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Feature Report

“How Might Artificial Intelligence Affect the Risk of Nuclear War?”. Published by RAND Corporation; April 23, 2018

<https://www.rand.org/pubs/perspectives/PE296.html>

Advances in artificial intelligence (AI) are enabling previously infeasible capabilities, potentially destabilizing the delicate balances that have forestalled nuclear war since 1945. Will these developments upset the nuclear strategic balance, and, if so, for better or for worse? To start to address this question, RAND researchers held a series of workshops that were attended by prominent experts on AI and nuclear security. The workshops examined the impact of advanced computing on nuclear security through 2040. The culmination of those workshops, this Perspective — one of a series that examines critical security challenges in 2040 — places the intersection of AI and nuclear war in historical context and characterizes the range of expert opinions. It then describes the types of anticipated concerns and benefits through two illustrative examples: AI for detection and for tracking and targeting and AI as a trusted adviser in escalation decisions. In view of the capabilities that AI may be expected to enable and how adversaries may perceive them, AI has the potential to exacerbate emerging challenges to nuclear strategic stability by the year 2040 even with only modest rates of technical progress. Thus, it is important to understand how this might happen and to assure that it does not.

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NUCLEAR WEAPONS

The Air Force Times (Vienna, Va.)

The Air Force Has Stopped its Continuous Bomber Presence Mission in Guam

By Diana Stancy Correll

April 22, 2020

Strategic bombers will no longer conduct routine rotations out of Andersen Air Force Base in Guam anymore as they have since 2004, according to Air Force Global Strike Command.

Although the move signifies the close of a 16-year mission as part of the Continuous Bomber Presence mission, the change doesn’t mean strategic bombers won’t operate in the Indo-Pacific anymore, the Air Force said.

“In line with the National Defense Strategy, the United States has transitioned to an approach that enables strategic bombers to operate forward in the Indo-Pacific region from a broader array of overseas locations, when required, and with greater operational resilience, while these bombers are permanently based in the United States,” Air Force Global Strike Command said in a statement.

“U.S. strategic bombers will continue to operate in the Indo-Pacific, to include Guam, at the timing and tempo of our choosing,” the statement said.

Air Force Strike Command did not disclose to Air Force Times specific locations where the aircraft will operate in the region, citing operational security concerns. However, the command said the Air Force will keep training with allies and continue to evaluate its overseas posture.

“We will maximize all opportunities to train alongside our allies and partners to build interoperability and bolster our collective ability to be operationally unpredictable,” the command

said. “We continually reassess our overseas posture and adjust to meet the requirements of the Joint Force and combatant commanders as well as our treaty commitments.”

The decision follows a so-called “elephant walk” on Andersen’s runway on April 13, where five B-52 strategic bombers joined an Air Force RQ-4 Global Hawk, KC-135 Stratotankers, a Navy MQ-4C Triton, and a Navy MH-60S Knighthawk stationed in Guam.

The “elephant walk” came days after the Chinese aircraft carrier Liaoning and its strike group made its way through the Miyako Strait near Japan and Taiwan, according to the South China Morning Post. Guam is more than 2,500 miles from Beijing.

According to The Drive, who was the first to report on the development, the official Defense Visual Information Distribution Service also posted photos on April 14 of B-52s in Guam and labeled the images “Last Continuous Bomber Presence Mission on Guam.” The titles were subsequently modified to “Andersen remains ready.”

Air Force Global Strike Command additionally foreshadowed a potential shakeup in a social media post on Thursday.

“Our diverse bomber fleet – B-52, B-1 & B-2 – allows us to respond to global events anytime, anywhere,” Air Force Global Strike Command said in the post. “Whether they’re launched from Louisiana, Guam, or the U.K., long-range strategic bombers have and will remain a bedrock of our deterrence! #DynamicForceEmployment.”

According to the National Defense Strategy former Secretary of Defense Jim Mattis put forth in 2018, the dynamic force employment concept encourages the military to be less predictable.

Secretary of Defense Mark Esper has reiterated that his primary objective is implementing the National Defense Strategy and addressing threats from China and Russia.

According to online military aircraft tracker Aircraft Spots, five B-52Hs had left Guam and were headed to Minot Air Force Base in North Dakota on April 16.

<https://www.airforcetimes.com/news/your-air-force/2020/04/21/the-air-force-has-stopped-itscontinuous-bomber-presence-mission-in-guam/>

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Atlantic Council (Washington, D.C.)

Atlantic Council Releases Landmark Report Assessing European Military Mobility

By Atlantic Council

April 23, 2020

WASHINGTON, DC – April 23, 2020 – Today, the Atlantic Council’s Transatlantic Security Initiative, housed within the Scowcroft Center for Strategy and Security, launched a new task force report titled: On the Move: A Comprehensive Assessment of European Military Mobility. The task force, cochaired by former Supreme Allied Commander Europe General Curtis Scaparrotti, USA (Ret.) and former US Ambassador to Hungary Colleen Bell, will officially launch the report on April 23 during a public event with senior US, NATO, and EU military and defense officials and experts.

The report’s findings come at a time when the military mobility effort in Europe has lost momentum in the face of other economic and political pressures and requires renewed emphasis at every level to succeed.

The Atlantic Council's task force on military mobility, comprised of former and current senior US and European defense officials and experts, was established in April 2019 to assess the adequacy of military mobility enhancement efforts in Europe to support the rapid reinforcement of allied forces across the continent in the event of crisis or war.

Through a year-long study drawing on consultations with NATO, the EU, and national government officials, the task force developed a set of concrete recommendations which together represent a critical next step to enhancing NATO's twenty-first-century conventional deterrence posture and military mobility throughout Europe.

"The Transatlantic security environment is dynamic and increasingly challenging. Focused and consistent investment in military mobility over the coming years is required to establish robust deterrence and defense and to ensure peace in Europe," said the task force's co-chair, General (ret.) Curtis Scaparrotti, former supreme allied commander Europe and former commander of US European Command. "The recommendations made in this report, when implemented, will enhance NATO, EU and the Nations' many defense initiatives in progress, especially the NATO Readiness Initiative."

Ambassador Colleen Bell, former US ambassador to Hungary, philanthropist, and strong proponent of a coherent and comprehensive approach to military mobility in Europe, said, "Ensuring NATO has the capabilities to deter and if necessary, defeat, any adversary is vital. It is just as important to ensure Allies can project those capabilities where they are needed, when they are needed. Eliminating barriers to freedom of military movement is critical to NATO meeting the full spectrum of current and emerging security challenges."

As the director of the task force, Wayne Schroeder, a nonresident senior fellow at the Atlantic Council, has led an extensive program of research on ongoing military mobility efforts and the remaining gaps and barriers. "A true transatlantic commitment and a whole-of-government approach by the nations of Europe to military mobility will be central to assuring peace, freedom, and security across the continent in the 21st century," said Schroeder. "While Europe currently finds itself in a challenging fiscal environment, it has the resource base to provide the robust and stable funding needed to ensure the success of the project over the long-term. A sustained political commitment is essential to undergirding the success of military mobility in Europe."

The report is available for download. For media inquiries, please contact press@atlanticcouncil.org. Follow the conversation online using #ACDefense <https://www.atlanticcouncil.org/news/press-releases/atlantic-council-releases-landmark-report-assessing-european-military-mobility/>

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CSIS (Washington, D.C.)

Decoding the Latest U.S. Report on Arms Control: Are Russia and China Really Cheating?

By Rebecca Hersman

April 17, 2020

On April 15, 2020, the State Department released the executive summary for the 2020 Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments, more commonly known as the Compliance Report. While the executive summary states the full, unclassified report will be released "at the earliest possible opportunity consistent with safe personnel and reduced staffing practices necessitated by the COVID-19 pandemic," some

critical questions and key takeaways can already be gathered from the available information. In particular, recent articles highlight specific concerns raised in the report that Russia and China may have conducted yield-producing or supercritical nuclear tests in 2019 in ways inconsistent with their international commitments.

Q1: What is the Compliance Report?

A1: The recently-released unclassified executive summary is an abbreviated version of the congressionally mandated annual report on “Adherence to And Compliance With Arms Control, Nonproliferation, And Disarmament Agreements and Commitments”—commonly referred to as the Compliance Report. Per the 1961 Arms Control and Disarmament Act, the State Department must submit to Congress the U.S. government’s assessment of the compliance and adherence to “arms control, nonproliferation, and disarmament agreements and related commitments . . . including confidence- and security-building measures (CSBMs) . . . and the Missile Technology Control Regime,” by April 15 of each year.

The 2019 report was the subject of significant controversy and disagreement, both publicly and privately. The original unclassified report issued in April 2019 came under fire for its highly politicized tone and disproportionate Iran focus rather than providing the far more technical and intelligence-based compliance assessments of prior years. A completely revised version, far more in line with the tone and content of prior years, was reissued in August 2019. The executive summary of the 2020 Compliance Report suggests a return to the more careful, technical approach to compliance of previous years, highlighting a number of areas of concern across a range of arms control and nonproliferation obligations. In particular, the executive summary carefully delineates between findings of noncompliance with legal obligations, issues of “adherence” with political commitments, and descriptions of areas of concern for which actual determinations of compliance or adherence cannot be made. Of note, most of the nuclear testing-related findings involving China discussed in recent media reports fall into this latter category. It remains to be seen if the full report will include more elaborated and detailed findings in this or other areas covered in the summary.

Q2: What does the Compliance Report say about Russia’s activities?

A2: Numerous prior compliance reports have raised serious concerns about Russia’s compliance and adherence to a wide range of arms control and nonproliferation agreements, and the 2020 report is no different. For example, the United States had assessed as far back as 2014 that Russia was in violation of the Intermediate-range Nuclear Forces (INF) Treaty by possessing groundlaunched cruise missiles and associated launchers with a range between 500 and 5,500 kilometers. The weapon deemed in violation of the INF Treaty is the SC-8 SCREWDRIVER, reportedly designated the 9M729 by Russian forces. Citing these concerns, the United States withdrew from the treaty on August 2, 2019.

Regarding the Open Skies Treaty, the United States finds that Russia continues to be in violation. In addition to the previously identified two violations in the 2019 Compliance Report, the 2020 executive summary alleges Russia improperly denied a planned U.S.-Canadian flight over the Russian TSENTR 2019 military exercise on September 20, 2019.

Regarding chemical weapons, the 2020 report asserts that Russia continues to be non-compliant with the Chemical Weapons Convention (CWC) due to its use of a military-grade nerve agent on March 4, 2018, in an alleged assassination attempt in the United Kingdom against a former Russian intelligence officer. The 2019 full Compliance Report made no such determination, instead referring to specific reporting mechanisms within the CWC. Importantly, given renewed uncertainty over the future of New START, the 2020 report finds Russia is in compliance with the treaty governing

strategic nuclear weapons. Ultimately, many of these findings are in accordance with Compliance Reports from years past: though there may be differences in tone and details from year to year, the U.S. government has had serious concerns about Russian compliance and adherence for years, and these concerns are not necessarily a new problem.

Q3: What specifically in the Compliance Report raises concerns about nuclear testing by Russia and China?

A3: The 2020 Compliance Report suggests both Russia and China have conducted some types of yield-producing nuclear tests. With regard to Russia, the report “finds that Russia has conducted nuclear weapons experiments that have created nuclear yield and are not consistent with the U.S. ‘zero-yield’ standard.” Similar accusations have been levied before. In May 2019, the director of the Defense Intelligence Agency, Lieutenant General Robert Ashley, stated in public remarks that “the United States believes that Russia probably is not adhering to its nuclear testing moratorium in a manner consistent with the ‘zero-yield’ standard.”

The accusation against Chinese nuclear testing is noteworthy in its specificity but is also much more nuanced in its claim. As originally reported by the Wall Street Journal, the compliance report suggests that a high level of activity at China’s Lop Nur facility and “possible preparation to operate its Lop Nur test site year-round, its use of explosive containment chambers, extensive excavation activities at Lop Nur, and lack of transparency on its nuclear testing activities . . . raise concerns regarding its adherence to the ‘zero yield’ standard.” This is not a new problem, and neither is the concern that Russia and possibly even China may have been conducting very low-yield, supercritical tests in support of their nuclear weapons development and stockpile management. Disagreement about what constitutes “zero-yield” and how it could be verified lies at the heart of the substantive debate surrounding ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT) and is one reason why the agreement has yet to be ratified by the U.S. Senate.

Q4: What are the major questions left unanswered from this executive summary of the Compliance Report?

A4: With the information that is currently available, there is nothing dispositive about the observations at the Chinese testing site Lop Nur. Perhaps the information in the classified report provides more concrete proof of Chinese nuclear testing, but openly available information raises more questions than answers. Moreover, the nuclear testing moratoria observed by a number of states including China, Russia, and the United States and referenced in the report is a voluntary political commitment. The “zero-yield” standard observed and favored by the United States is neither internationally agreed nor legally binding, hence the language used in the report: “as interpreted in accordance with the U.S. ‘zero-yield’ standard.” As for the international treaty designed to prohibit nuclear testing, the CTBT, both China and the United States have signed but not ratified the treaty, and the treaty has not entered into force. As such, it is difficult to consider these actions in a compliance context. Whether or not the forthcoming full report (either the unclassified public version or the classified report to Congress) provides any more evidence supporting these allegations of compliance and adherence remains to be seen.

Q5: What are the implications of these conclusions for the U.S. arms control and nonproliferation agenda?

A5: The conclusions of the compliance report have garnered attention in part because of worries about possible nuclear testing by Russia and China and what this could signal in terms of renewed nuclear competition. These reactions also reflect concern that these matters of compliance and adherence by other states are being amplified within the Trump administration for the purpose of

justifying controversial changes in U.S. arms control and nonproliferation policy and practice—whether in terms of justifying potential withdrawals from existing agreements such as the Open Skies Treaty, the development of new capabilities that would previously have been limited by the INF Treaty, or the latest calls by some to “unsign” the CTBT.

On this last point, the latest concern is that the United States would use these assessments as justification to redefine U.S. commitment to the nuclear testing moratorium and potentially violate the “zero-yield” standard, perhaps resuming supercritical testing it has insisted other states not conduct. Such a development would likely set off alarm bells across the international nonproliferation community, as this would be a significant change in a U.S. government policy that has existed for nearly three decades: as recently as the 2018 Nuclear Posture Review, it was stated that “the United States will not seek Senate ratification of the Comprehensive Nuclear Test Ban Treaty, but will continue to observe a nuclear test moratorium that began in 1992.” The United States currently maintains its stockpile through science-based stockpile stewardship programs, and as it currently stands, the National Nuclear Security Administration is only prepared to resume nuclear tests “when the President has declared a national emergency . . . and only after any necessary waiver of applicable statutory and regulatory restrictions.”

Rebecca Hersman is the director of the Project on Nuclear Issues and a senior adviser to the International Security Program at the Center for Strategic and International Studies in Washington, D.C.

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<https://www.csis.org/analysis/decoding-latest-us-report-arms-control-are-russia-and-chinareally-cheating>

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Real Clear Defense (Washington, D.C.)

Unconventional Deterrence in Europe: The Role of Army Special Operations in Competition Today

By Bryan Groves & Steve Ferenzi

April 16, 2020

The Problem: Russian New Generation Warfare

Russia’s aggressive actions in Georgia, Crimea, and Ukraine highlight its ability to quickly achieve escalation dominance along its frontier through the employment of new generation warfare and reflexive control. Russia occupied sovereign Georgian territory, quickly annexed Crimea, and supports proxy separatists in the Donbass region of Eastern Ukraine—subverting Western interests without triggering a war with NATO.

This Russian way of war involves a combination of early planning, mobilization of special forces and proxy elements (“little green men”), and political warfare. Under the guise of protecting “compatriots,” Russia utilizes indigenous populations to justify humanitarian intervention and then maintains “frozen conflicts” to create new facts on the ground that cement favorable political

outcomes, such as thwarting Georgia's accession into NATO. Russian feats accomplished against neighbors demonstrate its ability to separate the U.S. and its partners politically. Russian speed and unity of action exploit the West's uncertainty about the extent of what is happening, its permanence, and an inability or unwillingness to respond quickly and assertively.

In competition, Russia stays below the threshold of armed conflict by paralyzing political decisionmaking processes through the use of information operations and unconventional warfare. On select battlefields of its choosing and in support of its broader campaign of competition, Russia dominates in short periods of armed conflict utilizing advanced weaponry and employing anti-access/area denial systems. Through this hybrid operational construct, Russia has proven its ability to separate its foes' armed forces in time, space, and function through the application of non-military, indirect, asymmetric, and traditional military methods. Furthermore, allied war games have demonstrated that Russian forces could accomplish even more. They could reach the Estonian and Latvian capitals of Tallinn and Riga within 60 hours, while the recent Russian Zapad 17 exercise further demonstrates the vital nature of speed for the NATO alliance.

Russia's new generation warfare presents two critical challenges to traditional deterrence. 1) Evasion mechanisms characterized by "salami tactics" avoid triggers for a NATO Article V response. 2) Advanced anti-access/area denial (A2/AD) capabilities constrain options to punish the offender. Traditional deterrence, backed by large military formations and nuclear weapons, relies on the power to hurt an adversary if they cross a line. Deterring hybrid threats requires a different approach. It must address the vulnerabilities the adversary exploits in the target nation and augment capabilities to asymmetrically nullify the adversary's military advantages. Army Special Operations Forces offer unconventional ways to achieve such deterrence.

Confronting the Challenge: Unconventional Deterrence in Europe

"It is precisely to send a message to Russia -- don't do it -- we are ready and will not be hoodwinked like Ukrainians." - Karolis Aleksa, Lithuanian Ministry of Defense

In recognition that conventional force preparation alone is inadequate, the Baltics and other European nations have adopted a whole-of-society "Total Defense" approach consisting of civilian and military elements with the populations serving as the primary actor.

Comparing Traditional Defense (military-focused) to Total Defense (population-focused)

Army Special Operations Forces (ARSOF) play a critical role in preparing the European population to fulfill its Total Defense responsibilities – defending national sovereignty through resilience to adversary aggression and regaining national sovereignty through resistance to enemy occupation. Deterrence is the aim, preventing adversaries from taking malign actions in the first place. Deterrence requires both military capability and political commitment to use it. One without the other is insufficient. Moreover, America must demonstrate its capability and signal its intention to act early to establish its credibility and influence Russian foreign policy.

American commitment increases partner resilience and resistance within the affected country. However, conventional deterrence postures, such as large exercises and troop mobilization, can be viewed as offensive—despite efforts to signal defensive intentions. Unconventional deterrence is typically less provocative because it involves a smaller military footprint and less overt show of force. Yet it still communicates to the would-be adversary, such as Russia, "If you invade, don't expect our people to make it easy for you."

As an element of allied support, ARSOF contributes to both resilience and resistance through foreign internal defense (FID) and preparation of the environment. Working with partner forces,

this unconventional application of security force assistance asymmetrically sets the theater to shape the operational environment, deter aggression, and establish the conditions to win in largescale combat operations (LSCO).

Resilience – FID, executed by Army Special Forces, Special Operations Civil Affairs, and Psychological Operations units, contributes to resilience by supporting partner nations' internal defense and development programs. These pre-conflict activities bolster the nations' institutions prior to the employment of resistance and address societal vulnerabilities that Russia exploits.

Civil Affairs - Civil-Military Support Elements (CMSE) from the 92nd Civil Affairs Battalion, 95th Civil Affairs Brigade maintain a persistent presence 365 days a year in Europe. CMSEs map the human terrain, allowing Special Operations Command Europe (SOCEUR) to better understand the ground truth in the countries where the teams operate while also supporting partner nations' civil administration. Civil Affairs units are also uniquely capable of advising and assisting the partner nation on the development of a parallel or shadow civil government to govern during resistance while supporting its ability to achieve a high level of political mobilization, and assisting in the facilitation of civil unrest.

Psychological Operations - The 6th Psychological Operations Battalion, 4th Psychological Operations Group shapes, disrupts, and influences behaviors of foreign audiences through precision messaging. Psychologically hardening populations against adversary influence operations is a form of cognitive access denial. Exercises such as Gallant Sentry, which focused on the ethnically Russian region of Narva in northeastern Estonia, demonstrate the power of messaging to communicate U.S. and NATO protection of marginalized communities, assure partners, and deter Russian aggression, rendering Estonians and other Europeans less vulnerable.

Resistance – In preparation for resistance activities to regain national sovereignty post-invasion, Special Forces groups enable European allies to harden civilian populations and develop local insurgencies. This resistance capacity serves as a persistent deterrent in support of resilience by signaling to an adversary that the target of aggression would be too difficult to take and hold – a form of physical access denial. Those capabilities may be exercised as flexible deterrent options (FDO) in lieu of, or in conjunction with, conventional FDOs. If deterrence fails, ARSOF could support existing resistance capabilities through unconventional warfare (UW) activities in a blunt layer transition to slow enemy momentum and enable combat forces to surge into the theater of war. ARSOF could also leverage the insurgency to create windows of opportunity for the Joint Force to exploit in the close and deep areas during LSCO. Security cooperation exercises in support of resistance include:

Trojan Footprint– This SOCEUR-led exercise rapidly deployed SOF from America, Canada, and across Europe into Poland and the Baltics on short notice to support the region's indigenous territorial defense forces' resistance activities. Trojan Footprint demonstrated ARSOF's ability to shape the battlespace for decisive action by conventional forces while clearly sending the message that the U.S. is ready to go to war to protect its NATO allies.

Flaming Sword – This annual Lithuanian SOF-led multinational exercise, linked directly to Trojan Footprint, focused on Lithuanian SOF's ability to command and control SOF from multiple nations, and integration with their conventional and irregular forces, the Ministry of Interior, and other agencies to neutralize asymmetric threats, conduct resistance activities, and support conventional forces in countering hybrid aggression.

Allied Spirit– Allied Spirit is a U.S. Army Europe-directed multinational exercise designed to enhance NATO and key partners' interoperability and readiness. This exercise allowed ARSOF to

build capacity with partner SOF and territorial defense forces while improving integration and interoperability with the U.S. Army's 2nd Cavalry Regiment, the 1st Infantry Division, and the 4th Infantry Division Mission Command Element. As part of a contingent representing 10 nations, Texas Army National Guardsmen from 19th Special Forces Group (Airborne) mentored Albanian SOF and the Lithuanian National Defense Force Volunteers (KASP), Lithuania's primary irregular defense unit.

Unconventionally Expanding the Competitive Space

Army Special Operations Forces play a critical role in building the resilience and resistance capacity to support Europe's "Total Defense" programs. This demonstrates U.S. resolve to NATO while signaling the costs of Russian aggression without requiring a significant military footprint. Conventional force preparation alone is inadequate to deter Russia's hybrid threats because of Russia's significant economic, materiel, and military advantages. No realistic amount of American provided lethal aid can tip the balance against Russia.

Conventional deterrence, then, is insufficient. It is also more costly. Conventional deterrence in Europe runs \$1.875 billion for a conventional rotational presence versus \$55.8 million for SOF partnerships to build capacity. At a fraction of the cost, unconventional deterrence supplements conventional deterrence by hardening an entire society to adversary attempts to subjugate them and by providing means to resist before, during, and after large-scale combat operations.

These contributions are an advancement of ARSOF's Cold War forward presence in Europe and mission to conduct UW should war break out between NATO and the Warsaw Pact. This forgotten history should serve as a mental model for operations today. ARSOF's cost-effective expansion of options allows the Joint Force and policymakers to capitalize on limited resources and Conventional Forces-SOF synergy to prevail in great power competition with Russia.

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MAJ Steve Ferenzi is an Army Strategist and Special Forces officer serving in the USASOC G-5 Strategic Planning Division.

The views expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the U.S. Army Special Operations Command, the Department of the Army, the Department of Defense, or the U.S. Government.

https://www.realcleardefense.com/articles/2020/04/16/unconventional_deterrence_in_europe_the_role_of_army_special_operations_in_competition_today_115207.html [Return to top](#)

US COUNTER-WMD

Redstone Rocket (Huntsville, Ala.)

Reagan Test Site Gives Boost to Hypersonic Test

By Carrie David Campbell

April 22, 2020

To the Space and Missile Defense Command personnel who run the Ronald Reagan Ballistic Missile Defense Test Site in the South Pacific, the March 19 successful test of the Army and Navy jointly developed hypersonic glide body is the most recent test supported by RTS.

Information gathered from the test and future experiments will further inform the Department of Defense's hypersonic technology development. The event was a major milestone toward the department's goal of fielding hypersonic warfighting capabilities in the early- to mid-2020s.

Through the past half-century, RTS radars, imaging systems, data collection capabilities, and personnel have supported hundreds of missile tests ranging from validation of concepts and designs for intercontinental ballistic missiles to anti-satellite systems to ballistic missile defense systems. Located halfway between Hawaii and Australia on the Kwajalein Atoll in the Marshall Islands, RTS provides test support capabilities found nowhere else in the world.

"We're very proud of our role as America's national test range, and the long history we have supporting the development of ICBMs, ASATs, BMDS, and now hypersonic," Thomas Webber, director of the Technical Center, SMDC, said. "RTS is the nation's only long-range capable test range."

Col. Burr Miller, RTS director, said the RTS provides much more than just radars, cameras, recording equipment and data processing capabilities.

"RTS personnel provide cradle-to-grave support for every mission," Miller said. "We're here to support requirements definition for the test, environmental impact assessment, range scheduling, range safety and logistical support."

Miller notes the time from test concept to test is critical to each event's eventual execution.

"There are a lot of i's to dot and t's to cross before a test can be carried out. We work hard to keep the burden off of our customers, and do our best to keep the red tape to a minimum," Miller said. "But there are safety, environmental, host nation and government requirements that must be addressed."

When it comes time to support the actual test, Miller said, RTS brings instrumentation to bear unlike any other range in the world.

"You only get one shot at recording test data," he said. "For most tests, it's all instrumentation on deck. Our two tracking radars, ALTAIR and TRADEX, support tests, as well as our two imaging radars, ALCOR and MMW. We also have multiple high-speed optical and camera systems dedicated to capturing every measurable data opportunity."

After a test is successfully conducted by the launch team, there is still much work to do at RTS. The metrics team at the RTS Data Analysis Center begins to perform data analysis in support of customer requirements, working to fully flesh out all the collected data and perform extensive analysis.

According to Jim Cossey from the RTS Missions Operations Office, after a mission they conduct lessons learned meetings that benefit not just the current customer for any potential follow-on tests, but future customers as well.

"Post mission our mission and budget team also begin to balance the books and conduct lessons learned meetings to potentially find areas of improvement for RTS mission planning/execution," Cossey said.

In the end, post mission support is just as busy as mission preparation and mission support. Miller said. RTS could not accomplish their mission without core range stakeholders.

“These stakeholders include our fantastic support from U.S. Army Garrison-Kwajalein Atoll and our RTS Range director team, our contracting enablers at Army Contracting Command-Redstone Arsenal, Space, Missile Defense and Special Programs, the 413th Contracting Support Brigade, MIT/Lincoln Labs, and all of our teammates with our prime and subcontractors at RGNNext,” Miller said.

The next time you read about a missile test, he said, do not forget about the people working behind the scenes to make the test possible in the first place.

https://www.theredstonerocket.com/military_scene/article_b3d50d6a-84ac-11ea-9c634b85c3b16bb3.html

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US ARMS CONTROL

Al-Monitor (Washington, D.C.)

Trump Administration Doubles Down on Iran Nuclear Treaty Allegations

By Bryant Harris

April 16, 2020

The Donald Trump administration is using the State Department’s annual arms control compliance report to build upon its previous allegations that Iran may be violating the 1970 Treaty on the NonProliferation of Nuclear Weapons (NPT).

The State Department submitted a brief executive summary of the report to Congress today. This year’s executive summary bolsters the emphasis that last year’s report placed on the trove of documents that Israel says it obtained in a 2018 raid on an Iranian nuclear archive.

The 2019 report asserted that the archive itself “could potentially constitute a violation” of the NPT’s ban on nuclear weapons development. The summary of this year’s report goes a step further by noting that the International Atomic Energy Agency (IAEA) reported “articles of chemically processed uranium at an undeclared location in Iran.”

“Iran’s intentional failure to declare nuclear material subject to IAEA safeguards would constitute a clear violation of Iran’s [comprehensive safeguards assessment] required by the NPT and would constitute a violation of Article III of the NPT itself,” the executive summary says.

Notably, compliance reports under both the Trump and Barack Obama administrations had consistently found that issues related to Iranian NPT violations “were resolved as of the 2015 reporting period, despite Iran’s continued refusal to acknowledge or provide certain information about the military dimensions of its past nuclear activities.”

That assessment changed last year under the leadership of Yleem Poblete, a prominent Iran hawk who served as assistant secretary of state for arms control, verification and compliance. Poblete left the post in June after clashing with Undersecretary of State for Arms Control Andrea Thompson over the 2019 report. Thompson left her post in October.

The assistant secretary of state post remains vacant, but the 2020 report indicates that the State Department is still determined to move forward with its case over Iran’s alleged NPT violations.

“The problem with inserting all these concerns rather than sticking to hard and fast assessments of legal compliance ... is that you’re taking this away from being a very cut-and-dry document for the purpose of seeing where we are with treaty compliance and turning it into more of a political document,” said Alexandra Bell, a senior policy director at the Center for Arms Control and NonProliferation who worked on the compliance reports as a senior adviser to the State Department under President Obama.

Still, Iran’s reduced cooperation with the IAEA in recent months is providing fodder for the Trump administration’s arguments.

The summary of the 2020 report notes that Tehran has refused to provide IAEA inspectors with “access at two locations not declared by Iran and did not substantively respond to the IAEA’s requests for clarification regarding possible undeclared nuclear material or activities at those locations and a third, unspecified location.”

Iran agreed to allow IAEA inspectors to monitor its NPT compliance as part of Obama’s 2015 nuclear deal. But after Trump’s 2018 withdrawal from the deal, Iran began violating its end of the bargain, nearly tripling its enriched uranium stockpile since November. Iran also said it would no longer obey the deal’s restrictions following Trump’s January strike on Iranian Maj. Gen. Qasem Soleimani — even as Tehran continues to negotiate with Europe.

While the Iran nuclear archive and the IAEA’s struggle to inspect potential undeclared nuclear sites have already been widely reported, the full report — which is undergoing a declassification review — may contain more specifics. This marks the second year in a row that the Trump administration has missed its April deadline to submit the full report to Congress.

“They were actually legally required to get the full assessment up,” said Bell. “It would be nice to see that sooner rather than later.” <https://www.al-monitor.com/pulse/originals/2020/04/trump-double-down-iran-nuclear-treatyallegations.html>

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Associated Press via Defense News (Washington, D.C.)

Russia Shows Willingness to Include New Nuke, Hypersonic Weapon in Arms Control Pact

By AP

April 17, 2020

MOSCOW — U.S. Secretary of State Mike Pompeo and Russian Foreign Minister Sergey Lavrov discussed arms control and other issues Friday as Moscow has signaled readiness to include some of its latest nuclear weapons in the last remaining arms control pact between the two countries. But first Washington must accept the Kremlin’s offer to extend the agreement.

The State Department said the two top diplomats discussed next steps in the bilateral strategic security dialogue. Pompeo emphasized that any future arms control talks must be based on U.S. President Donald Trump’s vision for a trilateral arms control agreement that includes China along with the U.S. and Russia, the State Department said.

Russian President Vladimir Putin has offered to extend the New START arms control treaty that expires in 2021. The Trump administration has pushed for a new pact that would include China as a signatory. Moscow has described that goal as unrealistic given Beijing’s reluctance to discuss any deal that would reduce its much smaller nuclear arsenal.

Deputy Foreign Minister Sergei Ryabkov said Friday that Russia's new Sarmat heavy intercontinental ballistic missile and the Avangard hypersonic glide vehicle could be counted along with other Russian nuclear weapons under the treaty.

The Sarmat is still under development, while the first missile unit armed with the Avangard became operational in December.

The New START Treaty, signed in 2010 by U.S. President Barack Obama and Russian President Dmitry Medvedev, limits each country to no more than 1,550 deployed nuclear warheads and 700 deployed missiles and bombers.

The treaty, which can be extended by another five years, envisages a comprehensive verification mechanism to check compliance, including on-site inspections of each side's nuclear bases.

New START is the only U.S.-Russia arms control pact still in effect. Arms control experts have warned that its demise could trigger a new arms race and upset strategic stability.

<https://www.defensenews.com/global/the-americas/2020/04/17/russia-shows-willingness-to-include-new-nuke-hypersonic-weapon-in-arms-control-pact/>

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USNI News (Annapolis, Maryland)

Panel: North Korea Intent on Flexing Military Muscle During Pandemic

By John Grady

April 22, 2020

As questions linger about the health of North Korean leader Kim Jong Un following a recent surgery, Pyongyang has left no doubt it intends to keep flexing its military muscle with its latest round of air and land-based cruise missile tests, Asian experts at the Wilson Center said last week.

Speaking in a conference call, Abraham Denmark, director the center's Asia program, said "there's been no freeze put in place on its missile and nuclear programs." The proof, he added, came in March's nine short-range missile tests. They "were more than any other previous month's." The tests also signal that the North Koreans are following through on leader Kim's speech at year's end that Pyongyang would continue to develop "necessary and prerequisite strategic weapons."

The tests are also designed "to remind the region and the U.S. that, despite what's going on with COVID-19, they're still going to maintain deterrence," Denmark said.

Last week's tests were launched on the eve of South Korea's parliamentary elections. News reports say the land-based firings were likely the first test of North Korea's cruise missile arsenal in three years. The air-launched missiles were designed to strike ground targets.

Edward Wong, a diplomatic correspondent for The New York Times and a center fellow, said following Kim's speech there was a general feeling in Washington and other capitals that North Korea might resume testing its intercontinental missiles and possibly its nuclear weapons.

Denmark said that, since the administration has not objected in the past to these short-range tests, Kim "will take up the space he's been given."

So far, the global pandemic also has not spurred any real interest in North Korea in re-opening talks on denuclearizing the peninsula or easing economic sanctions. "There have been no high-level discussions ... outside of an exchange of letters with [President Donald] Trump" on offering medical assistance if needed to contain an outbreak.

Wong added there has been a slow-down of ship-to-ship transfers in North Korean or Chinese territorial waters meant to get around the U.N. Security Council-imposed sanctions restricting North Korean exports of coal and imports of needed goods.

“The borders have generally been closed” between China and North Korea on trade and population movement, he said.

Few believe North Korea’s claims of zero reported positive cases of COVID-19. It borders China, where the pandemic began, and South Korea, which reported a serious outbreak that apparently is now under control, Jean Lee, who heads the Korea program at the Washington think tank, said.

She quoted the top American commander on the peninsula, Army Gen. Robert Abrams, who said the regime’s assertion was “an impossible claim based on all the intelligence we’ve seen.”

The “no reported” cases, Lee said, was a reminder to “always question the veracity” of information coming from North Korean official spokesmen about a host of matters.

At the same time as it was reporting no COVID-19 cases, in last week’s meeting of the Politburo, Lee noted that it approved the construction of a mammoth new public hospital in Pyongyang. This followed its early-on restrictions on public gatherings and travel, closed businesses and government offices, and a bar on entry of most foreign nationals, signs that North Korea was taking the pandemic seriously.

Speaking from Switzerland, Katharina Zellweger, who was last in North Korea at the end of 2019, said, “people are really trying to follow all the rules and regulations” Kim’s regime imposed in late January. “Many places are closed, so people are staying home.”

By taking those steps, from building a large hospital to enforcing sheltering-in-place, the regime is trying “to regain confidence [of the public] at home” that it has matters under control, Lee said. Coupled with its continued show of military strength, Lee said these domestic efforts are attempts to “bring the people together in a unified battle.”

While better off than it was during the “starving times” of the mid-1990s, North Korea’s population remains extremely vulnerable to COVID-19, the experts agreed. Lee and Zellweger said 40 percent of its citizens are undernourished, with children being the most affected. Tuberculosis remains a chronic health problem, as does hepatitis B.

“The most vulnerable will suffer” if there is a major outbreak, Zellweger said. “Ordinary citizens are poor, very poor.”

Pyongyang’s health care facilities are chronically undersupplied to meet routine needs, and the flow of supplies and medical practitioners through outside non-governmental organizations has slowed or stopped, she added.

Zellweger termed the North’s hospitals “old and dilapidated” but clean.

Although there has been some easing of U.N. sanctions to provide more medical aid, the “impossibility to transfer money” to North Korea and the difficulty of “finding funding for aid program is hard” in these times.

For years, the North Korean regime under the Kim family “made the calculated decision to put their population at risk” by limiting contact with the outside world, Lee said.

But as Wong said, “it’s in China’s interest [that] there is no massive outbreak of COVID-19,” sending the contagion back across its borders, setting off a flood of refugees seeking safety or care and causing the collapse of Kim’s regime.

<https://news.usni.org/2020/04/22/panel-north-korea-intent-on-flexing-military-muscle-duringpandemic>

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COMMENTARY

War on the Rocks (Washington, D.C.)

Deterrence, Norms, and the Uncomfortable Realities of a New Nuclear Age

By Gerald C. Brown

April 20, 2020

One of the most important events of the last century was one that never took place — that is, thermonuclear war. Following the U.S. nuclear strikes against Japan in 1945, further use of nuclear weapons seemed inevitable. The United States and the Soviet Union amassed arsenals of unprecedented power, and competed for nuclear superiority in a contest that seemed certain to end in all-out nuclear conflict. But instead, neither utilized their arsenals, competition drove the Soviet Union bankrupt, and the Soviet empire collapsed. The United States and its allies dominated global politics after the Cold War, and democracy spread further across the world than at any other time in history. The Cold War ended without the use of a single nuclear weapon.

However, the non-use of nuclear weapons since 1945 can be misunderstood, and the wrong lessons can be learned. It is sometimes assumed that the absence of nuclear war since World War II proves that nuclear weapons are not relevant for national security, will never be used in conflict, or that a taboo against nuclear weapons will deter their use in the future. This thinking is dangerous, and may bring about the very event it assumes can never occur.

Nuclear weapons were never used during the Cold War because national leaders, even in situations like the Cuban Missile Crisis, judged that there was never any clear advantage in launching a nuclear strike. The risks never outweighed the perceived benefits, as a nuclear attack would clearly lead to nuclear retaliation. Deterrence worked during the Cold War, but only because Washington and Moscow worked hard to convince the other that using nuclear weapons would never be worth it. With the possibility of a new Nuclear Posture Review in 2021, it is important that policymakers study what will drive countries to use, or not use, nuclear weapons in the future.

The Nuclear Taboo Exists, But it Can Be Broken

It is sometimes argued that a normative basis of restraint, a “nuclear taboo,” is responsible for the lack of inter-state nuclear conflict. While such a taboo almost certainly exists, it is unlikely to prevent states from using nuclear weapons on its own. The decision to use nuclear weapons, like the decision to engage in conflict in general, has had a lot less to do with morality and a lot more to do with assessments of the national interest and domestic political considerations.

The United States and the Soviet Union refrained from nuclear strikes during the Cuban Missile Crisis due to mutual vulnerabilities. The crisis only de-escalated when both sides gave each other strategic victories — the Soviets removed its nuclear missiles from Cuba, while the United States removed missiles from Turkey. U.S. government officials decided not to use nuclear weapons during the Vietnam War because the nature of the conflict made them impractical and not worth the cost. Military analysts calculated it would take around 3,000 nuclear weapons a year to accomplish their goals in Operation Rolling Thunder. Following the Korean War, policies were put

in place to immediately respond with nuclear weapons if a return to hostilities occurred. Nuclear weapons were used in Japan in World War II because of this same calculus. The U.S. government calculated it could save 500,000 allied lives and massive amounts of time and money by using them.

This is not to say the nuclear taboo has no effect on policy. The fear of the moral, reputational, and political costs associated with using nuclear weapons — specifically, using nuclear weapons first in a crisis — has certainly acted as a deterrent. The taboo, combined with the mindset that the weapons would not be necessary for victory, contributed to President Harry Truman's decision to not use nuclear weapons in the early days of the Korean War, and prevented Gen. Douglas MacArthur's original war plans — which included the use of up to fifty nuclear weapons and a belt of radioactive cobalt to prevent reinforcements — from being implemented. Even Secretary of Defense Robert McNamara is reported to have privately advised against waging nuclear war under any circumstances.

Arms control agreements, for their part, have reinforced the nuclear taboo by seeking to control potential escalation, provide transparency, and minimize the situations where it would be advantageous to use nuclear weapons. However, arms control agreements are not signed primarily for normative reasons. Countries — specifically Russia and the United States — have pursued arms control agreements as a means of furthering competition and offsetting an adversary's advantages in specific sectors.

These agreements were pursued when there was a disparity in capabilities to curb competition and abandoned when the strategic conditions for the agreements were no longer favorable. For example, the Anti-Ballistic Missile treaty limited both the Soviet Union and the United States to maintain comparable capabilities and avoid a costly arms race. But Washington withdrew from the treaty in 2001 when it had a clear advantage in developing missile defense technology. The Intermediate-Range Nuclear Forces treaty, signed in 1987, allowed both sides to reduce tensions in the European theater, while strategically allowing continued competition in the realm of air and sea-launched missiles where the United States had a clear advantage. Russia began violating the treaty decades later when the strategic calculus changed, in the face of a proliferating Chinese intermediate-range missile force.

Thinking Through Deterrence

Nuclear deterrence is often assumed to work automatically, but in practice, nuclear states are inherently difficult to deter. Deterrence is not a condition achieved from simply possessing nuclear weapons; it is based on the perception of military power in general. Nuclear weapons drastically enhance a state's strength by creating the capacity to cause catastrophic amounts of damage in a very short period of time, with strikes that are largely indefensible. Due to the unique characteristics of nuclear weapons, nuclear states become less likely to engage in conflict with each other. However, this makes it even harder to deter a nuclear state from campaigns against nonnuclear states.

The United States has extended its deterrence commitments to its allies in Asia and Europe. Unfortunately, this may be an empty promise. In the case of a crisis with a nuclear state like Russia or China, the potential for escalation to the nuclear level always exists. This begs the question: How far is Washington really willing to go to defend an ally, and how would the American people respond to risking nuclear war to defend an ally when there is no threat to the U.S. homeland?

If a nuclear power decided to use nuclear weapons against a state within the American nuclear umbrella (e.g., Australia, Japan, South Korea, and NATO allies, among others), the United States might refrain from responding with nuclear weapons, since doing so would risk its own survival.

This dynamic is one of the reasons that the United States maintains a strong military presence and forward-deployed nuclear weapons in the territory of its European allies: The United States is far more likely to respond to aggression if American citizens are killed. This vulnerability allows states to build “theories of victory” that involve the use of nuclear weapons at the tactical level to offset conventional inferiority and deter foreign involvement.

Theories of Nuclear Victory

Nuclear use may be more plausible than many would like to believe. America’s adversaries invest a lot of resources in nuclear weapons, and a considerable amount of time thinking about situations in which they would use nuclear weapons and how to fight the United States under nuclear conditions. For example, if China decided to militarily retake Taiwan — a primary goal of the People’s Liberation Army — it faces two considerable obstacles. While it is possible it could succeed in an amphibious landing and take Taipei, the costs would be immense. Additionally, an invasion risks U.S. intervention and the outbreak of a war between the United States and China over the sovereignty of Taiwan. One of the goals of Chinese war planning against Taiwan is to ensure a quick and decisive occupation that would deter the United States from getting involved in the first place. Though China’s stated nuclear weapons posture claims a no first-use policy, this could be a situation where the cost-benefit ratio of using nuclear weapons is too good to easily overlook. The use of low-yield nuclear weapons against specific targets, such as Taiwanese military bases or coastal defenses, would have two effects. It would clear the way for a Chinese occupation with possibly fewer costs than a conventional approach, and would likely deter U.S. intervention. With no U.S. forces being harmed and China having demonstrated a willingness to escalate to the nuclear level, the United States is unlikely to find it worth the risk to intervene.

China would face economic and diplomatic costs from the international community, but it would face significant costs from annexing Taiwan anyway. Beijing could judge that using nuclear weapons would be worth it. Analysts have to honestly assess how much using nuclear weapons would improve Beijing’s chances of success, and weigh that against the repercussions of doing so.

Russia, with its aggressive nuclear posture, massive arsenal, and recent expansionist actions in Ukraine is another alarming case. Moscow’s calculated use of escalation controls shows a willingness and ability to calculate the appropriate use of force. If Russia can annex territory in Ukraine, it can conceivably do the same in the Baltics. A 2016 RAND study argued that Russian forces can rapidly move through and capture one or all of the Baltic states quicker than NATO would be able to effectively respond. Additionally, the Russian territory of Kaliningrad and its antiaccess/area-denial capabilities provide an effective means of defending against NATO intervention. Countering such an offensive would almost certainly require strikes against Russian territory, which could trigger a nuclear response from Moscow. Russia is well practiced in utilizing the fear of further escalation and uncertainty to its advantage; limited nuclear strikes, or a nuclear demonstration in key areas, could be used to create uncertainty and fear of conflict escalating to a larger scale, deterring conflict at a lower level of escalation. If push came to shove, would NATO be willing to risk nuclear conflict for a small state in Russia’s backyard?

Of course, nuclear deterrence is most credible as a means to prevent foreign invasion. This has been the primary reason numerous states have sought nuclear weapons in the first place, including India, Pakistan, Israel, and even North Korea. A significant threat to the homeland of a nuclear state could lead to the use of nuclear weapons to make up for conventional inferiority, especially if the state is losing ground to advancing forces. The state may utilize a limited strike against an invader’s military bases, to cut off supply trains, or even against an adversary’s cities to coerce them into backing down. Furthermore, if the state feels its nuclear deterrent is being threatened, it may

escalate by using its nuclear weapons under fear of a “use it or lose it” situation. Theoretically, this dilemma prevents invasion from occurring in the first place. But, if an adversary truly believes in this normative restraint and invades despite this deterrent, is it really believable that the state will continue to refrain from using nuclear weapons when its survival is at stake?

In the Cold War, analysts learned that it was very difficult to credibly engage and win in strategic-level warfare against a nuclear state. But this same lesson does not apply to nuclear versus non-nuclear states. The United States and Russia are unlikely to target each other in nuclear conflict — it is too risky. But nuclear weapons can be used against a non-nuclear state — outside of a nuclear adversary’s homeland — without triggering a suicidal response. There is a major difference between striking a nuclear power’s cities and threatening their survival and using low-yield weapons against a state that cannot retaliate at the nuclear level.

A counterargument is that it would not be necessary to use nuclear weapons against a non-nuclear state. However, this assumption may not always hold true, and the fear of inter-state nuclear conflict may be the edge a nuclear state needs to deter against foreign interference. If an American adversary uses nuclear weapons — in a manner that does not threaten the United States — will America blink? Is the United States truly willing to respond with nuclear weapons when doing so could quickly turn a situation that did not originally threaten it into one of mutual suicide?

Nuclear Restraint Is Not Based on Morality

Nuclear weapons may have increased deterrence between nuclear-armed states, but it is increasingly difficult to deter them in other campaigns. There are situations when a state may be able to use nuclear weapons to their advantage, and deterring against this requires hard work.

Nuclear weapons have not been used in combat in 75 years. Considerations of nuclear warfare have become taboo, which has contributed, in part, to the non-use of nuclear weapons for so long. But the taboo does not guarantee that nuclear weapons will not be used in the future, and history shows us that taboos are often broken. Recent evidence suggests that the nuclear taboo may not be as robust as many assume. An increasing number of Americans have even declared they would support using nuclear weapons to save American lives — a sentiment unlikely to be unique to the United States. In one study, 59 percent of respondents stated that they would support the use of nuclear weapons against Iran to save U.S. soldiers, and a different study showed that 77.2 percent would support a nuclear strike against al-Qaeda if nuclear weapons were deemed twice as effective as conventional weapons.

Unfortunately, the use of nuclear weapons may be increasingly plausible in the years ahead. The Joint Comprehensive Plan of Action, or “Iran deal,” meant to slow the inevitable proliferation of nuclear weapons in the Middle East, but was undermined when the United States withdrew from it in 2018. North Korean nuclear weapons and ballistic missiles have proven to be an effective means of deterring U.S. intervention and will not go away anytime soon, bringing fears of proliferation both in East Asia and to other dictatorships around the world. Bilateral arms control agreements are becoming less relevant as they weaken signatories against states outside of the agreement, and multilateral arms control agreements have become less likely to have meaningful content due to the wide variety of conflicting capabilities, arsenal sizes, and security concerns. The unfortunate reality is that the nuclear taboo is falling apart. If we wish to continue to see a world where nuclear weapons are not used, deterrent postures must be based on the assumption that states will use these weapons when it is in their interest to do so.

Gerald C. Brown (@GeraldC_Brown) is an analyst with Valiant Integrated Services, where he supports the Department of Defense nuclear enterprise and conducts nuclear strategy research and

exercise analysis. Previously, he spent six years in the U. S. Air Force, Global Strike Command, working in nuclear security operations. All views expressed here are his own.

CORRECTION: An earlier version of this article stated that Dwight Eisenhower was president in the early days of the Korean War. That was incorrect. Harry Truman was president at the start of the Korean War.

<https://warontherocks.com/2020/04/deterrence-norms-and-the-uncomfortable-realities-of-a-new-nuclear-age/> / [Return to top](#)

The Hill (Washington, D.C.)

America Needs an 'Iran Consensus'

By Lawrence J. Haas

April 16, 2020

The current debate over whether the United States should ease sanctions against Iran in light of the latter's struggles with COVID-19 reflects a broader reality: More than four decades after the 1979 Iranian Revolution, we still lack a consensus about the nature of the regime in Tehran and how to deal with it.

For Iran, we need something akin to the "Cold War consensus" of decades ago, when our two political parties agreed that America's biggest global challenge was Soviet-led communism and that Washington should defend itself and its allies by "containing" the Soviets.

Such an "Iran consensus" is long overdue. Ever since the revolution of 1979 ousted the U.S.-backed Shah and ushered in a terror-sponsoring, hegemony-seeking, nuclear weapons-aspiring, antiWestern theocracy, Washington has pursued a confused, disjointed, meandering approach toward the Islamic Republic.

To nurture an Iran consensus, especially at a time of bitter partisanship in Washington, the man elected president in November should consider appointing a bipartisan commission of foreign policy elders — former secretaries of state, national security advisors, and so on — to consider the nature of Iran's regime, clearly delineate the challenges it poses, and outline an approach around which the country can broadly rally.

That's because, as our policies of the last four decades make clear, we lack agreement on even the most basic issues relating to Iran. Those include:

What is the regime? In Tehran, an unelected Supreme Leader wields ultimate power and an unelected Guardian Council routinely bars most candidates for parliament, reflecting the fact that the government is far more authoritarian than democratic.

Nevertheless, in the early 2000s, Deputy Secretary of State Richard Armitage went so far as to term Iran a democracy, and for decades all-too-many of our foreign policy experts have held out hope that the election of a supposedly moderate Iranian president would nurture domestic reforms and warmer U.S. ties.

That neither the "moderate" President Mohammad Khatami two decades ago nor President Hassan Rouhani today have proved to be real reformists likely won't convince these same experts to abandon this hope.

What drives the regime? Henry Kissinger famously suggested that Iran must decide whether it wants to be “a nation or a cause.” But Washington, too, must decide whether it considers Iran a normal nation or an unrelenting revolutionary cause.

Starting with President Carter, after Iranian students seized America’s embassy in Tehran in late 1979, presidents of both parties have sanctioned Iran over its terror sponsorship, regional mischief, and nuclear-related pursuits.

Where presidents have disagreed with one another is over the possibility that Tehran could be persuaded to markedly change its behavior abroad and shed its anti-Western hostility, paving the way for normalized U.S.-Iran relations.

Though other presidents tested the possibilities of a U.S.-Iranian rapprochement in back-channel communications, President Obama went the furthest — hoping that by refusing to criticize Iran’s fraudulent presidential election of 2009 and spearheading a global nuclear deal with Tehran, he could convince the regime to reduce its hostility, change its nefarious ways, and rejoin the international community.

How dangerous would nuclear weapons make the regime? Iran’s nuclear progress started attracting greater attention beginning in the early 2000s, and Presidents George W. Bush, Obama, and Trump all vowed not to let Iran acquire or develop nuclear weapons with which to threaten the region and wider world.

That consensus was a bit of a mirage, however. To be sure, Obama rejected the idea of “containing” a nuclear Iran, saying that an Iran with nuclear weapons would pose too large of a threat to Israel and the United States. But, while he and his aides proclaimed that the U.S.-led nuclear deal closed off all Iranian pathways to a bomb, the deal he ultimately concluded was slated to expire over time, giving Tehran eventual free rein to pursue nuclear weapons anew.

That was a reality that Trump apparently did not want to accept. He withdrew the United States from the deal and imposed a “maximum pressure” campaign of sanctions to, among other things, force Iran back to the negotiating table to craft a more comprehensive agreement.

Indeed, nothing encapsulates Washington’s dissensus over Iran better than the nuclear deal itself and its aftermath.

Obama treated it as an executive agreement rather than an official treaty for the Senate to approve, at least in part because a Republican-controlled Senate wouldn’t have provided the two-thirds vote needed for ratification. Now, many Democrats of both the House and Senate are bemoaning Trump’s decision to ditch the deal, fearful that it isolates Washington from its allies in Europe, who still back the agreement.

All told, Washington’s head-spinning incoherence of the last decade over Iran’s nuclear program shows just how desperately we need a consensus. It’s long past time to build one.

Lawrence J. Haas, senior fellow at the American Foreign Policy Council, is the author of, most recently, "Harry and Arthur: Truman, Vandenberg, and the Partnership That Created the Free World."

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The Hill (Washington, D.C.)

Defense Budget Cuts Following the Pandemic Will Be Hard to Swallow

By Dov S. Zakheim

April 19, 2020

Congress has appropriated more than \$2.25 trillion to counter the impact of COVID-19 on American families and the economy. It is likely to spend even more once legislators return from their recess in early May. This unprecedented level of expenditure is resulting in a massive deficit and national debt levels that are likely to exceed 120 percent of the nation's gross domestic product, especially as GDP growth itself is no longer a foregone conclusion. In turn, there will be renewed pressure on the defense budget, which already is forecast to have no real growth in fiscal year 2021.

Interest on the national debt, which at some point will begin to rise again, will create a massive burden on annual federal budgets. The demand for increases in domestic spending will be difficult to ignore in the aftermath of the pandemic. For these reasons, it is not beyond the realm of probability that defense budgets beginning in fiscal year 2022 will not even grow in nominal terms.

Even if the Department of Defense (DOD) had been forced to address only the reality of no real growth in defense spending — as opposed to the additional burden of minimal nominal growth — it would have had to re-evaluate its spending priorities. Historically, when DOD has been forced to undertake what it terms “cut drills,” these have been done with the greatest reluctance, and at times have been completed with little analysis of the implications of potential trade-offs. Invariably, what resulted from these efforts were reductions in spending for operations and maintenance, force level reductions, or the shedding of research and development of untried weapons and systems. On the other hand, the department and especially the armed services were exceedingly reluctant to dispense with longstanding legacy programs.

This time, however, DOD faces a budget challenge of unmatched proportions. Defense budgets are certain to decline in real terms. Indeed, should the Democratic Party take the White House or the Senate (or both) in the upcoming elections, even deeper cuts in defense are sure to follow. Yet the threats posed by China and Russia, already projected to increase, may well prove to be even greater in the face of a weakened and disorganized West. The DOD, therefore, will have to take seriously the need for a fundamental re-evaluation of its priorities, and not merely undertake another cut drill.

The last time the department fundamentally shifted its focus was in the early 1990s, when its base force resulted in a 25 percent reduction in force structure, a 20 percent reduction in manpower relative to fiscal year 1990 and a 10 percent reduction in budget authority. DOD may have to consider launching an effort along similar lines if it is not to be caught flat-footed next year, as a result of either the full budget impact of coronavirus spending or the November elections, or both.

As with the base force, force levels are a likely target for reductions. Pay and benefits, to include family housing, are untouchable because they are key to maintaining a top-level volunteer force. This is especially critical at this time because, in the aftermath of the virus's spread within the military, it may prove difficult for the services to maintain their recruitment objectives. Similarly, operations and maintenance budgets cannot be tampered with to maintain deterrence against possible new adventurism on the part of Russia, China, North Korea or Iran.

Apart from force-level reductions, therefore, the only other candidates for cuts are research and development and the procurement accounts. Reductions in R&D, typically favored in cut drills, will be more difficult, given the need to maintain an advantage over Russia and China in the realms of hypersonics, artificial intelligence, quantum computing and other cutting-edge technologies. Procurement accounts are thus the only remaining targets for budget reductions.

Budget cutters for years have zeroed in on the strategic nuclear triad, and current plans for its modernization offer them new targets. Global Strike Command is seeking \$200 billion over the next decade to fund new bombers, intercontinental ballistic missiles, command and control and related supporting elements of the strategic nuclear triad. On the other hand, longtime opponents of spending on strategic nuclear forces will argue against the need for a new bomber, and instead will call for converting the strategic nuclear triad to a dyad of land- and submarine-based missiles. Other critics of the triad may support the bomber program and might prefer dispensing with the land-based leg in favor of the bomber and submarine legs. Budget pressures will underscore both sets of arguments.

With respect to general purpose forces, there no doubt will be a renewed call to halt all aircraft carrier procurement beyond the two Ford class carriers under construction, or at best to support construction of one more. Even President Trump at one point voiced his concern about the program. Given its skyrocketing costs, the F-35 also may find itself in the crosshairs of budget hawks. The Army recently dropped its program to develop an Optionally Manned Fighting Vehicle, its third attempt to replace the 1980s Bradley Infantry Fighting Vehicle, only to renew it several weeks later. It might have to drop it again. Finally, there have long been calls for a re-evaluation of the elements — and costs — of the nearly four-decades-old missile defense program.

Cutting procurement is always a difficult pill for the services to swallow, and this time will be no different. No doubt DOD will point to the need to maintain the defense industrial base, and workers' jobs, as a reason for avoiding major reductions in defense procurement. That argument certainly will resonate with Congress. This time, however, the case for resisting change may be overwhelmed by the impact of a plague that has caught the nation unprepared and may well return with even greater force in the months or years ahead.

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<https://thehill.com/opinion/national-security/492756-defense-budget-cuts-following-the-pandemic-will-be-hard-to-swallow>

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Real Clear Defense (Washington, D.C.)

Preparing for a Dark Future: Biological Warfare in the 21st Century

By Thomas G. Mahnken

April 16, 2020

News of the spread of COVID-19 aboard the aircraft carrier USS Theodore Roosevelt and the subsequent relief of its Commanding Officer has highlighted the tension that exists between maintaining military readiness and the need to safeguard the health of members of the armed forces in the face of a pandemic.

The disease has been a feature of war for the vast majority of human history – from the plague that ravaged Athens early in the Peloponnesian War, killing the Athenian strategos Pericles; to the diseases that European settlers brought with them to the New World, devastating local populations; to the host of tropical diseases that caused appalling casualties in the China-Burma-India and

Southwest Pacific theaters in World War II. The fact that we were surprised by the emergence, growth, and spread of COVID-19 reflects the false conceit of 21st century life that we have “conquered” disease.

In fact, pandemics are but one class of low-probability but high-impact contingencies that we could face in the coming years, including an earthquake or other natural disaster in a major urban area, regime change in an important state, and the collapse of financial markets leading to a global depression. When I served as Deputy Assistant Secretary of Defense for Policy Planning between 2006 and 2009, we explored a series of such “shocks” as well as the role the Defense Department could play in responding to them as a way of helping the Department’s leaders address such contingencies. During my time in the Pentagon, we also held a series of wargames with members of Congress and their staff, governors of several states and their cabinets, and the government of Mexico, to explore in depth the consequences of a pandemic. Much of what we found then resonates with what we are experiencing now. On the one hand, the measures that individuals need to take to protect themselves against a virus such as COVID-19 are relatively straightforward. On the other hand, group dynamics, bureaucratic behavior, public policy, and economic forces make it difficult to implement measures that make sense on an individual level across a society, let alone across countries. It was, and is, also clear that the Defense Department possesses medical, logistical, and command and control assets that are helpful in dealing with a disaster such as a pandemic. Even if not a surprise, the fact that pandemics of this scale are rare events has hindered preparation and response.

The current pandemic foreshadows an even darker future, one for which we need to prepare. Although it appears that COVID-19 is of natural rather than man-made origin, that may not be the case the next time around. Indeed, our reaction to COVID-19 shows just how vulnerable we are to the hostile use of biological agents, and just how disruptive such an attack could be. Whereas the Defense Department has justifiably devoted a lot of attention to developments in the hard sciences, those at the intersection of biology, genomics, and big data portend the development of increasingly sophisticated biological weapons. For example, the advent of gene-editing techniques could allow states to develop new or modified pathogens that would be more lethal, difficult to detect and treat, and more targeted in their effects.

States such as Russia continue to devote attention to biological warfare, and Russian President Vladimir Putin has expressed interest in developing weapons based on new principles, including genetics. The Russian government possesses stockpiled biological weapons as well as production capabilities. Indeed, less than a year ago there was an explosion at Russia’s State Research Center of Virology and Biotechnology, a Soviet-era bioweapons laboratory that now researches and houses Ebola, Smallpox, and Anthrax. In contrast to the U.S. armed forces, the Russian military maintains high readiness to protect itself against chemical and biological weapons. We need to ensure that U.S. forces are capable of fighting through such advanced threats. This includes not only protecting operational forces, but also the logistical support and facilities upon which they depend. Ensuring the operation of the defense industrial base in the face of such threats also deserves attention. The last time the topic received scrutiny was more than two decades ago, and even then, efforts to address the challenge were partial.

A related area where we could be surprised is the use of biology, chemistry, or technology to enhance human performance. A 2012 study by the National Research Council found that “the sheer breadth of the scope of inquiry [into human performance modification] is staggering, from nanotechnology to genetic engineering to manipulating normal human processes (such as healing or fatigue). Predicting where each will go is difficult, predicting or even imagining the interactions, cross-applications, and unintended consequences borders on the impossible.” Whereas the

barriers to human performance modification in the United States and elsewhere in the West are high, other states face an easier path. For example, Russia, China, and others have long used performance-enhancing drugs to aid their international athletes. Indeed, the International Olympic Committee has sanctioned Russian athletes for the use of such drugs. In the future, the United States could face soldiers on the battlefield who use chemical, biological, or computational means to enhance their performance by, perhaps, increasing their strength, improving their cognitive capabilities, or reducing their need for rest. We also need to figure out types of human performance modification comports with our values.

Planning and preparation today can reduce the impact of future shocks. The experience of the current pandemic can give us insight into future biological warfare challenges. Similarly, measures we take today to prepare for future biological warfare can also enhance our readiness to meet future pandemics.

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<https://www.realcleardefense.com/articles/2020/04/16/preparing-for-a-dark-future-biological-warfare-in-the-21st-century-115208.html>

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Defense News (Washington, D.C.)

America's Bomber Force is Facing a Crisis

By Maj. Gen. Larry Stutzriem (ret.) and Douglas Birkey

April 23, 2020

The nation faces a bomber crisis, and it is time to openly acknowledge the scale and scope of the problem.

Tasked with deterrence and, if necessary, striking targets around the globe, Air Force crews operating these aircraft afford the nation's security leaders unique options best embodied in the phrase: anytime, anyplace. Despite the criticality of this mission, the Air Force currently operates the smallest, oldest fleet of bombers since its 1947 founding. No other service or ally has this capability, which places an imperative on this finite force. The service's recent announcement that it will be ending its continuous bomber presence in Guam further amplifies the precarious state of bombers. It is a stark warning to senior leaders in the Pentagon, in the executive branch and on Capitol Hill that the Air Force is "out of Schlitz" when it comes to the critical missions they perform.

Bombers are unique instruments of power. They can strike targets with large volumes of kinetic firepower without requiring access to foreign bases and without projecting the vulnerability associated with regionally based land or sea forces. The striking power of a single bomber is immense. In fact, B-1Bs flying missions against ISIS in the opening days of Operation Inherent Resolve were able to carry more munitions than that delivered by an entire carrier air wing.

Stealth bombers can penetrate enemy air defenses, depriving mobile targets of sanctuary. They can also carry large bunker-buster munitions required to eliminate deeply buried and hardened facilities. Bomber aircraft are also cheaper to operate on a per-mission basis when compared to alternate options, like ships, large packages of smaller strike aircraft or standoff missiles.

The erosion of the bomber force is no secret. At the end of the Cold War, the U.S. Air Force possessed 400 bombers arrayed to fight the Soviet Union. Today, it has just 157, with a plan to cut a further 17 in the fiscal 2021 budget submission. Air Force efforts to modernize the bomber force a decade ago were thwarted within the Department of Defense by an excessive near-term focus on counterinsurgency operations. Bombers are requested by combatant commands on a continual basis given the concurrent threats posed by peer adversaries, mid-tier nations like Iran and North Korea, and hostile nonstate actors.

The Air Force knows this mission area is stretched too thin, and that is precisely why in 2018 leaders called for an additional five bomber squadrons in “The Air Force We Need” force structure assessment.

Well-understood risk exists with operating a high-demand, low-density inventory for too long. The B-1B force, which makes up over one-third of America’s bomber capacity, offers a highly cautionary tale in this regard. In the immediate aftermath of 9/11, the service retired 26 of these aircraft to free up modernization funds, which subsequently were snatched away from the bomber mission area for other uses. For the next two decades, the Air Force flew the B-1B in a nearly continuous string of intense combat deployments. Sustainment funding was under-resourced, which further wore down the B-1B force. Last summer, B-1B readiness rates plummeted below 10 percent — effectively putting them out of commission.

As Air Force Global Strike Command Commander Gen. Tim Ray explained: “We overextended the B1Bs.” It was a toxic formula of too much mission demand and too few airplanes. Air Force leaders continually signaled concern, but their calls for help went unanswered.

The normal solution to this sort of a challenge would be straight-forward: Go buy more airplanes. However, operational B-21s will not be in production until the latter 2020s. The Air Force is asking to retire 17 B-1s to free up resources to nurse the remaining aircraft along as a stopgap measure.

COVID-19 emergency spending and corresponding downward pressure on future defense spending are only going to aggravate the complexity of this juggling act with mission demand, available force structure and readiness. Whether world events will align with these circumstances is yet to be seen.

It was in this context that the Air Force decided to end its continuous bomber presence on Guam. Launched in 2004 to deter adversaries like China and North Korea and to reassure regional allies, the mission has been a tremendous success. It clearly communicated U.S. readiness to act decisively when U.S. and allied interests were challenged. Ending continuous bomber presence in the Pacific now sends the opposite message, just as the region grows more dangerous. This is a decision with significant risk, yet it is an outcome compelled by past choices resulting in a bomber force on the edge.

The path forward begins with admitting the nation has a bomber shortfall. Retiring more aircraft exacerbates the problem. Nor is this just an Air Force problem. Bombers are national assets essential to our security strategy and must be prioritized accordingly. If other services have excess funds to invest in ideas like a 1,000-mile-range cannon when thousands of strike aircraft, various munitions and remotely piloted aircraft can fill the exact same mission requirements, it is time for a roles and missions review to direct funding toward the most effective, efficient options. Bombers would compete well in such an assessment. Ultimately, the solution demands doubling down on the B-21 program.

There comes a point where you cannot do more with less. Given the importance of bombers to the nation, rebuilding the bomber force is not an option — it is an imperative.

Retired U.S. Air Force Maj. Gen. Larry Stutzriem served as a fighter pilot and held various command positions. He concluded his service as the director of plans, policy and strategy at North American Aerospace Defense Command and U.S. Northern Command. He is currently the director of studies at the Mitchell Institute for Aerospace Studies, where Douglas Birkey is the executive director. Birkey researches issues relating to the future of aerospace and national security, and he previously served as the Air Force Association's director of government relations.

<https://www.defensenews.com/opinion/commentary/2020/04/23/americas-bomber-force-isfacing-a-crisis/>

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ABOUT THE USAF CSDS

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

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

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

The Center's military insignia displays the symbols of nuclear, biological, and chemical hazards. The arrows above the hazards represent the four aspects of counterproliferation — counterforce, active

defense, passive defense, and consequence management. The Latin inscription "Armis Bella Venenis Geri" stands for "weapons of war involving poisons."

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