Boris Johnson, who entirely supports the U.S. military’s attack on Syria, said after meeting Tillerson on Monday that the leaders would discuss additional sanctions against Russia, clearly expressing his hard stance against the country.

The United States, the European Union and Japan have imposed economic sanctions against Russia following its annexation of the Crimean Peninsula from Ukraine in March 2014.

Britain hoped to include in a joint statement to be adopted on Tuesday that the G-7 members would demand Russia stop supporting Syria.

Although the G-7 foreign ministers agreed on bringing a swift end to Syria’s conflict, Russia’s cooperation is necessary to solve the situation.

German Foreign Minister Sigmar Gabriel on Monday said it is essential to have Russia and Iran at the negotiation table for peace talks.

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Meanwhile, Italian Foreign Minister Angelino Alfano, who chaired this year's meeting, is also aiming to build an amicable relationship with Russia.

Foreign ministers from five Middle Eastern countries that oppose the Assad regime, including Saudi Arabia, were also invited to Lucca. The leaders were scheduled to discuss a response to the latest situation in Syria on Tuesday morning.

The G-7 meeting was to close on Tuesday.

<http://the-japan-news.com/news/article/0003633850>

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The Times of India (India)

### **Is Pakistan close to a nuclear deal with the US?**

By Sunil Sharan

April 12, 2017

Many signs portend yes. In the waning days of the Obama administration, talk grew in Washington, D.C. of the US offering the same nuclear deal to Pakistan as it had offered India. The White House never seemed to categorically deny those rumours.

India was irked. But nothing has irked Pakistan more since 1971 than the deal that George W. handed India on a platter. Irked is perhaps too mild a word. Pakistan was livid. Here it was the one "helping" the Yanks in Afghanistan, and there it was the eternal enemy reaping the rewards.

Pakistan started clamouring for the same deal. But the world scoffed at it. Wasn't it one of the biggest non-proliferators of them all. Wasn't the AQ Khan network its creation. Actually Pakistan got away lightly with Khan's activities.

The US has snapped and shared pictures of Pakistani military aircraft downloading fissile material in North Korea and uploading missiles from there. No Khan could have ordered that; only the Pakistani army chief could have. The then-Pakistani army chief was Musharraf. But the canny Musharraf shifted the blame on to Khan, Pakistan's national hero, and incarcerated him, making it appear that he and his army had nothing to do with proliferation.

To escape Afghanistan, a naive Obama first put his eggs in Pakistan's basket, then took some out, then put some back in. He vamoosed from Iraq without a trace, leading in part to the growth of ISIS. Afghanistan though could not be allowed to become another Iraq, a happy hunting ground for anti-American jihadis.

Pakistan has always held the keys to Kabul, and has played its cards expertly. The seeming about-face against the Taliban post 9-11; the double game played with the Americans, one foot in their camp, the other planted firmly in the Afghani Talibani; all of this has led to the Taliban coming to the cusp of capturing Kabul, with the Yanks receiving the same hiding that the Russkies and the Pommies haven't as yet forgotten.

The Yanks are desperate to quit Afghanistan in one piece. They are resigned to the Talibs winning Kabul. What they don't want is the Talibs nurturing another Bin Laden, worse still a

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nuclear Bin Laden. Who might have loose nukes in the neighborhood. The Yanks claim to have invested over a hundred million dollars to secure Pakistan's nukes.

But how can one secure against a security guard who turns turtle. The Yanks must have their own folks in the Strategic Plains Division and other centralized Pakistani nuclear establishments. After all, a hundred million can pay for a lot of outsized American salaries. But the Pakistanis have pulled a fast one with the deployment of their tactical nukes, the little Nasrs.

No Yank can control their use, for the operational control lies with about 300 Pakistani military field commanders. One goes rogue and a dirty bomb could go off in Indianapolis in short order. No wonder Nikki Haley, a key member of Trump's foreign policy team, is now crying herself hoarse to mediate between Pakistan and India. Her express aim: Islamabad, you ditch your tacticals, India you yours. Washington's interest must always be protected.

Pakistan is happy with the mediation. But not happy enough. It has left the Americans out of talks with the Afghan Taliban, cozying up instead to the Chinese and the Russkies. What is the Russian interest in Kabul? They are not even contiguous with Afghanistan any more. And the Chinese? Well, wherever the Pakistanis are, can the Chinese be far behind. And not even a leaf can fall anywhere in Asia now without the assent of the Chinese.

America is alarmed. Ever the brinkman, Pakistan is up to its old tricks. One overriding purpose drives it: Treat us as India's equal. Memo from Islamabad to Washington: We know you are screwed in Afghanistan. We will get you out safely as long as we get the same nuclear deal as India has got.

The Yanks seem to have got the message. Pakistani nuclear delegations visit Washington regularly now. One is there right now meeting with American experts. Nikki Haley was perhaps just the portend of things to come. Any day, you might have an announcement of a nuclear deal for Pakistan.

Poor India. What has it been doing all this while. It has alienated the Russkies so much that they are now selling arms to Islamabad for the first time ever. Has India's foreign policy establishment been sleeping at the wheel? Or will they be able to pull a rabbit out of their hat? The plot thickens.

<http://blogs.timesofindia.indiatimes.com/strategic-insights/is-pakistan-close-to-a-nuclear-deal-with-the-us/>

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Arms Control Wonk (United States)

### **The Counterforce Compulsion in South Asia**

By Michael Krepon

April 11, 2017

Quotes of the week:

“There has been literally no chance at all that any sane political authority...would consciously choose to start a nuclear war. This proposition is true for the past, the present, and the foreseeable future. For sane men on both sides the balance of terror is overwhelmingly persuasive... There is no prospect at all that [X] could attack [Y] without



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incurring an overwhelming risk of destruction vastly greater than anyone but a madman would choose to accept.”

— McGeorge Bundy, “To Cap the Volcano”

“Dreams of ‘disarming first strikes’ leading to the temptation to ‘go first’ and the consequent instability of Small Nuclear Power equations are think-tank myths.”

— General K. Sundarji, “India’s Nuclear Weapons Policy”

Vipin Narang stirred up a tempest at the Carnegie Endowment’s Nukefest by warning that a serious revision of Indian nuclear doctrine may be in the offing – even to the extent of entertaining pre-emptive strikes against Pakistan’s nuclear deterrent. Is New Delhi likely to succumb to the most extreme manifestation of the counterforce compulsion – a damage limiting, nuclear war fighting force posture?

Vipin cites provocative passages in Shivshankar Menon’s new book, *Choices: Inside the Making of India’s Foreign Policy*, the public musings of former Defence Minister Manohar Parrikar, plus the hawkish advocacy of former Strategic Forces Command Commander in Chief Gen B.S. Nagal, to conclude that,

“There is increasing evidence that India will not allow Pakistan to go first. And that India’s opening salvo may not be conventional strikes trying to pick off just Nasr batteries in the theater, but a full ‘comprehensive counterforce strike’ that attempts to completely disarm Pakistan of its nuclear weapons so that India does not have to engage in iterative tit-for-tat exchanges and expose its own cities to nuclear destruction.”

Before jumping to conclusions, let’s back up a bit. India has always had its share of nuclear hawks. They primarily reside in aviaries of retired military officers. Read, for example, Gurmeet Kanwal’s *The New Arthashastra: A Security Strategy for India*. A second species consists of scientists associated with India’s defense research establishment. Unlike their military brethren, they usually speak up while on the government payroll, rather than in retirement. A rare breed is the civilian strategist with perches at think tanks, like Bharat Karnad, who has written *India’s Nuclear Policy* and other books on this topic. These views deserve a close reading, but they have had little influence on Indian nuclear doctrine in the past.

Shivshanker Menon’s views are more consequential, as he served as the National Security Adviser in the previous Congress-led coalition government and is a widely respected strategic thinker. Reports of his hawkish musings have already led some champions of Pakistan’s nuclear deterrent to conclude that their darkest suspicions have been confirmed.

The Strategic Plans Division is already ramping up Pakistan’s counterforce capabilities, presuming the need to compete in this sphere with India. Vipin’s take on Menon’s book will no doubt add impetus to this compulsion. But it’s not too late to avoid reprising the U.S.-Soviet counterforce competition on a regional scale. So before going off to the races, let’s look more closely at Menon’s book.

This chapter is entitled, “Why India Pledges No First Use of Nuclear Weapons.” Not “Why India has Unwisely Pledged No First Use,” “Why India Should Rethink No First Use,” or “Why India Should Revise No First Use.” Menon states that India’s NFU doctrine has “deterred others from attempting nuclear coercion or blackmail against India.” He asserts that “a first-strike doctrine is surely destabilizing, and does not further the primary purpose of our

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weapons in deterring blackmail, threat, or use of nuclear weapons.” He argues that, “no first use is a useful commitment to make if we are to avoid wasting time and effort on a nuclear arms race,” and that, “Today, India has effective deterrence against both China and Pakistan.” Menon also writes that he is opposed to shifting Indian strategic doctrine to a nuclear war fighting posture (such as by embracing tactical nuclear weapons, like Pakistan) because “this shift would be reactive and would not increase the effectiveness of deterrence. Instead it would add one more level of complexity and bring nuclear war closer. Nor would this shift be credible.”

And here is Menon’s bottom line:

“It seems to me that rather than seeking answers in our nuclear weapons to all the threats that India does or may face, it is important that we maintain the fundamentals of our doctrine, treating our nuclear weapons as political instruments to deter nuclear attack and attempts at coercion.”

These passages do not suggest a warm embrace of counterforce targeting, let alone its most extreme form. Instead, they reinforce India’s NFU posture. Now let’s look more closely at the two troublesome passages in Menon’s book that Vipin has rightly focused on:

“Circumstances are conceivable in which India might find it useful to strike first, for instance, against an NWS [nuclear weapon state] that had declared it would certainly use its weapons, and if India were certain that adversary’s launch was imminent.”

And then this:

“If Pakistan were to use tactical nuclear weapons against India, even against Indian forces in Pakistan, it would effectively be opening the door to a massive Indian first strike, having crossed India’s declared red lines. There would be little incentive, once Pakistan had taken hostilities to the nuclear level, for India to limit its response, since that would only invite further escalation by Pakistan... In other words, Pakistani tactical nuclear weapon use would effectively free India to undertake a comprehensive first strike against Pakistan.”

What are we to make of these two passages that suggest the possible embrace by India of the most extreme form of counterforce targeting — pre-emptive damage limitation strikes?

The first passage ends with one additional, cryptic sentence: “India’s present public nuclear doctrine is silent on this scenario.” This is most odd. Is there an additional exception to India’s NFU posture that has not been publically declared – one that permits pre-emptive, damage-limiting strikes? If so, India does not have a NFU posture; it has a first use and first strike posture. Night cannot be day, and day cannot be night. At this point, even a public reaffirmation at the highest level of India’s NFU posture will not be persuasive to Pakistan’s nuclear hawks, but it is still needed. Otherwise, opaqueness and worst-case thinking will add even more fuel to a counterforce competition now in its early stages.

The second passage reads to me as nothing more than a reaffirmation of India’s declared nuclear doctrine: First use by Pakistan, regardless of yield and location, would invite massive retaliation by India. What’s odd here is Menon’s terminology. If Pakistan uses nuclear weapons first, then India’s response is not a “first strike”; it’s a retaliatory strike – pure and simple. Menon has thus regrettably added salt to the open wound that is India’s deeply flawed declaratory policy. The threat of massive retaliation, even in the event of a single demonstration shot, invites the worst of two worlds: it lacks credibility and yet invites uncontrolled escalation.



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Parsing Menon's language is tedious, I know, but necessary because the nuclear competition in South Asia is at an important juncture. Pakistan and India have fulfilled the requirements of counter value targeting, and are moving down the path of counterforce targeting requirements. Warhead totals can grow significantly because MIRVing technology is available and because as counterforce capabilities increase, neither side can afford to be caught with missiles in garrisons. The obvious countermove is to have some missiles out of garrison, even in peacetime. Many more missiles will be flushed in a crisis. These are some of the operational ramifications of adopting worst-case assessments of Menon's writing, which Rawalpindi is prone to do. New Delhi is likely to lag behind unless there is an extraordinary shift in India's strategic culture. Nuclear dangers will grow alongside counterforce capabilities, because launchers will be maintained at increased readiness levels to deal with reciprocal fears of surprise attack. Sound familiar?

It will be difficult, but still possible, to break this cycle. For a start, it's worth recalling how the premier strategic thinkers on the subcontinent rejected the counterforce compulsion in favor of stable nuclear deterrence. General Sundarji's views, as noted above, were anti-counterforce. K. Subrahmanyam estimated in *India and the Nuclear Challenge*, that a minimum deterrence posture could consist of "an arsenal of a few dozen bombs and an aircraft delivery system." In *Nuclear India*, Jasjit Singh believed "it is difficult to visualize an arsenal with anything more than a double-digit quantum of warheads. It may be prudent to even plan on the basis of a lower end figure of say 2-3 dozen nuclear warheads by the end of 10-15 years."

Back then, Pakistani strategic analysts were on the same page. Agha Shahi, Abdul Sattar and Zulfikar Ali Khan wrote of "minimal" requirements for deterrence. They expressed confidence that Pakistan would avoid a futile arms competition with India. They ruled out the need for a nuclear war-fighting posture. When Abdul Sattar joined the Musharraf government as Foreign Minister, he promised Pakistani participation in the Fissile Material Cut-off Negotiations. Early on, the SPD's Director General Khalid Kidwai discounted the likelihood of nuclear artillery being part of Pakistan's nuclear plans.

Pakistan and India have come a very long way since these hopeful and sensible declarations. Both have succumbed to the siren song of "credible" deterrence. Rawalpindi now embraces the concept of "full spectrum deterrence," which will be reinforced by the former Indian National Security Adviser's thoughts about pre-emption.

Athletes achieve peak performance by slowing down the game. If Indian and Pakistani decision makers do not slow down the counterforce compulsion, they could pay a very steep price.

<http://www.armscontrolwonk.com/archive/1203018/the-counterforce-compulsion-in-south-asia/>

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The Times of India (India)

## **Is Pakistan close to a nuclear deal with the US?**

By Sunil Sharan

April 12, 2017

Many signs portend yes. In the waning days of the Obama administration, talk grew in Washington, D.C. of the US offering the same nuclear deal to Pakistan as it had offered India. The White House never seemed to categorically deny those rumours.

India was irked. But nothing has irked Pakistan more since 1971 than the deal that George W. handed India on a platter. Irked is perhaps too mild a word. Pakistan was livid. Here it was the one "helping" the Yanks in Afghanistan, and there it was the eternal enemy reaping the rewards.

Pakistan started clamouring for the same deal. But the world scoffed at it. Wasn't it one of the biggest non-proliferators of them all. Wasn't the AQ Khan network its creation. Actually Pakistan got away lightly with Khan's activities.

The US has snapped and shared pictures of Pakistani military aircraft downloading fissile material in North Korea and uploading missiles from there. No Khan could have ordered that; only the Pakistani army chief could have. The then-Pakistani army chief was Musharraf. But the canny Musharraf shifted the blame on to Khan, Pakistan's national hero, and incarcerated him, making it appear that he and his army had nothing to do with proliferation.

To escape Afghanistan, a naive Obama first put his eggs in Pakistan's basket, then took some out, then put some back in. He vamoosed from Iraq without a trace, leading in part to the growth of ISIS. Afghanistan though could not be allowed to become another Iraq, a happy hunting ground for anti-American jihadis.

Pakistan has always held the keys to Kabul, and has played its cards expertly. The seeming about-face against the Taliban post 9-11; the double game played with the Americans, one foot in their camp, the other planted firmly in the Afghani Talibani; all of this has led to the Taliban coming to the cusp of capturing Kabul, with the Yanks receiving the same hiding that the Russkies and the Pommies haven't as yet forgotten.

The Yanks are desperate to quit Afghanistan in one piece. They are resigned to the Talibs winning Kabul. What they don't want is the Talibs nurturing another Bin Laden, worse still a nuclear Bin Laden. Who might have loose nukes in the neighborhood. The Yanks claim to have invested over a hundred million dollars to secure Pakistan's nukes.

But how can one secure against a security guard who turns turtle. The Yanks must have their own folks in the Strategic Plains Division and other centralized Pakistani nuclear establishments. After all, a hundred million can pay for a lot of outsized American salaries. But the Pakistanis have pulled a fast one with the deployment of their tactical nukes, the little Nasrs.

No Yank can control their use, for the operational control lies with about 300 Pakistani military field commanders. One goes rogue and a dirty bomb could go off in Indianapolis in short order. No wonder Nikki Haley, a key member of Trump's foreign policy team, is now crying herself hoarse to mediate between Pakistan and India. Her express aim: Islamabad, you ditch your tacticals, India you yours. Washington's interest must always be protected.

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Pakistan is happy with the mediation. But not happy enough. It has left the Americans out of talks with the Afghan Taliban, cozying up instead to the Chinese and the Russkies. What is the Russian interest in Kabul? They are not even contiguous with Afghanistan any more. And the Chinese? Well, wherever the Pakistanis are, can the Chinese be far behind. And not even a leaf can fall anywhere in Asia now without the assent of the Chinese.

America is alarmed. Ever the brinkman, Pakistan is up to its old tricks. One overriding purpose drives it: Treat us as India's equal. Memo from Islamabad to Washington: We know you are screwed in Afghanistan. We will get you out safely as long as we get the same nuclear deal as India has got.

The Yanks seem to have got the message. Pakistani nuclear delegations visit Washington regularly now. One is there right now meeting with American experts. Nikki Haley was perhaps just the portend of things to come. Any day, you might have an announcement of a nuclear deal for Pakistan.

Poor India. What has it been doing all this while. It has alienated the Russkies so much that they are now selling arms to Islamabad for the first time ever. Has India's foreign policy establishment been sleeping at the wheel? Or will they be able to pull a rabbit out of their hat? The plot thickens.

<http://blogs.timesofindia.indiatimes.com/strategic-insights/is-pakistan-close-to-a-nuclear-deal-with-the-us/>

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### **World Nuclear News (United Kingdom)**

#### **Australian PM says exports to India soon**

Author Not Attributed

April 11, 2017

*Australia wishes to export uranium to India "as soon as possible", Prime Minister Malcolm Turnbull said today. Turnbull made his comments during an official visit to India.*

India has an ambitious nuclear power program but few indigenous uranium resources, and could provide a significant market for Australian uranium. Australia is the world's third-largest producer of uranium behind Kazakshtan and Canada. All of its production - over 6000 tU in 2016 - is exported under strict controls to ensure that it is only for civilian use. Australia is a signatory of the Nuclear Non-Proliferation Treaty (NPT), but also requires any countries to which it sells uranium to put in place a rigorous bilateral safeguards treaty.

While India has an impeccable nuclear non-proliferation record it is not a signatory of the NPT, and was effectively isolated from world nuclear trade until 2008, when it signed a safeguards agreement with the International Atomic Energy Agency. The 45-member Nuclear Suppliers Group subsequently agreed to exempt the country from rules prohibiting trade with non-members of the NPT, opening the door to the possibility of nuclear trade with India. Since then, India has signed nuclear cooperation agreements with several countries.

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A bilateral agreement between Australia and India for the supply of uranium was signed in 2014, and came into force in November 2015, although Australia's Joint Standing Committee on Treaties (JSCOT) recommended that uranium sales should begin only after conditions concerning India's nuclear regulatory regime, routine inspections and reactor decommissioning plans were fulfilled. A bill on Civil Nuclear Transfers to India was passed by both Australian houses in November 2016.

Welcoming Turnbull on his first visit to India, Prime Minister Narendra Modi said the passage of Australian legislation meant the country was now able to export uranium to India. Responding to Modi's welcome, Turnbull said: "We've worked closely with India to meet our respective requirements for the provision of fuel for India's civil nuclear program, and we look forward to the first export of Australian uranium to India as soon as possible."

Turnbull said the trading relationship between the two countries was delivering significant benefits to both nations, with two-way trade in goods and services worth nearly AUD20 billion (\$15 billion) in 2016. This was "a fraction of the level it could and should be," he said.

<http://www.world-nuclear-news.org/NP-Australian-PM-says-exports-to-India-soon-1104178.html>

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Live Mint (India)

### **India is not moving to counterforce doctrine**

By Yusuf Unjhawala

April 11, 2017

*The current estimate of India's nuclear arsenal is not good enough for minimum credible deterrence, let alone a counterforce first strike to disarm Pakistan*

There has been a lot of speculation on India's nuclear doctrine since Vipin Narang, a nuclear strategist from the Massachusetts Institute of Technology, said, "There is increasing evidence that India will not allow Pakistan to go first," at a conference on nuclear policy hosted by the Carnegie Endowment for International Peace, a Washington-based think tank. Referring to an India-Pakistan war scenario, Narang added that India's opening salvo may not be conventional strikes trying to pick off just Nasr batteries in the theatre, but a full comprehensive counterforce strike that attempts to completely disarm Pakistan of its nuclear weapons.

This is a big claim. The pieces of evidence cited for this claim are: India's focus on developing highly accurate missiles, acceleration of ballistic missile defence (BMD) and the development of multiple independently targetable re-entry vehicle (Mirv) capabilities for its missiles. None of these moves sufficiently explains a possible change in India's nuclear doctrine.

First, the development of accurate missiles is being undertaken as India's yield of nuclear weapons is 15-20KT (kilotons) for its fission warheads and 250KT for thermonuclear warheads. The destruction caused by nuclear warheads goes down exponentially as the distance increases from the centre of the blast, hence the move towards improving the accuracy of weapon delivery systems.



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Second, BMD is a defensive mechanism aimed at neutralizing a nuclear attack rather than conducting a counterforce first strike. A BMD forces the enemy to reassess the number of warheads it requires for destroying a target. This imposes costs in terms of producing more warheads, delivery platforms, and the cost of maintaining and securing them.

Finally, India is developing Mirvs not for first strike but to retain a credible second strike option if India loses some of its missiles to an enemy first strike. For example, if India has 20 intercontinental ballistic missiles (ICBMs) with 6 Mirvs, and 30% of them are taken out by an enemy in a first strike, India will still be left with sufficient missiles and warheads to strike back and impose unacceptable damage on the enemy.

Moreover, a counterforce strike is a lot more complex and taxing than both first use and second strike. First use may be on countervalue and/or counterforce targets or ones that overlap and it may not be a surprise or a pre-emptive strike. On the other hand, a counterforce strike is a surprise nuclear blitz on the enemy's missiles, C4I (command, control, communications, computers, and intelligence), military infrastructure and war-fighting capabilities. It requires a large number of warheads, missiles, accurate and round-the-clock intelligence, surveillance, target acquisition and reconnaissance (Istar).

The enormity of the task to track hundreds of road mobile missiles and other military targets can be gauged from the fact that after the 26/11 attacks on Mumbai, the Indian Air Force was ready to strike Pakistan, but did not have the precise targeting coordinates of terrorist camps and other relevant targets.

The current estimate of India's nuclear arsenal, based on Western think tanks, is about 100-120 warheads, which, according to some experts, is not good enough for a minimum credible deterrence, let alone a counterforce first strike to disarm Pakistan. Most importantly, the financial cost of a first strike doctrine will be prohibitive for India.

What needs to be remembered is that Pakistani missiles are road mobile on transporter erector launchers (TEL). Conventional missiles can take them out if the need arises; there is no need for nuclear missiles to accomplish this task. The US and USSR made megaton warheads for counterforce strike because they had missiles in hardened silos.

If India has precise intelligence on Pakistani TELs, it can quickly take them out using Brahmos missiles which travel at three times the speed of sound or any other conventional munition.

If Pakistan uses tactical nuclear weapons (TNW) even on its soil on Indian troops, India, according to its stated doctrine, will undertake massive retaliation, which was thought to be countervalue strikes on Pakistani cities. Recently, this has been misinterpreted by some analysts as a counterforce first strike. India using nuclear weapons after Pakistan's use of TNW will not be a first strike but a retaliatory strike. India would be free to take out Pakistani targets like the Pakistan army headquarters in Rawalpindi, which is an example of an overlapping counterforce and countervalue target.

The talk of counterforce first strike is destabilizing and dangerous. Instead of deterrence, it moves to the realm of fighting a nuclear war and trying to win it. It means hundreds if not thousands of warheads on hair-trigger alert and the risks that come with it.

Any signalling to India's adversaries that India is moving to a counterforce first strike doctrine will make them take countermeasures and increase their own arsenal and look to



strike India first, leading to a destabilizing chain reaction. The assumption that India is moving towards a counterforce first strike doctrine and the evidence cited for it are on weak ground. While India's doctrine needs a revision to be in tune with current strategic realities, the claims that it is moving to a counterforce first strike are erroneous.

<http://www.livemint.com/Opinion/Xgg3LgQFFB0U40hB2oH7rO/India-is-not-moving-to-counterforce-doctrine.html>

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All Africa (South Africa)

### **Zimbabwe: 'Dirty War' - Inside Rhodesia's Chemical Warfare**

By Simon Massey

April 10, 2017

I have been looking into the Rhodesian "Bush War" for many years after growing up in the country through this period. I have an old copy of Plague Wars by Tom Mangold sitting right next to me and have recently read "The Myth of Smith" by Doug Schorr, "Assignment Selous Scouts" by Jim Parker and "Special Branch War" by Ed Bird. All of these books describe in some way the indiscriminate use of chemical weapons or false flag atrocities by the pseudo-terrorist Selous Scouts (Schorr).

The book begins with a brief overview of the Rhodesian war mindset. It describes how Rhodesians were subject to a propaganda campaign that sought to dehumanise and demonise their black enemy. Of course, Rhodesian civilians were the same colour as the terrorist insurgents.

The Rhodesian government retained tight control of the media and of its own information and when their actions began causing a sharp increase in seemingly accidental poisonings and deaths amongst civilians, even in the city of Salisbury, the government forced the media to cover it up.

Because the modern, well-equipped and well-trained Rhodesian security forces tended to win direct battles easily they were struggling against their enemy.

The sheer numbers of insurgents in the country and their tendency to attack soft rather than hard targets using hit-and-run techniques meant that the insurgents did not often engage in direct combat with the considerably more advanced Rhodesians. This asymmetric style was running rings round the well-equipped Rhodesians and as such the Rhodesians developed their own asymmetric techniques.

It is clear that desperation amongst the Rhodesians in their battle of attrition against the liberating forces of black nationalism drove the Rhodesian regime to measures that can only be described with the benefit of hindsight as war crimes.

This desperation also brought the well-publicised Selous Scouts false-flag atrocities blamed on the insurgents against African civilians as well as Catholic missions, which often aided and abetted the insurgents. Rhodesians faced a huge economic and moral decline through the 1970s and this created an environment where the more desperate measures of the regime became tolerable and acceptable.

The Smith regime ran what Cross described as a "rudderless bureaucracy", with Smith intent on preserving his own position and often refusing to delegate to more experienced

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individuals. Cross says, "factionalism and rivalries crippled decision-making". Rhodesia's regime was riddled with persons Cross describes comfortably as "right-wing racists" including Defence Minister PK van der Byl.

It is obvious that the indiscriminate use of chemical weapons came out of a deep hatred for the blacks regardless of whether they had taken up arms or not. Obviously no one cared that innocent persons were being killed so long as white hegemony in Rhodesia was protected.

When Ed Bird as a recruit discovered contaminated clothing being packed and asked how it was assured that only terrorists would find the clothing and not civilians, he was asked, "you're new here, aren't you mate?" Collateral damage, they call it now. Innocents caught in the "cross-fire".

The Rhodesians developed counter-insurgency chemical warfare from the early-to-mid 70s, which, once its success was known, expanded to the point where, by the end of the war in 1979, it was causing health problems amongst the civilian population.

The techniques employed were questionable right from the start in the early 70s, when clothing and food soaked in toxic organophosphates were distributed by a double-agent, to recruits on their way to terrorist training camps in Zambia or Mozambique.

The recruits would die in the bush long before they reached the border. Here, right from the start of their CW programme, the Rhodesians were effectively poisoning persons who had not actually taken any armed action against Rhodesia, other than sign up with the revolutionaries.

The morality of murdering Israeli schoolchildren on the pretext that they will grow up to join the Israeli security forces is equally morally bankrupt.

Later, boxes of poisoned clothes or food or medicines would be left on known terrorist routes where they were often recovered by local civilians, who put on the clothes, ate the food or used the medicines, and then died.

Boxes of tainted products were also stored in local shops so that when these shops were raided by insurgents they would steal tainted goods. It seems pretty clear given the numbers of civilians suffering from poisonings that these materials often made it into the hands of innocents. It is not known how many civilians might have been harmed or killed by poisonings but such is the preserve of indiscriminate action.

The Rhodesians probably tested their materials on captured insurgents at secret Selous Scouts bases hidden away in the bush! There are few if any records of animal testing so it seems the Rhodesians jumped straight to testing on humans. This is utterly beyond the Geneva Convention! It is a war crime to experiment with lethal compounds on captured enemy subjects. Once the Rhodesian war ended much of the material and techniques learned were exported for use in South Africa, Namibia and Angola.

Cross' work researching the funding for the Rhodesian chemical and biological weapons programme threw up something interesting. Cross found that funds for the chemical weapons work as well as for the Rhodesian Selous Scouts, the purveyors of false-flag, so-called "terrorist atrocities" during the war, was channelled first through Saudi Arabia and then through what was then apartheid South Africa.



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As there cannot be any obvious reason for Saudi Arabia to fund the Rhodesian Bush War, it strikes me as extremely likely that the United Kingdom funded the chemical, biological weapons effort in Rhodesia and the Selous Scouts pseudo-terrorist groups.

The Selous Scouts are now thought to have performed numerous atrocities against both black villagers and Catholic missions as part of the propaganda war. The false flag attacks were used to pin atrocities on the freedom fighters and drive international public opinion against the insurgents.

Saudi Arabia and other Gulf states are presently being used to funnel Western funding to ISIS as they battle to remove Assad in Syria. This shows circumstantial evidence and precedent suggesting that it's most likely that the Saudi funds through Pretoria had come originally from the United Kingdom. The same thing is happening right now except it is ISIS receiving the funds instead of Rhodesia.

The Rhodesian propaganda war is STILL in full force, with most ex-Rhodesians unwilling to accept that Rhodesia committed the most vile of war-crimes and used chemical weapons indiscriminately, directly affecting the civilian population in the process. Cross describes ex-Rhodesians who would prefer to "glorify the past as the realm of heroes" rather than dredge up this dreadful issue. They would rather not have to face the facts of this "ungentlemanly footnote".

Simon Massey was born in the UK but grew up in both pre- and post-independence Zimbabwe. He left in 1987 but has returned several times for long trips and follows Zimbabwe affairs closely. He wrote this exclusively for The Herald.

Although Rhodesian war-crimes have been documented and discussed before, "Plague Wars" was published in 1999, Glenn Cross' book is by far the most well researched and detailed examination. His credentials are second to none and infallible, and although it repeats itself in places, the book is very well written and flows effectively.

The revelation that funding for the Selous Scouts and the chemical weapons programme that leaked into the civilian population came first through Saudi Arabia and then through apartheid South Africa, obviously originating in the United Kingdom, should be a heads-up for anyone who thinks that the West has some sort of moral high ground in the war against terror.

The Rhodesian Bush War was, in fact, a microcosmic prototype for the kind of underhanded illegality of Guantamamo Bay and the extra-judicial drone killings of the Middle East now common as well the Islamophobic propaganda streaming from our media outlets since the inside-job, false-flag attack of 9/11. The fact that the Rhodesian Bush War was primarily a propaganda war should give anyone who watches TV or reads the newspapers a compelling and rather rude awakening.

Trust no one. Believe Nothing. Question Everything. This was once the mantra of the conspiracy theorist. It's now just plain common sense.

<http://allafrica.com/stories/201704100162.html>

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## ***USAF Center for Unconventional Weapons Studies (CUWS) Outreach Journal***

All Africa (South Africa)

### **Africa: A Transformational Moment in Nuclear & International Affairs?**

By John Burroughs

April 3, 2017

Is a paradigm shift now underway on nuclear weapons at the United Nations? That was the question posed as about 130 nations gathered this past week to begin negotiations on a treaty prohibiting nuclear weapons, leading to their total elimination. The treaty would prohibit development, possession and use of nuclear weapons, but would not contain detailed provisions relating to verified dismantlement of nuclear arsenals and governance of a world free of nuclear arms.

This is the first multilateral negotiation on nuclear weapons since the Comprehensive Nuclear-Test-Ban Treaty (CTBT) was adopted in 1996. It is also the first ever such negotiation relating to the global elimination of nuclear arms, despite the fact that the first UN General Assembly resolution, in 1946, called for the elimination of weapons of mass destruction.

The hope of the nations leading the negotiations, including Costa Rica, whose ambassador, Elayne Whyte, is president of the negotiating conference, is that the second session, to be held from June 15 to July 7, will succeed in adopting a treaty. The idea is to strike while the iron is hot.

What makes the initiative at first hard to grasp is that it involves countries whose acquisition of nuclear weapons is already barred by the Nuclear Non-Proliferation Treaty (NPT) and by regional nuclear-weapon-free zone treaties.

The nuclear-armed states (United States, United Kingdom, France, Russia, China, India, Pakistan, North Korea, Israel) are not participating, nor are almost all states in military alliances with the United States. The aim, nonetheless, is to set a global standard stigmatizing nuclear arms and laying the foundation for their universal and permanent elimination.

The initiative grew out of three conferences on the humanitarian impact of nuclear explosions organized by the governments of Norway, Austria, and Mexico, in 2013 and 2014. The straightforward message is that the consequences of use of nuclear weapons are morally unacceptable and also incompatible with international humanitarian law barring the use of weapons causing unnecessary suffering and indiscriminate harm.

Therefore, nuclear weapons should be explicitly prohibited by treaty, as have other weapons including biological weapons, chemical weapons, landmines, and cluster munitions. The initiative also builds upon the regional nuclear weapon free zone treaties, to which most of the negotiating states belong.

The Trump Administration has carried forward the Obama Administration's policy of opposing the negotiations. An alarming related development is that Christopher Ford, a former US Special Representative for Nonproliferation now serving on the National Security Council, has stated that the administration is reviewing "whether or not the goal of a world without nuclear weapons is in fact a realistic objective, especially in the near to medium term." Ford, a lawyer, knows very well that the United States is legally bound by Article VI of

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the NPT to pursue in good faith negotiations on effective measures relating to nuclear disarmament.

A common objection made by U.S. allies is that a nuclear ban treaty will undermine the NPT. Participating states reply: How? We are negotiating an effective measure relating to nuclear disarmament as Article VI requires of all NPT states parties.

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In The Style Of: Charlize Theron

This Academy Award winning actress is always a 'Monster' hit on the red carpet, looks amazing even when she's on 'The Road' and is the very ...

The first week of negotiations revealed a broad convergence in favor of a relatively simple prohibition treaty. Only a few countries advocated negotiation in this forum of a comprehensive convention addressing all aspects of nuclear disarmament. Many other countries see negotiation of a comprehensive convention as a step to be taken later, when at least some nuclear-armed states are ready to participate.

There remain significant issues to be resolved concerning the provisions of a prohibition treaty, including issues relating to threat of use of nuclear arms and to testing. My organization, the International Association of Lawyers Against Nuclear Arms (IALANA), advocates for inclusion of a prohibition of threat of use.

In our view, that would confirm and specify existing international law and, as Chile and South Africa also said, help to delegitimize nuclear deterrence. An opposing view is that the illegality of threat of use would be implicit in the prohibitions of possession and use and is already adequately covered by the UN Charter.

IALANA also calls for the treaty to prohibit design and testing of nuclear weapons, capturing a whole suite of activities from computer simulations to explosive testing. The treaty will help set the template for future disarmament agreements, and therefore should be reasonably comprehensive.

Many governments support the inclusion of a prohibition of at least testing. Some governments maintain, however, that it is captured by the prohibition of development and note that explosive testing is banned by the yet to enter into force CTBT.

A knotty issue is how to handle possible later participation in the treaty by nuclear-armed states. The basic options are to require that they denuclearize prior to joining the treaty, or to provide that they may join the treaty if they have accepted a time-bound obligation verifiably to eliminate their arsenal. Participation by nuclear-armed states in a ban treaty in the near term is entirely theoretical, and may not happen even when they do decide to eliminate their arsenals. Still, negotiators want to make it clear that all states are welcome and encouraged to join the treaty.

The initiative and the negotiations have been marked by close cooperation between governments and civil society, notably the International Campaign to Abolish Nuclear Weapons, and with the International Committee of the Red Cross. Civil society was given ample opportunity to comment throughout the first week.

Such cooperation has never before occurred in the nuclear sphere. Also noteworthy is that the negotiations are taking place in a UN process over the opposition of the permanent five members of the Security Council, perhaps a harbinger of democratization of the United Nations.

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Diplomats and civil society organizations involved in the negotiations are clearly energized, even passionate, and determined to work constructively. If all goes well, members of a ban treaty, working together with civil society, will become a potent collective actor that will transform nuclear and international affairs for the better.

<http://allafrica.com/stories/201704070528.html>

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Stuff (New Zealand)

### **Peter Curson: Threat of new epidemic of infectious disease or bioterrorist act never far away**

By Peter Curson

April 7, 2017

Hardly a week goes by without evidence of the growing microbial threat to human health and well-being.

Recently, evidence emerged of a resurgence of avian flu in China and there is fear that the virus could spread to domestic chickens and possibly humans.

It is a harsh fact that infectious diseases continue to flourish and in many countries remain poorly controlled.

In 1967 the US Surgeon-General proudly announced to an American nation that infectious disease had been conquered and that we could now move on to address a range of important chronic diseases such as cancer and heart disease.

In fact, as many of us indulged visions of a new infection-free age, new infections were already appearing. At first they appeared in Africa and Asia but with our comfortable ethnocentric view of the world we conveniently disregarded them.

But the 1970s ushered in a series of so-called new infections and our complacency was dashed forever. Looking back on the 1950s there were plenty of signposts to warn us of the advent of a new infectious age but we chose to overlook or ignore them. West Nile virus burst forth in Israel in a series of major epidemics between 1950 and 1954, Korean haemorrhagic fever appeared in 1951, followed by Dengue haemorrhagic fever two years later.

But it was not until 1967 when a new and particularly virulent haemorrhagic fever broke out in Zaire and the Sudan, only to hit the world headlines when it affected 31 workers in a research laboratory in Marburg, Germany, that our attention came to focus on infectious disease.

The next 50 years witnessed an endless parade of new infections, including Lassa Fever, Lyme disease, Ebola, Legionnaires disease, West Nile virus, SARS, avian flu, swine flu and Zika.

The hope of an infection-free age, so triumphantly proclaimed 50 years ago, has disappeared. Infectious disease has now returned to the public health agenda, with so-

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called new infections triggering global epidemics, while older infections, once thought totally under control, have returned, often in more virulent forms.

More recently, SARS, avian and swine flu, Ebola and Zika have all raised considerable concern. We should, therefore, not be complacent about the return of another major epidemic and it is more than likely that we will experience a major outbreak of infectious disease some time over the next 5-10 years. Whether it is a newly emerged infectious agent or a mutation of an existing one, remains to be seen.

Globalisation has transformed our world and radically altered the nature of health risks. We are now living in a world where national and international borders mean nothing and where the scale of global travel makes any particular disease outbreak a threat for the whole world.

Our assault on microbes also rests on the misguided belief that we are confronting stationary targets against which we can simply level magic antibiotic and antiviral bullets.

In all of this we continue to see humans as the centre of a universe which almost accidentally also contains infectious disease agents. Yet in reality we are simply just one of a series of competing species and there is little doubt that our anthropocentric quest to control or eradicate all infectious diseases remains utopian.

Microbes have been selected for survival. Mutation and change are facts of microbial life, and there is little doubt that we have severely underestimated the complexity of our environment and the capacity of species to adapt and evolve.

Equally important is the fact that we have placed too much reliance on antibacterial and antiviral drugs.

The threat of bioterrorism has also heightened in recent years. The events of September 11, the Anthrax incidents in the US, the Sarin nerve agent release in Japan, the Ricin incident in Britain and the use of chemical weapons in the Iraq-Iran war and more recently during the attack on Mosul, have all cast an ominous shadow.

We have been forced to accept that the use of such weapons against civilian populations is no longer in the realms of fantasy. Many are now coming to believe that a major bioterrorist attack against a civilian population is inevitable within the next 20 years.

In such a context, preparedness for such an attack becomes a high national security priority. Over the past 15 or so years the US has carried out a wide range of simulation exercises designed to cope with such an event using both plague and smallpox as the biological agents. It would seem that both US and Russia have maintained stocks of smallpox virus and may have even produced more lethal strains of the virus.

There seems little doubt that the planned release of a biological agent would be a devastating weapon of terror. Anthrax spores released upwind from a boat or aircraft in a New Zealand harbour could, for example, have devastating effects.

Equally, a planned release of smallpox in a large shopping centre would create an extraordinary environment of fear and panic.

New Zealand has a long history of epidemics and pandemics of infectious disease. The plague outbreaks between 1900 and 1912 affected hundreds of people, the smallpox outbreak of 1913-14 infected more than 2000 Maori and 116 Europeans. The 1918 influenza pandemic killed more than 8600 New Zealanders, including more than 2000



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Maori, while polio between 1915 and 1956 probably affected more than 15,000 New Zealanders.

Since the early 1980s more than 6000 New Zealanders have developed HIV and today at least 3000 are living with it.

The threat of a new epidemic of infectious disease or a bioterrorist act is always lurking not far away.

Are we well prepared to meet such challenges? I do not think that we fully appreciate the significance of the biophysical world and the ability of bacteria and viruses to mutate and change in tune with changes in their environment and that of their host's environment.

Do we also realise that antimicrobial resistance has now reached such heights that within a few years most of our antibacterial and antiviral drugs may well be virtually useless.

We also continue to overlook the psycho-social side of disease outbreaks, the significance of human reaction, particularly fear, hysteria and panic, and how people regard risk in their live.

Despite earlier predictions that infectious diseases were under control and disappearing from the public health domain, they remain an important feature of life in the 21st century and there is little doubt that emerging and re-emerging diseases will continue to plague us over the next 25 years.

<http://www.stuff.co.nz/national/health/91147258/peter-curson--threat-of-new-epidemic-of-infectious-disease-or-bioterrorist-act-never-far-away>

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### **The Northlines (India)**

#### **India's Nuclear Strategy and Brain Freeze in Delhi!**

By Anil Athale

April 10, 2017

Former Defence Minister, Mr. Manohar Parrikar had set the cat amongst the pigeons and doves some months ago when he mentioned a need to have a re-look at our nuclear posture. Encouraged by this open-ness and also deeply disturbed by the shallow treatment of the subject by the former NSA (National Security Advisor- 'Choices: Making of India's Foreign Policy) I had raised certain concerns regarding the Indian nuclear posture of no first use and threat of massive retaliation in case of first use by the enemy.

...since nuclear weapon 'use' is fraught with danger of an Armageddon or national suicide the primacy is to the threat of its use. Thus psychological warfare is an integral part of nuclear strategy as much as weapons dialectics.

I received a very terse response from one of our foremost Delhi based think tank. Quote "The debate on nuclear deterrence has been more or less concluded decades ago: one bomb over one city is unacceptable damage. In any event, we already have the necessary capability to comprehensively destroy Pakistan through the use of nuclear weapons" The

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author then went on to say that the ‘real’ issue today is how to ‘deter’ Pakistan at the sub-conventional level” unquote.

There is a reason to believe that this represents the dominant view in the think tanks fraternity in Delhi. My experience in Delhi has shown that think tanks there often resemble an ‘echo chamber’. Thus there is need to take this response seriously.

But before we embark upon the debate, there is need to understand some basics of nuclear strategy. This is one form of warfare that has no ‘history’ to back up various theories since mercifully no nuclear war has taken place in last 72 years. The one model of nuclear competition/threats/coercive use is the interaction between the US and erstwhile USSR during the Cold War.

Second important point is that in nuclear warfare it is the weapon and its delivery system that is central to all strategies. Nuclear strategy at a basic level can be understood as ‘Weapon dialectics’. It is quite akin to the tactical level, where there are certainties of outcomes, very few options, direct result and pure violence (contrary to Clausewitzian notions of war being politics by other means). It is like war for an individual soldier on battle field and is a question of survival. As a result many analysts often use ‘rational actor mode’ as a tool of analysis. Technical understanding of various weapon systems is a basic foundation.

...amongst the major powers, the US has consistently declined to give a no first use guarantee. In the context of the Indian subcontinent, Pakistan has explicitly declared that it will use nuclear weapons first if threatened with conventional weapons...

On the other hand since nuclear weapon ‘use’ is fraught with danger of an Armageddon or national suicide the primacy is to the threat of its use. Thus psychological warfare is an integral part of nuclear strategy as much as weapons dialectics.

At the risk of oversimplification, one can summarize the Indian nuclear posture as consisting of pledge of ‘no first use’ and ‘massive retaliation’ in case of ‘any’ use by an adversary of a nuclear, chemical or biological weapon against Indian territory or Indian forces. The issue of such a use by proxies or terror groups or non-state actors and our response to it has been left vague. ‘Deterrence’ of sub-conventional conflicts or proxy wars is mentioned as one of India’s strategic objectives but how that relates to nuclear deterrence or a conventional deterrence (Cold Start doctrine) has been left vague. These constitute the grey areas of Indian strategy.

“No First use” of nuclear weapons has long been championed by India. Short of universal nuclear disarmament, if all countries are to give a no first use assurance then the danger of nuclear war could be avoided, is the basic logic. China has given similar pledge with a proviso added that it applies to only non-nuclear weapon states. The Chinese version of no first use thus was more a non- proliferation tactic rather than a universal/mutual restraint policy. It is noteworthy that amongst the major powers, the US has consistently declined to give a no first use guarantee. In the context of the Indian subcontinent, Pakistan has explicitly declared that it will use nuclear weapons first if threatened with conventional weapons or in other unspecified circumstances.

The Indian strategy of ‘massive retaliation’ has an interesting parallel with the Cold War era. It was on 12 Jan 1954 that the then American secretary of State, John Foster Dulles announced that henceforth the US will resort to ‘massive retaliation’ to any provocation by the Soviet Union and the Communist block that had launched a series of conflicts worldwide to change the territorial status quo that favoured the West. The just concluded Korean War



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(during which the US lost nearly 54000 soldiers) was the backdrop to this. The looming war in IndoChina, specially the siege of Dien Bien Phu, provided the immediate backdrop. This was American attempt to deal with Soviet proxy wars by invoking the nuclear threat. A point to be noted was that at that point in time the Soviet Union had still not developed retaliatory nuclear capability.

Proxy war against India or Jihad for Kashmir is a necessity for Pakistan. The unending violence is due to ideology, perceived history, demography, economic reasons and in self-interest of Pak Army as well as the politicians.

A partial parallel to Indian situation is very discernable. We also face a proxy war and have promised a massive retaliation as a threat to deal with escalation of that proxy conflict. In our case the adversary possesses retaliatory capability and unlike the US of 1950s we are not immune to reaction to our so called massive retaliation. Another major difference between American threat during Cold War and our situation is that the proxy conflict is being waged on our own soil and not some distant theatre.

It is instructive that despite these various advantages, the 'massive retaliation' strategy of the US never worked. Once the Soviet Union developed retaliatory capability, massive retaliation became an empty and non-credible threat and never worked. The Soviet Union continued its proxy wars and ousted the US from Vietnam in a spectacular manner in April 1975 when the American Ambassador fled Saigon (now Ho Chi Minh city). India's 'massive retaliation' strategy was dead on birth as it lacks credibility, clarity and resources. Will our adversary believe that we will risk our cities if he has inflicted damage on mid to large sized military unit as part of our response to a terror incident?

The other major strategic issue that is uppermost on our priority list is how to deter the proxy war? At the sub-conventional level we are already fighting a proxy war and what is needed is not deterrence (which is a pre-conflict phase concept) but compellance. What we face today is a proxy war fought by Pakistan using tactics of guerrilla warfare. We can learn from our NE experience only in a limited way. We must remember that in case of proxy war with tactics of guerrilla warfare as well as terrorism, we have to contain and roll back the conflict. The time for deterrence is long over. What this means in strategic terms is that we need 'action', be it in form of cross border retaliation or counter proxy war in enemy's hinterland! It seems from various actions, the present govt. has understood the issue and is acting on it under 'Doval Doctrine'. Proxy war against India or Jihad for Kashmir is a necessity for Pakistan. The unending violence is due to ideology, perceived history, demography, economic reasons and in self-interest of Pak Army as well as the politicians. It must also be clearly understood that the 'soft power' of religious ideology is far superior to its cultural variant.

Indians have to put their heads together and find a solution. Ostrich approach to national security will not do.

<https://thenorthlines.com/indias-nuclear-strategy-brain-freeze-delhi/>

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The Washington Times (United States)

## **Forget grand U.S.-Russia bargain**

By Thomas Graham

April 11, 2017

*Syria, Cold War, Ukraine, nukes, other issues in the mix*

What's a grand bargain? Since Donald Trump's election last November, there has been much speculation about a U.S.-Russia grand bargain, although it has faded dramatically in recent weeks amid far-reaching U.S. investigations of Russian interference in U.S. elections last year and possible collusion between Mr. Trump's associates and the Kremlin.

It was never clear, however, what the content of a grand bargain would be.

In Russia, the hope appeared to be that Washington would accept Moscow's views on the Syria and Ukraine crises and lift the Ukraine sanctions in exchange for Moscow's cooperation against Islamic State in Syria and elsewhere in the Middle East. That was precisely what many in Washington feared.

Such a deal was never really in the cards. Few in Washington believe that Russia is intent on fighting Islamic State. Its military operations appear more focused on supporting Syrian President Bashar Assad against U.S.-backed moderate opponents with legitimate grievances against his brutal regime. The U.S. military and intelligence services, deeply distrustful of their Russian counterparts, would have pushed back aggressively against any White House plan to deepen cooperation. Meanwhile, the Ukraine crisis concerns much more than the fate of the Donbas. At stake are the fundamental principles of European security and world order, disagreements over which cannot be swept away with a presidential handshake.

Moreover, even a deal on Syria and Ukraine would have left much of great import and contention unresolved in U.S.-Russian relations. The hard truth is that divisions between the two countries are deeper now than they have been since the later stages of the Cold War. They involve questions of world order, strategic stability, regional conflicts in Europe, the Middle East and East Asia — and values.

The two countries espouse sharply different interpretations of sovereignty and self-determination, as demonstrated by the U.S. and Russian approaches to Kosovo and Crimea. They diverge on when the use of force is legitimate: Look at U.S. condemnation of Russian military action against Georgia in 2008 and Russian questions about NATO operations in Libya in 2011. Russia claims a sphere of privileged interests in the former Soviet space, which the United States categorically rejects.

Similarly, Russia and the United States trade accusations over which side has violated the Intermediate-range Nuclear Forces (INF) Treaty and argue over the implications of the U.S. missile defense system and conventional strike forces for strategic stability. To Ukraine and Syria, add opposing positions on other conflicts in the Middle East and approaches to Iran's and North Korea's nuclear programs that are out of sync, even if both countries endorsed the Iran nuclear deal and support sanctions against North Korea. The ideological divide might not be as great as during the Cold War, but the two countries do not share a commitment to democratic values, and each side interferes in the domestic affairs of the other, even as it insists it does not.

There is no easy resolution to these outstanding problems, and certainly no truly grand bargain that would resolve most, if not all, of them. The best that can be hoped for is a

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mutual commitment to manage the differences in a way that avoids falling into a confrontation that would benefit neither side and risk catastrophic damage given each side's arsenal of nuclear, cyber and advanced conventional weapons. At a time of deep acrimony, what is now called for are small steps. At the top of the list is reopening the channels of communication that were shut down with the eruption of the Ukraine crisis three years ago. Russia and the United States need to be engaged in constant discussion of the contentious issues between them to better understand each other's interests, perspectives and goals so that they do not misread the other side and overreact at a time of crisis or mistake an accident for a deliberate attempt to harm. Eventually, these discussions might lead to deals, to the resolution of one or another problem or identify important areas for cooperation, but that will take time.

Each side could improve the atmosphere for such discussions by ratcheting down the hostile rhetoric about the other side. That would carry benefits not only for U.S.-Russian relations but for the domestic situation in each country. The demonization of the other side deflects attention from the hard truth that the main domestic problems each country confronts are largely home-grown and aggravated by poor policy. They are not the work of some dark conspiracy by the other side.

In short, forget about grand bargains. Small steps are the order of the day in U.S.-Russian relations. The sooner the two sides get on with the hard work at hand, the better off both sides will be.

<http://www.washingtontimes.com/news/2017/apr/11/us-russia-crosstalk-forget-grand-bargains/>

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The Washington Post (United States)

### **The Democrats' arms-control agenda is a failure**

By Marc Thiessen

April 10, 2017

In January, President Barack Obama's national security adviser, Susan Rice, declared: "We were able to get the Syrian government to voluntarily and verifiably give up its chemical weapons stockpile." Obama, she boasted, was able to "deal with the threat of chemical weapons by virtue of . . . diplomacy" and "in a way that the use of force would never have accomplished."

Tell that to the children of Idlib, their lifeless eyes dilated from exposure to an apparent nerve agent that the Obama administration assured us the Assad regime no longer possessed.

"I'm very proud of this moment," Obama declared last year of his decision not to enforce his red line and turn instead to Russia to get him out of his pledge with a face-saving agreement for Syria to give up its chemical weapons — one we now know President Bashar al-Assad violated with impunity.

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The Syrian gas attack was not just a failure of Obama's feckless foreign policy. It also was a failure of the Democrats' arms-control agenda. For decades, Democrats have placed their faith in international agreements to control the spread of dangerous weapons. But as we have seen in recent years, pieces of parchment, not backed by credible threat of force, are powerless to restrain murderous dictators from trying to stockpile weapons of mass destruction.

It's not just Syria. As President Trump ordered strikes against the Assad regime, he was meeting with China's president to discuss how to deal with another Democratic arms-control failure: the North Korean nuclear threat. On Oct. 18, 1994, President Bill Clinton boasted that while "three administrations have tried to bring this nuclear program under international control," his administration had finally succeeded in reaching a historic agreement with North Korea that would help to put an "end to the threat of nuclear proliferation on the Korean Peninsula."

Twelve years later, North Korea exploded a nuclear device. Despite Clinton's promises of intense verification, the North Koreans had — just like Assad — been cheating all along. They not only continued developing nuclear weapons but also became one of the world's most profligate proliferators of nuclear technology, helping Syria to build a suspected nuclear reactor at Deir al-Zour (that was stopped not by diplomacy, but by an Israeli military strike).

Worse, on Jan. 1 of this year, Kim Jong Un announced that his regime had "entered the final stage of preparation for a test launch of an intercontinental ballistic missile" that could one day deliver such a bomb to the United States.

Once North Korea possessed a demonstrated nuclear capability, it became increasingly difficult for subsequent administrations to roll back its nuclear program. But at least we could defend ourselves by building and deploying ballistic missile defenses to protect against a North Korean attack, right?

No, Democrats said, that would violate another sacred precept in the left's arms-control canon — the 1972 Anti-Ballistic Missile Treaty (ABM) Treaty. Democrats howled when President George W. Bush withdrew from the ABM Treaty in 2001, allowing the United States to begin deployment of defenses against rogue regimes. Unable to prevent U.S. withdrawal, Democrats did their best to limit deployment. The Wall Street Journal reported that Obama cut funding for missile defense by about 25 percent over the course of his presidency as of 2015 and eliminated critical programs that could overcome decoy missiles by placing multiple warheads on a single interceptor and destroy incoming missiles in the boost phase when they are slowest and thus easiest to strike.

As a result, we now face a rapidly emerging intercontinental ballistic missile threat from North Korea but are years behind the curve in terms of our ability to defend against it.

That's not all. If you liked the arms-control failures in Syria and North Korea, you're going to love the results of Obama's nuclear agreement with Iran. The Iran agreement is actually far worse than the nuclear framework Clinton negotiated with North Korea. While North Korea at least had to cheat to develop a nuclear bomb, Iran does not have to cheat — because Obama's agreement does not require it to dismantle any of its nuclear facilities, end enrichment, end research and development on advanced centrifuges, permit snap inspections or stop the development of intercontinental ballistic missiles. Israeli Prime Minister Benjamin Netanyahu has said that, far from preventing Iran from becoming a nuclear power, the Iran deal "paves Iran's path to the bomb."

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The Democratic arms-control establishment assures us that Netanyahu is wrong. Well, it also assured us that Obama's diplomacy had disarmed Syria, that Bill Clinton's diplomacy had helped to end "the threat of nuclear proliferation on the Korean Peninsula" and that we would be safer relying on the ABM Treaty and "Mutually Assured Destruction" rather than ballistic missile defenses.

Feeling safer yet?

[https://www.washingtonpost.com/opinions/the-democrats-arms-control-agenda-is-a-failure/2017/04/10/512b91ae-1df6-11e7-be2a-3a1fb24d4671\\_story.html?utm\\_term=.8293cb9e3f22](https://www.washingtonpost.com/opinions/the-democrats-arms-control-agenda-is-a-failure/2017/04/10/512b91ae-1df6-11e7-be2a-3a1fb24d4671_story.html?utm_term=.8293cb9e3f22)

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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.

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