



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

CUWS Outreach Journal 1233

16 September 2016

**Feature Item:** ***“NUCLEAR WEAPONS: NNSA Should Evaluate the Role of the Enhanced Surveillance Program in Assessing the Condition of the U.S. Nuclear Stockpile.”*** Authored by the U.S. Government Accountability Office (GAO); GAO-16-549; Published: Sep 14, 2016; Publicly Released: Sep 14, 2016; 29 pages.

<http://www.gao.gov/assets/680/679735.pdf>

The Department of Energy's (DOE) National Nuclear Security Administration (NNSA) did not fully implement the Enhanced Surveillance Program as envisioned in the agency's 2007 Surveillance Transformation Project (2007 initiative) and has not developed a long-term strategy for the program. Surveillance is the process of inspecting a weapon through various tests of the weapon as a whole, the weapon's components, and the weapon's materials to determine whether they are meeting performance expectations, through dismantling the weapon or through the use of diagnostic tools. As called for in its 2007 initiative, NNSA took steps to improve the management of the overall surveillance program, which primarily tests dismantled weapons and their components, but the agency did not increase the role of the Enhanced Surveillance Program, as envisioned. The program develops computational models to predict the impact of stockpile aging; identifies aging signs; and develops diagnostic tools. Under the 2007 initiative, NNSA was to conduct more Enhanced Surveillance Program evaluations using computer models to predict the impacts of aging on specific weapon components—especially nonnuclear components and materials—and to assess the validity of more diagnostic tools. Instead of expanding the program's role, NNSA reduced program funding by more than 50 percent from fiscal year 2007 to fiscal year 2015. NNSA also delayed some key activities and reduced the program's scope during this time. For example, NNSA did not complete its proposed evaluations of the impact of aging on nonnuclear components and materials. These evaluations, originally estimated to be completed by 2012, were dropped as program goals in fiscal year 2016, according to NNSA officials and contractor representatives.

In fiscal year 2016, NNSA broadly refocused the Enhanced Surveillance Program on multiple nuclear weapon life-extension efforts and supporting activities but has not developed a corresponding long-term strategy for the program. Instead, program officials have focused on developing general long-term goals and managing the program on a year-to-year basis under reduced funding levels to maintain key stockpile assessment capabilities. These general goals, however, do not provide measureable outcomes or encompass the entirety of the program. In addition, as GAO's previous work has shown, managing longer term work, such as multiyear technology development projects, on an annual basis makes it difficult for Congress and other decision makers to understand up front what they are funding and what benefits they can expect. As a result, these projects may receive a lower priority and may not be consistently funded.

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Air Force Magazine – Arlington, VA

### **USAF Looks for UH-1N Replacement Deliveries in 2019**

By WILL SKOWRONSKI

September 13, 2016

The Air Force is looking to buy up to 84 new helicopters to replace the UH-1N fleet that protects ICBM fields, according to a recent announcement. The service wants off-the-shelf replacements that could start being delivered less than a year after the contract is expected to be awarded in Fiscal 2018, according to the request for information. In May, the service said there will be a “full and open competition” to replace the Huey fleet even though Defense Secretary Ash Carter testified in April there was an urgent need for replacements. That same month lawmakers urged the Pentagon to detail its plan to protect the nuclear forces at Malmstrom AFB, Mont.; Minot AFB, N.D.; and F.E. Warren AFB, Wyo., until the replacement fleet is ready. The service hopes the RFI—including a set of questions for industry partners that have access to a draft requirements document—will help clarify contractors’ capabilities, assess the acquisition strategy, reduce program risk, and foster a competitive environment. An industry day that will include one-on-one sessions with contractors will be held Sept. 27-28 at Wright-Patterson AFB, Ohio.

<http://www.airforcemag.com/DRArchive/Pages/2016/September%202016/September%2013%202016/USAF-Looks-for-UH-1N-Replacement-Deliveries-in-2019.aspx>

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Sputnik International – Russian Information Agency

### **US Nuclear Safety Agency Neglecting Surveillance of Weapons Stockpile**

*The US National Nuclear Security Administration has not properly implemented a surveillance plan for the country's atomic weapons stockpile over the past nine years and has no plans to do so, the Government Accountability Office report says.*

15 September 2016

WASHINGTON (Sputnik) — The US National Nuclear Security Administration (NNSA) has not properly implemented a surveillance plan for the country’s atomic weapons stockpile over the past nine years and has no plans to do so, the Government Accountability Office (GAO) said in a report issued Wednesday.

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*"The Department of Energy's NNSA did not fully implement the Enhanced Surveillance Program as envisioned in the agency's 2007 Surveillance Transformation Project and has not developed a long-term strategy for the program," the report stated.*

According to the GAO, the nuclear safety agency has failed to follow through on plans to strengthen the surveillance program. Instead, the NNSA reduced funding for the program by more than 50 percent from fiscal years 2007 through 2015, the report said.

The NNSA also did not complete proposed evaluations of aging's effect on non-nuclear components and materials, and it dropped the assessments as program goals in 2016, the GAO found.

<https://sputniknews.com/us/20160915/1045315954/us-nuclear-safety-neglecting-surveillance.html>

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National Defense Magazine – Arlington, VA

## **Carter Optimistic about Beating Nuclear Modernization Cost Estimates**

By Jon Harper

September 15, 2016

**ON BOARD A U.S. MILITARY AIRCRAFT** — As the Defense Department faces massive nuclear modernization bills, Secretary of Defense Ashton Carter sees opportunities to beat current cost estimates.

The Navy's Ohio-class replacement ballistic missile submarine program — the service's top acquisition priority — is projected to cost about \$100 billion. The Air Force's B-21 bomber fleet — which is being designed to conduct nuclear as well as conventional missions — is expected to cost at least \$80 billion, possibly much more, while the long-range standoff cruise missile arsenal is estimated to come in at \$20 billion to \$30 billion.

The Air Force estimated that the ground-based strategic deterrent intercontinental ballistic missile program would cost about \$62 billion, while the Pentagon's cost assessment and program evaluation office put the potential price tag at \$85 billion or more in the coming decades.

"If you look at the design carefully and how things are manufactured carefully, you can reduce costs in [the nuclear programs] and all of our other programs," Carter told National Defense and online media outlet Breaking Defense in a Sept. 14 interview on board his plane en route to Andrews Air Force Base, Maryland.

"As a former acquisition executive I never accepted the cost estimates, and I always believe we should be better than that if we can," he added. Carter previously served as the undersecretary of defense for acquisition, technology and logistics, the Pentagon's top procurement officer.

"We always try to do the best, accurate estimates," he said. "But they are just estimates, and we should try to exceed that in terms of the performance of the acquisition system."

The Pentagon chief said recent history shows that reducing program costs is achievable. "We've been able to do that with 'Better Buying Power' [practices] over the last several years," he said. "The statistics show that we are capable of undershooting ... our own cost estimates."

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Carter isn't the only high-ranking defense official to suggest that existing cost estimates for nuclear modernization programs might be overshooting. During a recent media roundtable at the Pentagon, Secretary of the Air Force Deborah Lee James questioned the Defense Department's methodology for assessing the price tag of the ground-based strategic deterrent.

"We have not collectively done a cost estimate of this type for probably more than 40 years," she said. "The data that everybody is using to try to build up these cost estimates is somewhat dated simply because we haven't done it in so long."

James expects the projections to change as the program advances. "As we go forward, as we get the proposals back from industry, this will inform what I believe will be refinements in that cost estimate over time as we learn more," she said. "The point is, if you haven't done it in 40 years you need to refine it as you go along."

Analysts are warning that the Pentagon is facing a modernization "bow wave" in the 2020s when it plans to invest heavily in a range of expensive nuclear and conventional programs. Carter expects the U.S. government to pay the bills required for comprehensive nuclear modernization even if defense officials aren't able to beat current cost estimates.

"We will work to reduce the cost of those programs as we always do but we are committed to a safe, secure [and] reliable triad," he said.

"Each part of that ... is going to undergo a modernization," he added. "I'm confident that we will spend the money because it is a bedrock capability. Fortunately it's not one that we need to use, but it's fundamental to our security."

<http://www.nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?ID=2299>

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Space Daily.com – Australia

### **US Has North Korea Missile Threat Covered: Pentagon**

By Staff Writers, Washington (AFP)

September 9, 2016

The Pentagon on Friday repeated reassurances that the United States and its regional allies are well protected against any threat from North Korean missiles, after Pyongyang conducted a new nuclear test.

The renegade country has now conducted five nuclear tests and dozens of missile launches, and says it has realized its goal of being able to fit a miniaturized warhead on a rocket.

"This is a threat we recognize as very real and we are always ensuring that we are outpacing it," Pentagon spokesman Captain Jeff Davis said.

"We take them at their word and have built a defensive architecture that assumes that they have the capability -- but we have never actually seen it demonstrated."

The United States has a range of missile-defense technologies at its disposal, including the Aegis Combat System, Patriot missiles and sophisticated radars.



Washington is also working with Seoul to install a missile defense system known as THAAD in South Korea, though the move has infuriated Beijing, which says the hardware poses a significant threat to regional security.

Davis said the THAAD system would be up and ready in 2017, though it could be installed quicker in an emergency.

"There is a lengthy process we are working through with (Seoul) but of course... we can always move it much more quickly," he said.

The US Air Force will fly a specially equipped WC-135 jet that can detect radiation and other particles in the sky to determine what happened in North Korea.

"Certainly all the indications we've seen based on the seismic activity, it's certainly consistent with a nuclear test," Davis said.

[http://www.spacedaily.com/reports/US\\_has\\_North\\_Korea\\_missile\\_threat\\_covered\\_Pentagon\\_999.html](http://www.spacedaily.com/reports/US_has_North_Korea_missile_threat_covered_Pentagon_999.html)

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Xinhua News – Beijing, China

### **S. Korean Opposition Parties Oppose THAAD Deployment, Urge Dialogue with DPRK**

Source: Xinhua

September 12, 2016

SEOUL, Sept. 12 (Xinhua) -- South Korea's opposition party chiefs on Monday expressed objections to the deployment of a U.S. missile shield in their homeland, calling for dialogue with the Democratic People's Republic of Korea (DPRK) in their rare meeting with President Park Geun-hye.

Park met with the leaders of three major political parties for about two hours in the presidential office to discuss how to address the DPRK's fifth nuclear test, according to Park's office.

The meeting was attended by ruling Saenuri Party chairman Lee Jung-hyun, main opposition Minjoo Party chairwoman Choo Mi-ae and interim head of the minor opposition People's Party Park Jie-won as well as top presidential security advisor Kim Kwan-jin and ministers of foreign affairs and unification.

Asked directly by Park about whether to favor the Terminal High Altitude Area Defense (THAAD) in South Korea, the People's Party chief expressed his clear objection to the THAAD deployment on the South Korean soil, he told reporters after the meeting with the president.

The Minjoo party chairwoman said the THAAD issue is not of military nature but of diplomatic one, telling the president that the U.S. missile defense system cannot protect South Korea from the DPRK's nuclear threats from a military perspective.

The chairwoman said close relations with China, South Korea's largest trading partner, can help save people's livelihood economically, according to local media reports.

Seoul and Washington agreed in July to install one THAAD battery in southeastern South Korea by the end of next year despite strong oppositions from China and Russia.

China and Russia have opposed the U.S. missile shield, of which X-band radar can peer deep into their territories, breaking strategic balance in the region and damage security interests of the two countries.





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President Park and the three party leaders denounced the DPRK's fifth nuclear test with one voice, but they were divided over how to deal with the DPRK's nuclear and missile program.

Pyongyang said Friday that it successfully conducted an explosion test of nuclear warhead that can be mounted on ballistic missiles. Seoul's military estimated it is the "most powerful" nuclear detonation so far with a yeild of 10 kilotons, stronger than 6 kilotons recorded in the previous test in January.

The two opposition party chiefs called on President Park to resume talks with the DPRK, though they acknowledged the need for sanctions against Pyongyang.

The main opposition party chairwoman asked Park to send a special envoy to Pyongyang as part of dialogue efforts, but the president flatly rejected the proposal, saying it will allow the DPRK, which focuses only on advancing a nuclear capability, to buy time.

In her introductory remarks, President Park denounced the DPRK's nuclear ambitions as "reckless and fanatic" adherence. "It clearly shows once again how reckless the North Korean (DPRK) regime is and how fanatically it adheres to a nuclear (program)," Park said.

She said Pyongyang's fifth nuclear test showed a totally different pattern from previous tests that had been carried out every three years or so.

The DPRK's first atomic device test was conducted in October 2006, followed by the second in May 2009 and the third in February 2013. The explosive yield has risen from 0.4 kilotons in the first test to 6 kilotons in the fourth and 10 kilotons in the fifth.

Park said South Korea is seeking to adopt stronger sanctions toward the DPRK rapidly in cooperation with the international community.

In March, UN Security Council introduced tougher-than-ever sanctions on Pyongyang over its fourth nuclear detonation in January and the launch in February of a long-range rocket. The DPRK is banned from any test of nuclear and ballistic missile technologies under UN Security Council resolutions.

Citing Pyongyang's claim that it successfully miniaturized nuclear warheads small enough to fit on ballistic missiles, Park said the DPRK's nuclear and missile programs are not a simple blackmail but an urgent, realistic threat targeting South Korea.

The DPRK has said it will continue to develop its nuclear capability despite increasing condemnation by the international community.

[http://news.xinhuanet.com/english/2016-09/12/c\\_135682579.htm](http://news.xinhuanet.com/english/2016-09/12/c_135682579.htm)

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The Diplomat – Tokyo, Japan

## Russia Test Fires Intercontinental Ballistic Missile

*The primary aim of the missile drill was to test the ICBM's capability to overcome advanced missile defense systems.*

By Franz-Stefan Gady

September 13, 2016

Russia's Strategic Missile Forces have successfully test-fired an intercontinental ballistic missile (ICBM) during a military exercise, the Russian Ministry of Defense announced on September 9, according to *TASS* news agency.

The test launch of the nuclear-capable Topol-M (aka RS12M2/NATO reporting name SS-27) or more advanced Topol MR (aka SR-24 Yars/NATO reporting name SS-27 Mod2) ICBM—the defense ministry did not specify the missile type—took place at the Plesetsk Cosmodrome, in Arkhangelsk Oblast, approximately 800 kilometers north of Moscow.

One of the rationales behind the missile launch was to test whether the ICBM can penetrate advanced missile defense systems. According to the defense ministry, the ICBM succeeded in doing so and successfully destroyed a target at a testing ground on the Kamchatka peninsula in Russia's Far East.

“The main aim of the launch is to confirm the basic flight and technical characteristics of the Topol intercontinental ballistic missile and test an advanced combat outfit and means of overcoming missile defense systems,” the statement reads. “The missile's experimental warhead hit a hypothetical target with high precision at a testing ground on Kamchatka peninsula.”

At the beginning of 2016, the Strategic Missile Forces announced that they will conduct 16 ICBM test launches in 2016—with 14 dedicated to testing new missiles and warheads—and over a hundred exercises in total (See: “Russia to Launch 16 Intercontinental Ballistic Missiles in 2016”). Given the emphasis on new missile systems, it is likely that the test involved a new variant of the Topol ICBM family such as the Topol MR.

The Topol MR is the Strategic Missile Forces “newest operational fifth-generation intercontinental ballistic missile (ICBM), which can carry multiple independently targetable nuclear warheads and was first introduced into service in July 2010,” I explained previously. The Topol MR along with the single-warhead Topol-M missile system will be the mainstay of Russia's future mobile ICBM force. (A large number of older silo-based Topol ICBM–Nato reporting name SS-25– is slated to be decommissioned from service by 2021.)

As I wrote elsewhere (“Russia to Add 40 New ICBMs: Should the West Be Worried?”):

*Russia is in the middle of modernizing its strategic and nonstrategic nuclear warheads. (...) Moscow has currently 4,500 nuclear warheads, of which roughly 1,780 strategic warheads are deployed on missiles and at bomber bases. An additional 700 strategic warheads are kept in storage along with approximately 2,000 nonstrategic warheads.*

Overall, Russia approximately has 300 ICBMs deployed with a little over 1,000 warheads. The Strategic Missile Forces are also working on testing a new silo-based super heavy liquid-propelled ICBM, the RS-28 Sarmat. The first test-launch of the missile, purportedly capable of carrying ten heavy or 15 light warheads is scheduled for last quarter of 2016. The missile is expected to enter





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service by 2020. Russia has also been testing so-called hypersonic glide vehicles, warheads capable of penetrating advanced missile defense systems.

<http://thediplomat.com/2016/09/russia-test-fires-intercontinental-ballistic-missile/>

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TASS Russian News Agency – Moscow, Russia

### **Engine for Russia's New Ballistic Missile Sarmat Passes Fire Tests — Source**

*The missile may begin to be flight-tested no earlier than the end of the first quarter of 2017*

September 13, 2016

MOSCOW, September 13. /TASS/. The first stage engine for Russia's Sarmat ballistic missile has passed fire tests, so the missile's pop-up tests may be held at the end of the year, a source in the defense-industrial complex has told TASS.

"The last series of fire tests was successful. The technical glitches identified earlier have been eliminated," he said.

Currently, work is in progress on technical documentation. It is to be completed in November. According to the most optimistic forecasts Sarmat's pop-up tests will be carried out in November or December," the source said.

Even in that case, he added, the missile may begin to be flight-tested no earlier than the end of the first quarter of 2017, because at the moment the research and development program is no less than seven months behind time.

TASS has no official confirmation if this is really so.

Sarmat is expected to replace the missile R-36M2 Voyevoda. The new missile's payload is expected to grow to ten tonnes (against approximately 8.75 tonnes of its predecessor). Sarmat is scheduled to go operational at the end of 2018.

<http://tass.com/defense/899447>

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Scout Warrior.com – U.S.

### **US Tests, Upgrades Nuclear-Armed, Submarine-Launched Trident II D5s**

*Nuclear-Armed Trident II D5 missiles rest in 44-foot long missile tubes built into ballistic missile submarines quietly patrolling the undersea domain - to ensure security and peace.*

By KRIS OSBORN

September 15, 2016

The US Navy is test-firing and upgrading its arsenal of Trident II D5 nuclear-armed submarine launched missiles designed to keep international peace -- by ensuring and undersea-fired second-strike ability in the event of a catastrophic nuclear first strike on the US.

Issue No.1223, 16 September 2016

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Firing from the Atlantic Ocean off the coast of Florida Aug. 31, a specially configured non-armed “test” version of the missile was fired from the Navy’s USS Maryland. This was the 161st successful Trident II launch since design completion in 1989.

The missile was converted into a test configuration using a test missile kit produced by Lockheed Martin that contains range safety devices, tracking systems and flight telemetry instrumentation, a Lockheed statement said.

The Trident II D5 missile is deployed aboard U.S. Navy Ohio-class submarines and Royal Navy Vanguard-class to deter nuclear aggression. The three-stage ballistic missile can travel a nominal range of 4,000 nautical miles and carry multiple independently targeted reentry bodies.

The U.S. and UK are collaboratively working on a common missile compartment for their next generation SSBNs, or ballistic missile submarines.

The 130,000-pound Trident II D5 missile can travel 20,000-feet per second, according to Navy figures. The missiles cost \$30 million each.

The “Bulletin of the Atomic Scientists” further describes the weapon -- “The Trident D5s carry three types of warheads: the 100-kiloton W76/Mk-4, the 100-kiloton W76-1/Mk-4A, and the 455-kiloton W88/Mk-5 warhead, the highest-yield ballistic missile warhead in the U.S. arsenal.”

### **Trident II D5 - Nuclear-Armed Missile Upgrade**

The Trident II D5, first fired in the 1990s, is an upgraded version of the 1970s-era Trident I nuclear weapon; the Trident II D5s were initially engineered to serve until 2027, however an ongoing series of upgrades are now working to extend its service life.

The Navy is modernizing its arsenal of Trident II D5 nuclear missiles in order to ensure their service life can extend for 25 more years aboard the Navy’s nuclear ballistic missile submarine fleet, service leaders said.

“Sustaining and modernizing the nuclear enterprise infrastructure is crucial to maintaining a strong, credible and flexible nuclear deterrent, which is essential to our national security and the security of United States’ allies and partners,” Adm. Cecil D. Haney, U.S. Strategic Command commander said in a written statement.

The 44-foot long submarine-launched missiles have been serving on Ohio-class submarines for 25 years, Vice Adm. Terry Benedict, director of Strategic Systems and Programs, said several years ago at the Navy League’s Sea Air Space exposition.

The missiles are also being planned as the baseline weapon for the Ohio Replacement Program ballistic missile submarine, a platform slated to serve well into the 2080s, so the Navy wants to extend the service life of the Trident II D5 missiles to ensure mission success in future decades.

The Navy has been working on technical upgrades to the existing Trident II D 5 in order to prevent obsolescence and ensure the missile system remains viable for the next several decades.

Engineers have modernized the guidance system by replacing two key components due to obsolescence – the inertial measurement unit and the electronics assembly, Benedict said.

Under the U.S.-Russia New START treaty signed in 2010, roughly 70-percent of the U.S.’ nuclear warheads will be deployed on submarines.

Within the last several years, the Navy has acquired an additional 108 Trident II D 5 missiles in order to strengthen the inventory for testing and further technological development.



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As part of the technical improvements to the missile, the Navy is upgrading what's called the Mk-4 re-entry body, the part of the missile that houses a thermonuclear warhead. The life extension for the Mk-4 re-entry body includes efforts to replace components including the firing circuit, Navy officials explained.

The Navy is also working with the Air Force on refurbishing the Mk-5 re-entry body which will be ready by 2019, senior Navy officials said.

Benedict said the Mk-5 re-entry body has more yield than a Mk-4 re-entry body, adding that more detail on the differences was not publically available.

The missile also has a larger structure called a release assembly which houses and releases the re-entry bodies, Navy officials said. There is an ongoing effort to engineer a new release assembly that will work with either the Mk-4 or Mk-5 re-entry body.

<http://www.scout.com/military/warrior/story/1707164-us-tests-upgrades-nuclear-armed-trident-ii-d5>

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TASS Russian News Agency – Moscow, Russia

### **Diplomat Says US Fails to Specify Claims against Russia on Missile Treaty**

*The US administration accuses Moscow of violating the Intermediate-Range Nuclear Forces Treaty*

September 16, 2016

WASHINGTON, September 16. /TASS/. The United States has not specified its claims against Russia related to the Intermediate-Range Nuclear Forces (INF) Treaty to date, Vladimir Leontyev, Deputy Director of the Russian Foreign Ministry's Non-Proliferation and Arms Control Department has told TASS.

#### **No talks underway**

When asked to comment on the course of the dialogue between the parties given Washington's hope for ironing out differences on the treaty this year, the diplomat said:

"Firstly, I want to say that there aren't any negotiations on this issue. Our US counterparts are mostly employing megaphone diplomacy techniques. That is, they say that they have claims against Russia, and that's the end of it."

"The point is that they put forward claims against us in terms of tests we allegedly conducted in the past. However, the Americans fail to come up with details for their claims," Leontyev said.

The US administration first accused Moscow of violating the INF Treaty in July 2014. The Americans later repeated this allegation on several occasions, but Russia fully rebuffed the accusation.

Washington has purported that Moscow created a land-based cruise missile falling under the provisions of the INF Treaty, which prohibit the manufacture and testing of missiles with a range between 500 and 5,500 kilometers. However, the US government has never specified what product it meant.



## Russia's rebuttal

According to Leontyev, Russia "has counterquestions for the Americans, and quite substantive at that."

"Firstly, it is large-scale development and use of target missiles, which are fully identical to medium-and shorter-range ballistic missiles. That is, the scope of activities in this area is such that, in our view, one may talk about developing and testing the technologies for the production and combat use of these missiles," he said.

"The second issue that we raise with the Americans is not new either," Leontyev went on to say. "They have been well aware of it, probably, for more than 15 years now." "It is the US unmanned combat aerial vehicles falling under the definition of medium-range cruise missiles under the treaty. Here we see no willingness by the American side to meet us halfway either," the diplomat stressed.

He noted that "the last problem that has surfaced in connection with the deployment of elements of the global missile defense system to Europe is the use of the MK-41 launchers that, according to the US Missile Defense Agency, are almost similar to the ones used by the US Navy for launching the Tomawak cruise missiles.

"In our view, testing and deploying such launchers ashore can be regarded as a direct violation of the relevant provisions of this treaty by the United States. We raised this issue with the Americans. However, instead of discussing it seriously, at the level of technical experts, the US prefers to use megaphone diplomacy methods," the diplomat explained.

According to Leontyev, the issue of the INF Treaty "is addressed during some bilateral contacts from time to time."

"However, this issue should be discussed by military and technical experts," he noted. The diplomat took part in the seventh conference of officials of the five UN Security Council permanent members on disarmament and non-proliferation in Washington.

[http://tass.com/politics/900079?\\_ga=1.118191373.5295994.1474031676](http://tass.com/politics/900079?_ga=1.118191373.5295994.1474031676)

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Sputnik International – Russian Information Agency

## Russia-US Cooperation in Arms Control Impossible Over Sanctions

*United States and Russia are impossible to cooperate in the arms control sector due to sanctions imposed against Russia's defense enterprises.*

16 September 2016

WASHINGTON (Sputnik) – It is impossible for the United States and Russia to cooperate in the sector of arms control due to sanctions imposed against Russia's defense enterprises, Russian Foreign Ministry's Deputy Director of the Department for Nonproliferation and Arms Control Vladimir Leontyev told Sputnik.

*"They [Washington] seemingly say that they are ready [to discuss arms control]. But how can defense issues be discussed without servicemen, amid sanctions imposed against the majority of our defense enterprises... We can speak to our US vis-a-vis, but neither they nor we are technical experts," Leontyev said.*

Issue No.1223, 16 September 2016

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According to the official, technical experts are needed for talks on missile defense and Intermediate-Range Nuclear Forces Treaty (INF Treaty).

<https://sputniknews.com/military/20160916/1045374563/russia-us-sanctions-cooperation.html>

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The Japan Times – Tokyo, Japan

### **North Korea's Progress in Nuke Development Poses Real Threat to Japan**

KYODO

September 10, 2016

North Korea's notable progress in its nuclear and missile developments, underpinned by Friday's fifth nuclear test, is becoming a real security threat to Japan, which hosts a bulk of U.S. military bases as Washington's key ally in East Asia, analysts say.

Following Friday's test, coming on the heels of more than 20 ballistic missiles launched by the reclusive state this year, Defense Minister Tomomi Inada said the possibility of North Korea having miniaturized nuclear weapons through the last four nuclear tests cannot be denied.

"We cannot rule out the possibility that with the nuclear test this time, North Korea's nuclear technology has reached a stage where it can aim for" operational use, a senior Defense Ministry official said.

Another senior ministry official also said, "The time of interval between the nuclear tests is shorter. North Korea may have attained a high level of technology." The previous test was conducted on Jan. 6.

Under the leadership of Kim Jong Un, North Korea has been accelerating its nuclear and missile development.

In June, North Korea succeeded in launching a Musudan medium-range ballistic missile for the first time. In August and September, medium-range Rodong-type missiles landed in waters near Japan, while a submarine-launched ballistic missile (SLBM) was successfully fired in August.

Japan particularly sees the SLBM and Rodong missiles as threats to its security. Tokyo has been increasing efforts to strengthen defense cooperation with Washington, Seoul and other governments to rein in Pyongyang's ambitions.

Many experts say that if North Korea possesses a nuclear warhead that can be mounted onto a ballistic missile, it would be for use on a type of Rodong, which is capable of hitting Japan.

"It can be judged that North Korea now has technology that can mount a nuclear warhead on a Rodong-type missile," said Toshiyuki Ito, a former general in the Maritime Self-Defense Force.

Although North Korea is looking at the United States as its target for political negotiations, not Japan, Tokyo should nonetheless remain on guard, Ito said.

Some analysts said North Korea wants to show that it can hit locations where the U.S. military can operate, whether it be in South Korea or Japan.



On Aug. 3, in the first-ever such case, a North Korean Rodong missile flew some 1,000 km (600 miles), with its warhead landing in Japan's exclusive economic zone in the Sea of Japan.

That was followed by three launches of Rodong-type ballistic missiles on Monday. They also landed in Japan's EEZ, which extends 200 nautical miles (about 370 km) from Japanese shores. The incident showed that North Korea is improving its accuracy in operating the missiles.

One senior member of the Self-Defense Forces said that North Korea has "escalated its provocative actions greatly."

"It is a different significance when a warhead, used for offensive purposes, falls within the EEZ as opposed to just a missile casing" lands there, the member said.

On Aug. 24, North Korea fired an SLBM that flew 500 km, reaching Japan's air defense identification zone for the first time. Previously, such SLBM tests only flew a matter of a few dozen kilometers.

SLBMs are particularly worrying as their launches are relatively difficult to detect in advance. South Korean experts have said the SLBMs could be operational within the year.

"Imagine if a submarine comes to the middle of the Sea of Japan and launches a missile. The level of threat completely differs from that of a ground launch," another senior SDF member said.

In anticipation of potential North Korean missile launches, Japan has issued an order for the SDF to shoot down any projectile heading toward Japanese territory.

But it remains uncertain whether Japan can effectively respond to an SLBM due to difficulties in detecting signs of a launch, analysts said.

To better cope with the North Korean threat, Japan hopes to conclude talks with South Korea for the early signing of an agreement that will allow the two countries to share military intelligence, defense ministry officials said.

It is also seeking to conduct more joint drills with the U.S. military to better detect submarines, they said.

<http://www.japantimes.co.jp/news/2016/09/10/national/north-koreas-progress-uke-development-poses-real-threat-japan/#.V9mlN7TFtmB>

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The Korea Herald – Seoul, South Korea

### **Park Says N. Korean Leader Uncontrollable, Calls for Stronger U.S. Extended Deterrence**

September 10, 2016

President Park Geun-hye on Friday excoriated North Korean leader Kim Jong-un for the country's fifth nuclear test, calling him "uncontrollable" and stressing the need to strengthen the U.S. extended deterrence.

During a meeting of top security and foreign policy officials, Park underscored that the communist state's evolving nuclear threats are "urgent and existential" for South Korea, and that the international community's response to them must be "diametrically different" from what it has been.

"This (Pyongyang's nuclear test) clearly reaffirmed the North Korean regime's recklessness and its obsession with nuclear arms," she said during the meeting upon returning from an eight-day overseas trip.





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"Kim Jong-un does not listen to anything from the international community so he can hold onto power, and this leads us to view his mental state as uncontrollable," she said.

Park, in particular, underscored the need to strengthen the U.S.' extended deterrence, which involves the nuclear umbrella.

Extended deterrence means Washington's stated commitment to mobilize all military capabilities, nuclear and conventional, to defend its ally against Pyongyang's possible aggression and provocations.

"To allay our people's concerns, I instruct our military to maintain a full readiness posture to strongly retaliate against any type of North Korean provocation," Park said.

Park, in addition, called for an end to the political offensive against the planned deployment of a US anti-missile system to the Korean Peninsula, saying that the nation should take "basic" steps to defend itself against the possibility of a North Korean attack.

Seoul and Washington plan to deploy a Terminal High Altitude Area Defense (THAAD) battery to the peninsula by the end of the next year. But some opposition lawmakers have opposed the plan, saying it could escalate regional tensions and bring South Korea into an intensifying Sino-U.S. rivalry.

Meanwhile, Foreign Minister Yun Byung-se said that the government will explore ways to respond to the North's latest provocation with the reckless aspect of the North Korean regime in mind.

The meeting was attended by the ministers of defense, foreign affairs and unification, and senior presidential secretaries in charge of security and foreign policy. (Yonhap)

<http://www.koreaherald.com/view.php?ud=20160910000065>

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The Korea Times – Seoul, South Korea

### **'Military Ready to Destroy Pyongyang Before Nuke Attack'**

*South adopts new concept of pre-emptive strikes*

By Jun Ji-hye

September 11, 2016

The South Korean military has developed a new operational concept to annihilate Pyongyang with a barrage of pre-emptive missile firings once signs of a North Korean nuclear attack are detected, defense sources said Sunday.

A source said the plan, dubbed, Korea Massive Punishment and Retaliation (KMPR), is intended to launch pre-emptive attacks on North Korean leader Kim Jong-un as well as the regime's military leadership if signs of their impending use of nuclear weapons are detected or in the event of a war.

Under the KMPR, the military would divide Pyongyang into several districts and completely destroy a certain section in which Kim and other military leadership are suspected to be hiding, before they use a nuclear weapon, the source noted.

Issue No.1223, 16 September 2016

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"In other words, the North's capital city will be reduced to ashes and removed from the map," the source told reporters on condition of anonymity.

The disclosure of the detailed operation came after the isolated state conducted its fifth nuclear test, Friday, claiming to have detonated a nuclear warhead successfully. In the wake of the test, observers say the North is now apparently in the final stages of making a nuclear warhead small enough to fit on a ballistic missile.

The Ministry of National Defense reported details about the KMPR to the National Assembly in response to the North's latest nuclear test.

The source said that the South Korean military plans to mobilize its locally developed surface-to-surface ballistic and cruise missiles, the Hyunmoo, for the operational concept.

The Hyunmoo 2A and 2B ballistic missiles have ranges of 300 and 500 kilometers, respectively, while the Hyunmoo 3 cruise missile has a range of 1,000 kilometers.

The military earlier said it plans to increase the number of Hyunmoo 2As, 2Bs and 3s that can simultaneously strike missile bases all across North Korea in a time of war.

The source noted that the military is also planning to complete tests of its newly developed ballistic missile with a range of 800 kilometers by next year for operational deployment.

"The KMPR is the ultimate operation concept the military can have in the absence of its own nuclear weapons," the source noted.

Another source indicated the military has recently launched a special operational unit in charge of destroying the North Korean military leadership and launching retaliatory attacks on them.

Along with the military options, the government plans to adopt diplomatic ones, as well.

"In response to North Korea's repeated provocations, including the nuclear test, that defy the United Nations (U.N.) Security Council's resolutions, the government plans to make diplomatic and military efforts," said Kim Kyou-hyun, the senior presidential secretary for foreign affairs and national security, in a briefing.

In addition, Foreign Minister Yun Byung-se plans to attend the U.N. General Assembly, scheduled to begin Sept. 17, and urge cooperation in formulating a new set of international sanctions against the North.

He will also meet with his U.S. and Japanese counterparts to discuss how to impose stronger sanctions on Pyongyang, according to the foreign ministry.

### **US aircraft carrier to visit South**

As part of allies' efforts, the United States plans to dispatch a nuclear-powered aircraft carrier to South Korea next month in a show of force to deter further military provocations by the North.

The USS Ronald Reagan (CVN-76) will sail to the West and South Seas to participate in a joint naval exercise with the South Korean military. The drill is slated for Oct. 10 to 15, officials said, adding that the exercise will focus on training the allies' naval forces on joint precision attacks on the North's key military facilities and the regime's leadership that would be launched in the event of a war with the reclusive state.

Commissioned in 2003, the Nimitz-class nuclear-powered aircraft carrier has more than 80 combat aircraft, including the F/A-18, EA-6B electronic warfare aircraft and E-2C airborne early warning planes. It can carry about 5,000 sailors.



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Washington is expected to dispatch more of its strategic military assets, such as the B-2 stealth nuclear bomber, to Seoul in a show of military might against Pyongyang.

For their part, top nuclear envoys from South Korea and China agreed to communicate and work together to halt the North's nuclear ambitions, according to the foreign ministry here, Saturday.

Kim Hong-kyun, Seoul's special representative for Korean Peninsula Peace and Security Affairs at the ministry, spoke with his Chinese counterpart Wu Dawei on the phone and discussed countermeasures in response to the North's nuclear test.

"Both agreed to keep open the lines of communication and cooperate with each other with regard to the North's nuclear issue, including future countermeasures," the ministry said in a press release.

During the talks, Wu mentioned that China has made it clear that Beijing strongly objected to the North's nuclear test, noting that China will never recognize the North as a nuclear state, nor will it condone the country having nuclear weapons, according to the ministry.

[http://www.koreatimes.co.kr/www/news/nation/2016/09/116\\_213907.html](http://www.koreatimes.co.kr/www/news/nation/2016/09/116_213907.html)

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The Guardian (U.S. Edition) – New York, NY

### **North Korea Demands Recognition as Legitimate Nuclear State**

*Pyongyang spokesman says threat of further sanctions is 'laughable' and country will work to increase its nuclear force*

*Agencies*

September 11, 2016

North Korea has demanded the US recognise it as a "legitimate nuclear weapons state" following its fifth and largest atomic test, adding that threats of further sanctions against the country were "laughable".

The dictatorship set off its most powerful nuclear explosion to date on Friday, saying it had mastered the ability to mount a warhead on a ballistic missile and ratcheting up a challenge to rivals and the UN.

"Obama is trying hard to deny the DPRK's [North Korea's] strategic position as a legitimate nuclear weapons state but it is as foolish an act as trying to eclipse the sun with a palm," said a foreign ministry spokesman quoted by the official KCNA news agency.

The spokesman defended the test, which has been condemned worldwide, as a necessary response to what he termed a US nuclear threat. The country would work to increase its nuclear force "in quality and in quantity", his statement said.

"The group of Obama's running around and talking about meaningless sanctions until today is highly laughable, when their 'strategic patience' policy is completely worn out and they are close to packing up to move out," the statement reportedly added.

Issue No.1223, 16 September 2016

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“As we’ve made clear, measures to strengthen the national nuclear power in quality and quantity will continue to protect our dignity and right to live from augmented threats of nuclear war from the United States.”

The UN security council denounced North Korea’s decision to carry out the test and said it would begin work immediately on a resolution. The US, Britain and France pushed for the 15-member body to impose new sanctions.

Obama said after speaking by phone with the South Korean president, Park Geun-hye, and the Japanese prime minister, Shinzo Abe, on Friday that they had agreed to work with the security council and other powers to vigorously enforce existing measures and to take “additional significant steps, including new sanctions”.

“We will be working very closely in the security council and beyond to come up with the strongest possible measure against North Korea’s latest actions,” said the US special representative for North Korea policy, Sung Kim, on Sunday.

“In addition to action in the security council, both the US and Japan, together with the Republic of Korea, will be looking at unilateral measures, as well as bilateral measures, as well as possible trilateral cooperation,” he said, referring to South Korea by its official name.

South Korea’s top nuclear envoy also spoke to his Chinese counterpart late on Saturday by telephone and emphasised the need for fresh countermeasures including a new UN security council resolution, the South Korean foreign ministry said in a statement.

The latest test showed North Korea’s nuclear capability was expanding fast and that the country’s leader, Kim Jong-un, was unwilling to alter course, South Korea said on Saturday.

Another KCNA report on Sunday said North Koreans were “delighted” by the nuclear test. “The enemies can no longer deny the strategic position of our country as a nuclear weapons state,” Jong Won-sop, a teacher at the University of National Economy, was quoted as saying.

<https://www.theguardian.com/world/2016/sep/11/north-korea-demands-recognition-as-legitimate-nuclear-state-pyongyang>

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The Korea Times – Seoul, South Korea

## **N. Korea's Next Step May Be ICBM Test**

By Jun Ji-hye

September 12, 2016

Following its fifth nuclear test, Friday, North Korea may move to test-fire an intercontinental ballistic missile (ICBM) – the KN-08 – to show off its advanced technology that could threaten the United States, observers said Sunday.

The latest nuclear test followed launches of short-, medium- and intermediate-range ballistic missiles and submarine-launched ballistic missiles in recent months. Observers noted that what now remains is the test-firing of the ICBM.

The North's missile provocations and the nuclear test followed North Korean leader Kim Jong-un's instructions in March to conduct a nuclear test and more ballistic missile launches as soon as possible.



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The ICBM, with a range of more than 10,000 kilometers, is capable, in theory, of hitting targets on the U.S. mainland.

If the reclusive state pushes ahead with the test-firing of the ICBM, the missile would be mounted with a mockup of a miniaturized nuclear warhead, observers said.

While confirming its fifth nuclear test, Pyongyang said it successfully detonated a miniaturized nuclear warhead that can be placed on a ballistic missile.

Concerns are also growing in the United States about the threats of the ICBM.

The Wall Street Journal said in its editorial Saturday that the accelerating pace of the Kim regime's nuclear and missile testing shows its determination to threaten Japan, South Korea and the U.S. homeland with nuclear weapons.

"A growing worry for the U.S. is the North's new KN-08 ICBM with the range to hit Chicago," it said, citing that the North used a similar rocket in February to allegedly launch a small satellite into space.

The editorial added, "Significant challenges remain, including a warhead that could withstand the vibration and temperature changes of a long-range missile flight. But the North has repeatedly solved technical problems more quickly than expected."

The New York Times also reported, citing military experts, that by 2020 Pyongyang will most likely have the skills to make a reliable ICBM topped by a nuclear warhead.

"Experts also expect that by then North Korea may have accumulated enough nuclear material to build up to 100 warheads," it said.

It is believed that the North is still in the development stage of producing an operational ICBM, but from Pyongyang's point of view, the test-firing of the missile is the surest method to deliver a strong message to Washington.

The North has threatened to launch a nuclear strike on the U.S. mainland, as well as Hawaii and Guam, where U.S. Air Force and Navy bases are.

The South Korean government has not ruled out the possibility that the North has already formed a military unit to deploy the KN-08s. In February, there was a media report that a KN-08 Brigade was a subordinate unit of the Strategic Rocket Forces, which oversee all missile units in the North.

On Feb. 7, Pyongyang launched what it claims was an Earth observation satellite called Kwangmyongsong-4, which was widely regarded as a cover for testing ICBM technology.

[https://www.koreatimes.co.kr/www/news/nation/2016/09/116\\_213911.html](https://www.koreatimes.co.kr/www/news/nation/2016/09/116_213911.html)

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The Chosun Ilbo – Seoul, South Korea

## **N.Korea's Nuke Test 'Only Cost \$5 Million'**

By Yang Seung-sik

September 12, 2016

North Korea spent an estimated US\$5 million on its fifth nuclear test on Friday, the National Intelligence Service here said Sunday.

The estimate was leaked by a lawmaker on the National Assembly's intelligence Committee, which was briefed by the NIS right after the test.

The lawmaker added, "Given intensity of the test, that was a very small amount of money."

Most of the money was apparently spent on acquiring the raw materials and on manufacturing the device.

The NIS said there are two or three more tunnels at the Punggye-ri test site that can be used at any time to conduct more nuclear tests, according to another lawmaker.

A government source here explained that North Korea spent around W1 trillion digging several tunnels in Punggye-ri, so it can now conduct more nuclear tests quite cheaply (US\$1=W1,102).

[http://english.chosun.com/site/data/html\\_dir/2016/09/12/2016091201285.html](http://english.chosun.com/site/data/html_dir/2016/09/12/2016091201285.html)

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People's Daily Online – Beijing, China

## **DPRK Vows to Continue Nuke Arsenal Development**

(Xinhua)

September 12, 2016

The Democratic People's Republic of Korea (DPRK) announced on Sunday that it will continue to develop its nuclear capability despite increasing condemnation by the international community.

"We are holding fast to the line of simultaneously developing the two fronts (economic growth and nuclear development) to safeguard the sovereignty, right to existence and peace from the ever-increasing nuclear threat and blackmail of the U.S., and the recent test was just part of the whole course of implementing the line," said a statement issued by a spokesman for the DPRK Foreign Ministry and carried by the state media KCNA.

The statement came two days after the DPRK's announcement that it had successfully carried out a nuclear warhead explosion, which marked its fifth nuclear test after Pyongyang conducted what it called a hydrogen-bomb test on Jan. 6.

The DPRK was compelled to develop nuclear warheads, and nuclear blackmail from the United States is "an engine which pushed the DPRK to reach this point," the statement noted.

"We will continue to take measures for increasing the nuclear force of the country in quality and quantity to ensure genuine peace from the U.S. increasing threat of a nuclear war," it added.

In the wake of its nuclear warhead test, the international community has voiced its strong condemnation over the development.





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After a closed-door meeting on the matter, the United Nations Security Council on Friday issued a press statement, saying "a clear threat to international peace and security continues to exist" with the DPRK's latest test.

The 15-member Security Council imposed severe sanctions on Pyongyang in March following its fourth nuclear explosion, including an export ban and asset freeze.

Also on Friday, the Chinese Foreign Ministry issued a statement expressing firm opposition to the nuclear test and commitment to settle the problems through the six-party talks on Pyongyang's denuclearization.

The statement said China's stance has always been to achieve denuclearization on the Korean Peninsula, prevent nuclear proliferation, and maintain peace and stability in Northeast Asia.

<http://en.people.cn/n3/2016/0912/c90000-9113596.html>

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The Korea Herald – Seoul, South Korea

### **US Sends B-1B Bombers to S. Korea Amid N. Korean Threats**

September 13, 2016

The flight by two U.S. B-1B bombers over South Korea demonstrates the "steadfast and unshakable" U.S. commitment to its key Asian ally in the wake of North Korea's nuclear test, the U.S. Forces Korea commander (USFK) said Tuesday.

The supersonic bombers left U.S. Andersen Air Force Base in Guam on Tuesday morning and arrived over the skies above the Osan Air Base, south of Seoul, at 10:00 a.m.

They flew past the U.S. air base in Pyeongtaek, 70 kilometers south of Seoul, accompanied by a flight of four South Korean F-15K and four U.S. F-16 fighter jets. The flybys highlight the close cooperation between the U.S. and South Korean military forces that keeps them ready to respond at any time to threats, the USFK said.

"North Korea's nuclear test is a dangerous escalation and poses an unacceptable threat. The United States has an unshakable commitment to defend allies in the region and will take necessary steps to do so, including operations like this one today, and the deployment of the Terminal High Altitude Air Defense (THAAD) battery to the Korean Peninsula," USFK Commander Gen. Vincent K. Brooks told reporters at Osan Air Base.

"Today's demonstration provides just one example of the full range of military capabilities in the deep arsenal of this strong alliance to provide and strengthen extended deterrence," he said.

Joint Chiefs of Staff Chairman Lee Sun-jin said, "As we warned multiple times, if North Korea continues its aggressive behavior and develops nuclear weapons, it will meet retaliatory actions that will shake the very foundation of the regime's existence."

The two generals also said the alliance military forces remain ready to meet mutual defense obligations against threats to the security of the Korean Peninsula and the Indo-Asia-Pacific region.



USAF Center for Unconventional Weapons Studies

CUWS Outreach Journal

Maxwell AFB, Alabama

In recent years, Pyongyang has escalated its saber-rattling despite warnings issued by the international community. On Friday, it detonated its fifth nuclear device in the face of strong opposition to its weapons of mass destruction programs.

The U.S. has in the past taken a series of military counteractions following major provocations by the North.

On Jan. 10, four days after the North conducted its fourth nuclear test, the U.S. sent a B-52 Stratofortress strategic bomber

to the skies above the same air base as a show of force. The bomber can be armed with nuclear missiles and "bunker buster" bombs that are capable of destroying the North's hardened underground facilities.

In August, the U.S. Air Force forward deployed the B-1B bomber in the U.S. Pacific Command's Andersen Air Force Base on Guam partly to better counter the North's evolving nuclear and missile threats.

The B-1B Lancer is a four-engine supersonic variable sweep wing, strategic bomber with a max speed of Mach 2.0 and is capable of flying very close to the ground to avoid detection as it closes in on its target. It first went into operation in the U.S. Air Force in the 1980s and can carry conventional guided bombs, such as the GBU-38 and the GBU-54.

The bomber, which costs \$137 million per unit, can reach Pyongyang within two hours after it leaves the Guam base.

The flyover, meanwhile, was originally scheduled on Monday but postponed due to "inclement weather conditions" in Guam, the USFK said. (Yonhap)

<http://www.koreaherald.com/view.php?ud=20160913000693>

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The Korea Times – Seoul, South Korea

### **N.K. Capable of Building 7 Bombs a Year, Likely to Build Nuclear ICBM Reaching U.S. in Decade: Hecker**

September 13, 2016

North Korea is capable of building seven nuclear warheads a year in addition to the existing stockpile of fissile material for some 20 bombs, and is expected to master the capability to fly nuclear missiles to the U.S. in a decade, a top U.S. nuclear scientist said Monday.

Siegfried Hecker, a Stanford University professor known for having a first-hand look at North Korea's uranium-enrichment facility during his 2010 visit, made the remark in an article to the website 38 North, calling for diplomatic efforts, rather than sanctions, to curb Pyongyang's runaway nuclear and missile programs.

"This test must be viewed with great concern, not for any specific capabilities it may have demonstrated, but as part of this enormous buildup of North Korea's nuclear arsenal," Hecker said, referring to the North's fifth nuclear test.

"Five tests conducted over a ten-year period, sufficiently spaced that the test results can inform the next test, are deeply alarming," he said. "What are the greatest threats from the rapidly expanding North Korean nuclear program? Left unchecked, Pyongyang will likely develop the capability to reach the continental United States with a nuclear tipped missile in a decade or so."

Issue No.1223, 16 September 2016

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Hecker said the North is believed to be capable of producing seven nuclear bombs worth of fissile material a year at the Yongbyon nuclear complex -- one bomb worth of plutonium from its 5-megawatt nuclear reactor and six bombs worth of highly enriched uranium.

"With the two successful nuclear tests this year, we must assume that the DPRK has designed and demonstrated nuclear warheads that can be mounted on some of its short-range and perhaps medium-range missiles. Its ability to field an ICBM fitted with a nuclear warhead capable of reaching the United States is still a long way off, perhaps 5 to 10 years, but likely doable if the program is unconstrained," he said.

What's more troubling for now is that its recent nuclear and missile successes may give Pyongyang a false sense of confidence and dramatically change regional security dynamics, Hecker said.

"The likely ability of the DPRK to put nuclear weapons on target anywhere in South Korea and Japan and even on some US assets in the Pacific greatly complicates the regional military picture. That situation would be exacerbated if Pyongyang decides to field tactical nuclear weapons as its arsenal expands and its confidence in its nuclear arsenal grows," he said.

The professor also said that the more the North has nuclear bombs, the difficult it is to secure them in the event of internal turmoil or a chaotic transition. In addition, a financially desperate leadership of the North may risk the sale of fissile materials or other nuclear assets, perhaps to non-state actors, he said.

"So, what to do? The latest nuclear test demonstrates conclusively that attempting to sanction the DPRK into submission and waiting for China to exert leverage over Pyongyang's nuclear program do not work," Hecker said.

"Increasing sanctions and adding missile defenses in South Korea to that mix will also not suffice and make China even less likely to cooperate. What's missing is diplomacy as much as Washington may find it repugnant to deal with the Kim regime," he said. (Yonhap)

[http://www.koreatimes.co.kr/www/news/nation/2016/09/485\\_214023.html](http://www.koreatimes.co.kr/www/news/nation/2016/09/485_214023.html)

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The Chosun Ilbo – Seoul South Korea

### **N.Korea 'Could Conduct Nuclear Test Any Time'**

By Lee Yong-soo

September 13, 2016

North Korea is ready to conduct another nuclear test any time, the Defense Ministry here said Monday.

"Assessment by South Korean and U.S. intelligence is that the North is ready for an additional nuclear test in the Punggye-ri area whenever it wants," Defense Ministry spokesman Moon Sang-gyun told reporters.

"North Korea has a couple of tunnels where it can conduct an additional nuclear test," Moon added.

There are thought to be three main tunnels at the Punggye-ri site, each with branch tunnels that lead to other test areas. Tunnel No. 1 was sealed after the first test in 2006, while the second to fifth



nuclear tests took place in tunnel No. 2. According to Moon, the additional tests could take place in the remaining branch shafts of tunnel No. 2 or tunnel No. 3.

Earlier, National Intelligence Service chief Lee Byung-ho was summoned to the National Assembly after the spy agency was taken by surprise by the latest test on Friday.

Lee told lawmakers he "would not be surprised" if the North conducts a sixth and even seventh nuclear test.

Kim Hwang-rok, head of the Defense Intelligence Agency, met with the heads of ruling and opposition parties and also said North Korea could conduct more nuclear tests judging by the existence of "two to three more tunnels."

The intervals between the North's nuclear tests have shrunk from over three years to eight months. The North claimed the fourth test in January was of a hydrogen bomb, but that seems unlikely. The latest and most powerful test so far was of a "warhead" for a missile, North Korean state media have claimed.

[http://english.chosun.com/site/data/html\\_dir/2016/09/13/2016091301141.html](http://english.chosun.com/site/data/html_dir/2016/09/13/2016091301141.html)

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Yonhap News Agency – Seoul, South Korea

### **N. Korea Bristles at U.S. Supersonic Bomber Flyover**

September 14, 2016

SEOUL, Sept. 14 (Yonhap) -- North Korea on Wednesday protested the United States' flyover of two B-1B nuclear-capable strategic bombers over South Korea, saying such "reckless provocations" should stop.

The U.S. Air Force on Tuesday flew the B-1B Lancers over Osan Air Base, south of Seoul, as a warning to North Korea following its fifth nuclear test last week.

The North's Korean Central News Agency (KCNA) blasted the exercise as a "military provocation" revealing Washington's intentions to mount a pre-emptive nuclear attack.

"They are blustering this is a 'demonstration of fulfillment of their strong commitment to protecting' south Korea and 'strong warning' to the DPRK, in particular," the KCNA said in an English dispatch, monitored in Seoul. DPRK is the acronym for North Korea's official name, the Democratic People's Republic of Korea.

It also claimed the U.S. will continue to bring nuclear carriers and other nuclear strategic means to the region in a bid to prepare for a nuclear attack.

"These extremely reckless provocations of the U.S. imperialist warmongers are pushing the situation on the Korean peninsula to the point of explosion hour by hour," the KCNA said, warning that the North's military has the means to "beat back any aggression and provocation at a single blow."

"They had better stop their rash actions," it added.

<http://english.yonhapnews.co.kr/northkorea/2016/09/14/69/0401000000AEN20160914001300315F.html>

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

The Hankyoreh – Seoul, South Korea

### **Amid Public Fear, More Calls for South Korea's Nuclear Armament**

*Amid increased jitters after N. Korea's fifth nuke test, opposition says nuclear armament is "dangerous" and "unrealistic"*

By Seok Jin-hwan, Lee Se-young and Park Seung-heon, staff reporters

September 14, 2016

Calls for South Korea's nuclear armament -- once confined to a small segment of the ruling Saenuri Party -- are growing in the wake of North Korea's fifth nuclear test.

The calls may be an attempt to seize control of what is poised to become a long-term issue on the security agenda due to North Korea's nuclear tests, regardless of the nuclear armament's actual feasibility.

On Sept. 11, Saenuri Party leader Lee Jung-hyun added his voice to the nuclear armament calls.

"We need to think of far tougher measures in response to North Korea's provocations than we have now," Lee told reporters at the War Memorial of Korea in Seoul's Yongsan district.

"We need to be bold and start bringing issues to the discussion table that we've always treated as exceptions," he added, hinting at plans to intensify the discussions of nuclear armament.

"I definitely wanted to bring into public debate the fact that many domestic experts and citizens already believe the current [security posture against North Korea] is not enough," Lee said in connection with the nuclear armament issue.

Among the leading Saenuri contenders for next year's presidential election, former party leader Kim Moo-sung and former Gyeonggi Province Gov. Kim Moon-soo also lent their support to the nuclear armament calls.

"It's time for us to use every means at our disposal, including deployment of strategic US nuclear weapons," said Kim Moo-sung on Sept. 9, just after North Korea's fifth nuclear test.

"All our efforts to stop the North Korean nuclear program have ended in failure. The only way to respond to nuclear weapons is with nuclear weapons," said Kim Moon-soo.

Former Saenuri floor leader Won Yoo-chul, considered one of the National Assembly's leading proponents of nuclear armament, brought the topic up for discussion at an emergency round-table meeting on Sept. 12 by the Association of Saenuri Party National Assembly Members for a Resolution of the North Korean Nuclear Issue (also known as the "Nuclear Forum"), which he plays a leading role in. Minister of National Defense Han Min-koo attended the meeting.

Opposition parties criticized the calls as extreme, impracticable, and dangerous.

"The administration does not have wartime operational control, and [nuclear armament] is not realistically possible because the US's principle is denuclearization of the Korean Peninsula," said Park Jie-won, chair of the People's Party emergency countermeasures committee.

"We may hear that kind of thing from a handful of hard-liners, but it's highly inappropriate for the leader of the ruling party to say such things," Park added.

Issue No.1223, 16 September 2016

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Rhee Cheol-hee, secretary for the opposition Minjoo Party on the National Assembly National Defense Committee, said the idea of nuclear armament for self-defense purposes was “unjustified and unrealistic from the standpoint of the South Korean government, which has said it cannot tolerate North Korea’s nuclear program and has consistently pursued denuclearization.”

“It’s a dangerous idea that could result in a chain reaction of nuclear armament in Northeast Asia by Japan and other countries,” Rhee said.

Kim Jong-dae, a Justice Party lawmaker also on the National Defense Committee, said, “Talking about [South Korea’s] nuclear armament and claiming that the US pledge of a nuclear umbrella isn’t enough is the extreme reaction of people in the grip of fear.”

The Blue House remains emphatic on the sensitive topic of nuclear armament. When asked by reporters about the armament calls from the ruling party, a senior Blue House official replied, “There has been no change yet in the government’s position [supporting denuclearization of the Korean Peninsula] as far as I am aware.”

[http://english.hani.co.kr/arti/english\\_edition/e\\_northkorea/761400.html](http://english.hani.co.kr/arti/english_edition/e_northkorea/761400.html)

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Global Times – Beijing, China

### **NK Nuke Reliability Doubtful**

*More info needed to measure Pyongyang’s strike potential*

By Shan Jie; Source: Global Times

September 14, 2016

Analysts believe it is too early to say if North Korea has already developed reliable nuclear weapons ready for combat or if their bombs are small enough to fit into missiles.

They noted that the fifth nuclear test on Friday might have surpassed the force of the Nagasaki A-bomb in 1945, and could be the beginning of a more frequent nuclear test cycle.

North Korea’s Korea Central News Agency said on Friday that standardizing the nuclear warhead will enable North Korea to produce a variety of smaller, lighter and diversified nuclear bombs of higher strike force with a firm hold on the technology for producing and using various fissile materials.

“Currently we know the explosive force of the nuclear tests in North Korea, but we do not know the mass and size of the explosion devices, which are key to calculating if the North Korean A-bombs are also in the process of becoming ‘smaller and lighter,’ which is the trend of nuclear weapons research,” Wen Lianxing, a seismologist, geodynamicist and planetary scientist at the University of Science and Technology of China, told the Global Times.

Meanwhile, the standard of smaller, lighter and diversified bombs varies in different countries. North Korea may be able to make their nuclear devices less than 1 ton, but it is hard to picture the country being able to make warheads light enough to be carried by medium to long-range missiles, Song Zhongping, a Beijing-based military expert, told the Global Times on Tuesday.

Analysts also said it is difficult to gauge the bombs’ security level.





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"At least so far they haven't blown the mountain open, so the nuclear devices look like they are still under control," Gui Liming, an expert on China's nuclear safety systems at Tsinghua University, told the Global Times on Tuesday.

Even though North Korea claimed the recent test was conducted with a nuclear warhead, and the country possesses nuclear weapons, they have only tested five times, which is too few to determine if they are reliable. Plus, the tests of their medium to long-range missile "Musudan" have failed twice this year, Song noted.

"Therefore, North Korea has just developed nuclear weapons, but it hardly has the capability for a nuclear strike," Song said.

Between the fourth and fifth tests, there were only 284 days, which broke a three-year cycle that the North Korea had maintained for its past four tests, according to South Korean newspaper JoongAng Ilbo.

"Previously, North Korea was testing the theory, which is complicated and takes more time," Song said, "Now they have turned to testing the reliability of the nuclear weapons, which could be more frequent than before, so we can expect more tests later in the year, as well as some tests of medium and long-range missiles, even in the name of launching satellites," Song said.

However, North Korea will find it hard to acquire plutonium and uranium, which is another difficulty they face, Song added.

### **Growing force**

North Korea's September 9 nuclear test had an estimated yield of  $17.8 \pm 5.9$  kilotons, which is higher than that of its previous tests in January 2016, February 2013 and May 2009, said a report authored by Wen.

The earthquakes caused by the nuclear tests conducted since October 2006 were of 3.9, 4.5, 4.9, 4.8 and 5.0 magnitude, respectively, JoongAng Ilbo said.

"North Korea's nuclear test was conducted underground to keep it secret and avoid drawing the wrath of the international community, because if it was exploded in the air, the radioactive materials could be detected very soon," Gui noted.

Since 2013, the force of the North Korean nuclear tests have reached the level of the atomic bomb dropped on Hiroshima in 1945, and the latest test on September 9 might have surpassed the Nagasaki A-bomb, Wen told the Global Times on Tuesday.

North Korea is able to abstract plutonium through chemical reactions and enrich uranium, which is a mechanical process that requires high-speed centrifuges. Meanwhile, the explosion yields from the first to the fifth tests have also increased, which proves that North Korea has become quite mature in making nuclear devices, Gui said.

North Korean Foreign Minister Ri Yong-ho arrived in Beijing on Monday, before heading to the United Nations headquarters in New York later this month, Kyodo News reported Monday.

Meanwhile, two US B-1 bombers flew over South Korea on Tuesday in a show of force and solidarity with its ally, while a US envoy called for a swift and strong response to Pyongyang from the UN.

<http://www.globaltimes.cn/content/1006385.shtml>

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The Hankyoreh – Seoul, South Korea

## Experts Say by 2020, North Korea Will “Perfect” Nuclear Warhead Technology

*Moving faster than predicted, addressing growing capability will require more than sanctions, say US analysts*

By Jung In-hwan, staff reporter

September 15, 2016

By 2020, North Korea will perfect its nuclear warhead technology and be poised to threaten the continental US, American analysts say. With North Korea carrying out its fifth nuclear test in the face of eight months of international sanctions and pressure, multiple figures are arguing that the North Korean nuclear issue should be regarded not as the object of strategic patience but rather as an imminent threat.

“North Korea’s fifth nuclear test is ominous not only because the country is slowly mastering atomic weaponry, but because it is making headway in developing missiles that could hurl nuclear warheads halfway around the globe, threatening Washington and New York City,” the New York Times said on Sept. 10.

“Military experts say that by 2020, Pyongyang will most likely have the skills to make a reliable intercontinental ballistic missile topped by a nuclear warhead. They also expect that by then North Korea may have accumulated enough nuclear material to build up to 100 warheads,” the paper added.

Siegfried Hecker, a Stanford professor and expert on North Korea’s nuclear program, said that “North Korea’s progress in missile and nuclear development signals that it has gone from seeing unconventional weapons as bargaining chips to ‘deciding they need a nuclear weapons fighting force,’” the New York Times reported.

In April, Adm. Bill Gortney, then-commander of North American Aerospace Defense Command (NORAD), told the US Senate Committee on Armed Services in a hearing that it was unlikely that North Korea had the ability to strike the continental US with a nuclear device delivered by a ballistic missile but that the likelihood of that was gradually increasing.

But now that North Korea has carried out its fifth nuclear test, analysts suggest that its nuclear capability is far greater than current estimates suggest.

In an article that ran in Foreign Policy on Sept. 10, Jeffrey Lewis, director of the East Asia Non-Proliferation Program at the Middlebury Institute of International Studies, drew attention to the reference to “standardized” nuclear warheads that appeared in the statement released by a North Korean nuclear institute immediately after the nuclear test. “The fact that the warheads are ‘standardized’ is, I think, intended to convey that they are being produced in quantity,” Lewis wrote in the article.

Experts estimate that North Korea currently possesses around 40 kg of weapons-grade plutonium. The International Atomic Energy Agency (IAEA) considers 8kg to be the amount of plutonium needed to make a single nuclear warhead. That would suggest that North Korea could make five nuclear warheads with its plutonium stockpile alone.

Lewis offered a slightly different interpretation, however. “It is an unclassified fact that a bomb can be made with as little as 4 kilograms. Divide by four, that’s 10 bombs. North Korea also has an almost totally unknown stockpile of highly enriched uranium,” he wrote.



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In March, North Korean leader Kim Jong-un called for the development of “stronger” nuclear weapons. What this means is combining plutonium and highly enriched uranium and boosting “the yield of the explosion using a gas of hydrogen isotopes,” Lewis explained. “That means there might be as little as 2 kilograms of plutonium in each device.”

The implication is that North Korea could produce 20 nuclear warheads using its current supply of plutonium. This is the approach that China used when it carried out its 12th nuclear test on Nov. 18, 1971.

North Korea has already vowed to increase its plutonium production, and there is no way to estimate how much highly enriched uranium it possesses. As if the fact that we don't know the extent of the North's nuclear capabilities were not bad enough, their development pace is accelerating as well, Lewis said.

As a consequence, more American experts are calling for a move away from the current policy focus on sanctions.

“Tough international sanctions and condemnation has failed to prevent North Korea from conducting nuclear tests and has failed to constrain its ballistic missile program,” said the American Arms Control Association (ACA) in a statement released on Sept. 10. “The next US presidential administration must renew efforts to productively engage North Korea in a diplomatic dialogue with the goal of freezing North Korea's nuclear and ballistic missile testing.”

“International sanctions have not been successful against North Korea, just as they have failed in the cases of India, Iran, Iraq, Libya and Pakistan,” said Tariq Rauf, director of the disarmament, arms control and non-proliferation program at the Stockholm International Peace Research Institute (SIPRI), in a statement on Sept. 9.

“The practical way forward must be direct negotiations between North Korea and the USA [. . .] in parallel with a composite strategic dialogue involving China, North Korea, South Korea, Japan, the USA and Russia, with the European Union as an observer,” Rauf said.

[http://english.hani.co.kr/arti/english edition/e\\_northkorea/761431.html](http://english.hani.co.kr/arti/english%20edition/e_northkorea/761431.html)

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Yonhap News Agency – Seoul, South Korea

### **Carter: U.S. Has 'Extremely Strong' Deterrent Posture against N. Korea**

September 16, 2016

WASHINGTON, Sept. 15 (Yonhap) -- U.S. Defense Secretary Ash Carter said the U.S. has an “extremely strong” deterrent posture on the Korean Peninsula and is trying to stay ahead of threats from North Korea with missile defense and other measures.

Carter made the remark during a visit to Austin, Texas, in response to a question about how much concern he has about North Korea's nuclear program and how far the communist nation is from mastering the missile capability to reach the U.S.

“Obviously we stand every single day strong on the Korean Peninsula and every day -- and this has been going now decade after decade after decade -- we have an extremely strong deterrent posture.



And it's really there set the motto of our forces on the Korean Peninsula is, "fight tonight." We don't want to do that, but we're ready to do that," Carter said.

"And the way the threat from North Korea's evolving, we stay ahead of that. So for example, in the matter of ballistic missiles, we started some years ago to improve both the number and the type of the missile defenses of North America," he said.

Carter also said that the U.S. is working with South Korea to deploy missile defense systems, referring to the planned placement of an advanced anti-missile battery, known as Terminal High Altitude Area Defense or THAAD.

"We work on the defense of Japan, of Guam, and we're always looking ahead and making sure that we stay ahead of the threat, both in terms of deterrence and defense," Carter said.

North Korea's fifth nuclear test last week has sparked concern in the U.S. that Pyongyang is making real headway in its nuclear and missile development, and could soon perfect capabilities to threaten the mainland U.S. with nuclear-tipped intercontinental ballistic missiles.

The Sept. 9 test was the most powerful of the five conducted by the North, with its yield estimated at 10 kilotons of TNT, compared with January's 6 kilotons. The previous four tests came in 2006, 2009, 2013 and January this year.

Analysts have warned that it is only a matter of time until the North develops nuclear-tipped missiles. Some experts have projected that the communist nation's nuclear arsenal could expand to as many as 100 bombs by 2020.

<http://english.yonhapnews.co.kr/northkorea/2016/09/16/0401000000AEN20160916000200315.html>

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Tasnim News Agency – Tehran, Iran

### **Iran's Commitment to JCPOA Hinges on Other Parties' Fulfillment of Duties: First VP**

September, 10, 2016

TEHRAN (Tasnim) – Iranian First Vice-President Eshaq Jahangiri underlined that the country will remain committed to the July 2015 nuclear deal with six world powers (known as JCPOA), only if the other parties do the same and fulfill their obligations under the agreement.

Speaking at a ceremony on Saturday held to commence the construction of the second unit of a nuclear power plant in the Iranian southern port city of Bushehr, Jahangiri said the construction of the second unit is a sign and outcome of the Joint Comprehensive Plan of Action (JCPOA).

The move demonstrates the adherence of the Russian government, as a party of the JCPOA, to the nuclear deal, he added.

The first vice-president went on to say that other parties to the agreement should also meet their obligations.

"Iran has insisted that the sustainability of the JCPOA hinges on the implementation of other parties' commitments," he noted.

The second unit of the Bushehr nuclear plant is expected to take 9 years to complete (October 2024). A third unit will also begin to be built 18 months later after that (April 2026).

A total of \$10 billion has been allocated for the construction of the two units.



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While the JCPOA, a 159-page nuclear agreement between Iran and the Group 5+1 (Russia, China, the US, Britain, France and Germany) came into force in January, some Iranian officials complain about the US failure to fully implement the accord.

Earlier in March, Leader of the Islamic Revolution Ayatollah Seyed Ali Khamenei said Americans have yet to fulfill what they were supposed to do as per the nuclear deal.

Iran still has problems in its banking transactions or in restoring its frozen assets, because Western countries and those involved in such processes are afraid of Americans, the Leader said at the time, criticizing the US for its moves to prevent Iran from taking advantage of the sanctions removal.

<http://www.tasnimnews.com/en/news/2016/09/10/1183122/iran-s-commitment-to-jcpoa-hinges-on-other-parties-fulfillment-of-duties-first-vp>

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Press TV – Tehran, Iran

### **US Claims of Warship Harassment in Persian Gulf Fictitious: Iran**

Sunday, September 11, 2016

Iran's chief Armed Forces spokesman has dismissed as untrue US claims that an American warship patrolling the Persian Gulf was harassed by Iranian boats, saying the Islamic Republic's naval forces act according to international law.

"Vessels belonging to the Islamic Republic of Iran are fully aware of international laws and regulations and have always acted based on stipulated standards, so the [US] claims are not only fictitious, but stem from their fear of the might of the Islamic Republic of Iran's forces," Deputy Chief of Staff of Iran's Armed Forces, Brigadier General Massoud Jazayeri, said on Sunday.

Pentagon spokesman, Captain Jeff Davis, said on Tuesday that seven fast-attack boats of the Islamic Revolution Guard Corps (IRGC) approached the *USS Firebolt* on September 4 with their machine guns uncovered, though not trained on the Americans.

Elsewhere in his remarks, Jazayeri noted that in safeguarding Iran's sea borders and economic interests, the Iranian naval units will never be deterred by the media propaganda of extra-regional enemies and their stooges in the region.

The senior commander added that when Iranian vessels pass by the American ships at a distance of several kilometers, they claim that the Iranian boats have approached to within a kilometer of them.

"In the pursuit of its interests and in accordance with established marine principles, the Islamic Republic of Iran will never be swayed by any power," Jazayeri said.

Noting that Washington still continues with its hegemonic approaches, he emphasized that as has been proved over the past 37 years since the Islamic Revolution, Iran would never tolerate such policies and would confront any move aimed at undermining its territorial integrity.

In January, Iran's Navy arrested the crews of two US patrol boats that had trespassed on Iranian territorial waters. Iran released them after establishing that they had done so by mistake.



Iran has invariably asserted that it only uses its naval might for defensive purposes and to send across the Islamic Republic's message of peace and security to other nations.

<http://www.presstv.com/Detail/2016/09/11/484215/Iran-US-Massoud-Jazayeri-Persian-Gulf>

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Islamic Republic News Agency (IRNA) – Tehran, Iran

11 September 2016

### **Velayati: Iran to Pursue US Disloyalty to Iran's Nuclear Deal at UN**

Tehran, Sept 11, IRNA – The Islamic Republic delegation while in New York to participate in the upcoming UN General Assembly's annual session will pursue the case of the US disloyalty to Iran's nuclear deal, says Ali-Akbar Velayati.

The head of the Center for Strategic Research of the Expediency Council told reporters on Sunday that the United States has failed to remain committed to its promises and Washington has shown disloyalty.

'We distinguish between P5+1 member countries,' he said.

'Undoubtedly, the behavior of the Russia and the China was different from that exhibited by other member states and maybe we can regard France different from others as well,' Velayati said.

Washington opposed to Russia's decision to sell S-300 missile system to Iran arguing that it was in contradiction to the nuclear deal, but the Russians firmly responded them and said that the delivery of the system was not against the deal.

'We do not consider the P5+1 member states as being the same. Their behavior is different from each other and it is the United States tending to break its promises more than others.'

<http://www.irna.ir/en/News/82227301/>

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Trend News Agency – Baku, Azerbaijan

### **Iran Storing 40 Tons of Reserve Heavy Water**

By Mehdi Sepahvand, Trend

11 September 2016

Tehran, Iran, 11 Sept 2016 -- Iran is storing 40 tons of heavy water for the rainy day, Head of the Atomic Energy Organization of Iran Ali Akbar Salehi said.

"We will also need less than 500 kilograms backup for which we have allocated 130 tons of heavy water, meaning we will be in no need for heavy water for the Arak reactor anymore," he told the IRIB September 10.

"In the JCPOA we had made arrangements to put on sale all that is surplus to the 130 tons. If there were a customer, then it will be sold, if not, it will be stored as in the past."

Iran's nuclear chief went on to say that toward the Implementation Day of the JCPOA, Tehran transferred 70 tons of heavy water to Oman in order to better assure the US of its commitments. In the near future the remainder will be transferred to Russia, he said.





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The JCPOA, a nuclear deal between Iran and the group 5+1 (the US, UK, France, Russia, and China, plus Germany) was implemented on January 16, according to which Iran had to reduce its heavy water and enriched uranium stockpile to prove to the powers that it does not seek a nuclear bomb.

Iran is able to enrich uranium up to 20 percent for peaceful purposes such as medicine, research, etc.

Tehran and Moscow on the same day capped off relations with a decade-long cooperation to construct two new nuclear power plants on the coasts of the Persian Gulf more than one year after the landmark nuclear deal.

“According to the timetable envisaged, the first and second units will be constructed respectively over 108 and 126 months with the cooperation of Russia’s State Atomic Energy Corporation (Rosatom),” Akbar Salehi said while attending a groundbreaking ceremony to mark the launch of construction of the two new nuclear power plants.

The agreement with Russia’s State Atomic Energy Corporation marks the second cooperation between the two countries since 1992 when the Russian company started completing the Bushehr nuclear power plant, first initiated by a German partner before the 1979 revolution.

<http://en.trend.az/iran/politics/2659239.html>

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The Japan Times – Tokyo, Japan

### **U.S. Warplanes, including B-52, Destroy Islamic State Chemical Arms Plant Near Mosul**

Associated Press (AP), Agence France-Presse (AFP)-Jiji

September 14, 2016

WASHINGTON – American warplanes eliminated a “significant chemical threat” to Iraqi civilians by bombing a complex of buildings near the northern city of Mosul that Islamic State militants had converted from pharmaceutical manufacturing to chemical weapons production, the three-star general in charge of U.S. air operations in the Middle East said Tuesday.

Air Force Lt. Gen. Jeffrey Harrigian told reporters at the Pentagon that the target was an Islamic State headquarters also used to produce lethal chemicals, possibly including chlorine and mustard gas. He provided no details on the chemical production.

Harrigian described the airstrike as a large, well-planned operation, which destroyed more than 50 targets at the site with a variety of U.S. warplanes, including Air Force B-52 bombers and Marine Corps F-18D attack planes. Other U.S. officials said later that a total of 12 U.S. planes were used.

Harrigian said the mission was part of a broader effort to cut off the Islamic State’s main sources of revenue, kill their leaders and create “organizational dysfunction” in ways that will eliminate the group as a military threat in Iraq and Syria.

“This represents just another example of Daesh’s blatant disregard for international law and norms,” Harrigian told Pentagon reporters in a video call, using an Arabic acronym for IS.

The strike occurred Monday near Mosul and was conducted by fighter jets, ground-attack aircraft and even a B-52 heavy bomber, the Pentagon said.

Issue No.1223, 16 September 2016

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The Pentagon provided video of the strike, showing a series of large, flat-roofed buildings disintegrating under multiple explosions.

Observers have repeatedly alleged IS has used chemical weapons, and the Pentagon has confirmed the jihadis have deployed chlorine and sulfur mustard devices.

Iraqi security forces, backed by coalition air power, are in the final weeks of “shaping” operations ahead of an assault to recapture Mosul, which IS seized in 2014 and which remains the jihadis’ last main stronghold in Iraq.

<http://www.japantimes.co.jp/news/2016/09/14/world/u-s-warplanes-including-b-52-destroy-islamic-state-chemical-arms-plant-near-mosul/#.V9mJ1bTFtmA>

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FARS News Agency – Tehran, Iran

Wednesday, September 14, 2016

### **IRGC Navy Commander Asks US to Leave Persian Gulf**

TEHRAN (FNA) - Commander of the Islamic Revolution Guards Corps (IRGC) Navy Rear Admiral Ali Fadavi called on the US navy to take back home its forces deployed in the Persian Gulf to prevent any possible confrontation.

"The Americans' presence in the Persian Gulf region is the reason for insecurity and they should terminate it; their presence is the root cause of their unprofessional behavior and they should end this issue honorably to prevent any problem," Fadavi said on Wednesday.

He underlined that the IRGC Navy's measures and its intelligence superiority over the region have prevented the occurrence of any problem and confrontation between the two sides in the Persian Gulf region.

His remarks came one day after Commander of the Islamic Revolution Guards Corps Second Naval Zone General Ali Razmjou announced that the IRGC Navy has launched a high-speed vessel capable of carrying military helicopters.

"Today, Shahid Nazeri speed vessel which can sail long journeys joined the IRGC Navy," General Razmjou told reporters in the Southern city of Bushehr.

He said that the round-the-clock relentless efforts of the Iranian experts and engineers have paved the way for launching the state-of-the-art vessel with the capability to navigate in roaring waters as well as landing and taking off of the military helicopters which is another achievement for the defense sector.

"The IRGC Navy has always made advancements and made valuable successes and under the current conditions it has made the Islamic Republic of Iran stronger by making use of modern technology and equipment as well as high missile, defense and deterrence power," General Razmjou added.

Shahid Nazeri vessel is capable of conducting operations in tidy waters and carry 100 military personnel and military helicopters.

In May, Rear Admiral Fadavi declared that the IRGC has done all the necessary tests and will soon launch mass-production of modern speedboats that cruise at a speed of 80 knots (148 kilometers) per hour.



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"We have been able to increase the speed of our military vessels which are equipped with missiles and torpedoes up to 80 knots and this speed was tested late winter and now we are after mass-producing them," Fadavi said in an interview with the state-run TV.

"This is while the speed more than 35 knots is a dream for the world naval forces and the US vessels can cruise at a maximum speed of 31 knots," he added.

<http://en.farsnews.com/newstext.aspx?nn=13950624000538>

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The Times of Israel – Jerusalem, Israel

### **In leaked Emails, Colin Powell Says Israel Has 200 Nukes**

*While discussing Iran nuclear deal, former secretary of state apparently reveals extent of Jewish state's alleged atomic arsenal*

By JUDAH ARI GROSS

September 15, 2016

Former US secretary of state and four-star general Colin Powell alleged that Israel possesses some 200 nuclear weapons, in an email apparently leaked by Russian hackers this week.

Discussing Prime Minister Benjamin Netanyahu's March 2015 speech to Congress about the dangers posed by the Iranian nuclear deal, in an email he sent to US Democratic party donor Jeffrey Leeds, Powell wrote that he doubted the Iranian regime would use an atomic bomb even if it could get one, since "the boys in Tehran know Israel has 200, all targeted on Tehran, and we have thousands."

The email was published by the LobeLog foreign policy website.

Israel maintains a policy of so-called nuclear ambiguity, neither publicly confirming nor denying the existence of an atomic arsenal.

According to a 2014 report by the Federation of American Scientists, however, the Jewish state is believed to possess between 80 and 400 nuclear weapons, though that document's authors estimated the figure was closer to 80.

Powell's email, sent on March 3, 2015, more than doubled that approximation. As a former chairman of the joint chiefs of staff, his figure of 200 nuclear weapons would appear to carry more weight than the approximations of the "news media reports, think tanks, authors, and analysts" cited in the FAS report.

A trove of Powell's emails was posted on the website DCLeaks.com and first reported by BuzzFeed News late Tuesday. Powell, 79, did not deny the emails' authenticity when asked for comment by BuzzFeed.

The emails, which run from March 2015 through last month, offer rare insight into the unvarnished opinions of the respected retired US Army general, who was secretary of state under President George W. Bush.



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DCLeaks.com has been alleged to be an outlet for hackers tied to the Russian intelligence groups. The website, which says it intends to expose the misuse of political power, has previously released emails from other Washington political figures.

In the leaked emails, Powell also bashed both Donald Trump and Hillary Clinton, and spoke frankly about a number of issues related to the US government.

However, his March 3, 2015, email dealt specifically with the Iranian nuclear deal and Netanyahu's controversial speech to Congress that day about it.

Powell told Leeds, his business partner, that he had watched "parts of it," and that is was "well done, but nothing new. I could have mouthed it."

He challenged some of the assertions made by Netanyahu in the speech. According to Powell, the Iranians "can't use [a nuclear bomb] if they finally make one," because of Israel's overwhelming arsenal.

"As Akmdinijad (sic) [said], 'What would we do with one, polish it?'" he wrote, referring to former Iranian president Mahmoud Ahmadinejad.

Powell said that while all his "buddies" in Abu Dhabi wanted an Iranian nuclear deal and had been working for over a decade to reach one, he was unconvinced.

"I don't trust Iranians — almost went to jail over Iran-Contra," he wrote, referring to a political scandal in the United States in the late 1980s, in which American officials were caught facilitating weapons sales to Iran, despite an arms embargo.

Powell also cast doubt on the amount of time that Netanyahu and others estimated that it would take Iran to develop a nuclear bomb.

"Bibi likes to say 'a year away,' as do our intel guys. They say it every years (sic)," Powell wrote.

*AP contributed to this report.*

<http://www.timesofisrael.com/in-leaked-emails-colin-powell-says-israel-has-200-nukes/>

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The Hindu – Chennai, India

### **Pakistan May Have a New Nuclear Site**

*The latest report of covert nuclear weapons development activities in Pakistan comes in the wake of a long series of such observations made in the recent years, mostly from commercial satellite photography.*

By Narayan Lakshman

September 16, 2016

Pakistan, which is already suspected to be expanding its nuclear weapons stockpile faster than any other nation, may be rapidly constructing a reprocessing site for a new centrifuge within the Khan Research Laboratories (KRL) in Kahuta, according to commercial satellite imagery.

IHS Markit, an analyst of business-intelligence information, says the imagery, taken by Airbus Defence & Space on September 28, 2015, and then again on April 18, 2016 show the progress of the construction of a possible new uranium enrichment complex.

Issue No.1223, 16 September 2016

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IHS Markit notes that the area is approximately 1.2 hectares in the southwestern part of the KRL complex.

“Roughly rectangular in shape and approximately 140 metres by 80 metres, it is surrounded by scrubland and trees that provide an additional measure of security on the ground,” the IHS Markit report observes.

The report of covert nuclear weapons development activity in Pakistan comes in the wake of a long series of such observations made in the recent years, mostly from commercial satellite photography.

Last year, a report from the Institute for Science and International Security (ISIS), a think tank in the U.S., said that Pakistan may be accelerating the weaponisation of spent nuclear fuel through its plutonium reprocessing plant at Chashma in Punjab.

This week’s report says that in addition to being located within the KRL, a known centrifuge facility, the new building shares similarities with known centrifuge facility structures built by the URENCO enrichment consortium in Capenhurst (in the UK), Almelo (in the Netherlands) and Gronau (in Germany).

“This may be more than coincidence, as A.Q. Khan, considered by many to be the founder of Pakistan’s nuclear programme, worked at URENCO before stealing centrifuge designs and returning to Pakistan to work on the country’s centrifuge programme,” said Charlie Cartwright, an imagery analyst for IHS Jane’s.

The group also notes that the September 28, 2015 satellite imagery shows that work on a large building structure had commenced, with a multi-bay steel frame structure visible in commercial imagery.

The construction work will continue for at least a further 12 months, while plumbing, electrical and ducting for air conditioning installations are undertaken. As such, it is likely that the site will not be ready for occupation until at least late 2017 or early 2018, says IHS Markit.

<http://www.thehindu.com/news/international/pakistan-may-have-new-nuclear-site/article9114286.ece>

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38 North.org – Baltimore, MD

OPINION/Article

### **What to Make of North Korea’s Latest Nuclear Test?**

By Siegfried S. Hecker

12 September 2016

On September 9, 2016, seismic stations around the world picked up the unmistakable signals of another North Korean underground nuclear test in the vicinity of Punggye-ri. The technical details about the test will be sorted out over the next few weeks, but the political message is already loud and clear: North Korea will continue to expand its dangerous nuclear arsenal so long as Washington stays on its current path.



Preliminary indications are that the test registered at 5.2 to 5.3 on the Richter scale, which translates to an explosion yield of approximately 15 to 20 kilotons, possibly twice the magnitude of the largest previous test. It appears to have been conducted in the same network of tunnels as the last three tests, just buried deeper into the mountain. This was the fifth known North Korean nuclear explosion; the second this year, and the third since Kim Jong Un took over the country's leadership in December 2011.

Unlike previous announcements, such as the claim of having detonated a hydrogen bomb in January 2016, the current statement can no longer be dismissed. This time, KCNA reported North Korea's Nuclear Weapons Institute claiming:

*The standardization of the nuclear warhead will enable the D.P.R.K. to produce at will and as many as it wants a variety of smaller, lighter and diversified nuclear warheads of higher strike power with a firm hold on the technology for producing and using various fissile materials. This has definitely put on a higher level the D.P.R.K.'s technology of mounting nuclear warheads on ballistic rockets.[1]*

This statement brings up some fundamental questions.

**How many nuclear warheads can the DPRK produce?** North Korea's capacity to produce plutonium remains limited to 6 kilograms, or approximately one bomb's worth, per year. We estimate that it may have a stockpile of 32 to 54 kilograms (roughly 6 to 8 bombs' worth) of plutonium now. Whereas plutonium production can be estimated reasonably accurately because of telltale signals resulting from reactor operation, production of highly enriched uranium (HEU) remains highly uncertain. However, based on what I saw at the Yongbyon centrifuge facility during my last visit in November 2010, the expanded footprint of the facility since, and our probabilistic estimates of how much it could make in covert facilities,[2] it is possible that the DPRK could add 150 kg of HEU (roughly 6 bombs' worth) to a current stockpile of perhaps 300 to 400 kg.[3] In other words, a stockpile of sufficient fissile material for approximately 20 bombs by the end of this year and a capacity of adding approximately 7 per year makes the DPRK claim sound plausible.

**Can the DPRK produce lighter, smaller warheads and as claimed by the DPRK Nuclear Weapons Institute, ones that have been "standardized to be able to be mounted on its ballistic missiles?"** With the two successful nuclear tests this year, we must assume that the DPRK has designed and demonstrated nuclear warheads that can be mounted on some of its short-range and perhaps medium-range missiles. Its ability to field an ICBM fitted with a nuclear warhead capable of reaching the United States is still a long way off—perhaps 5 to 10 years, but likely doable if the program is unconstrained.

As much as a doomsday nuclear shot at the United States worries Americans, it is not what I consider to be the primary threat from Pyongyang's unrelenting drive to more bombs and better bombs. At a minimum, the current state of the North's nuclear arsenal is an effective deterrent to potential hostile external intervention. It has reinforced Kim Jong Un's legitimacy as leader of what the North considers a beleaguered nation. The current situation is very different from what my Stanford colleagues and I encountered during our November 2006 visit a few weeks after the North's first nuclear test. At each of our stops—the Ministry of Foreign Affairs, the Department of Atomic Energy, and the military—we found their pronouncements of having achieved a deterrent against the United States to ring hollow.

Nevertheless, Kim Jong Il appeared sufficiently confident of the state's security that he accepted the Bush administration's change of heart and new willingness to find a diplomatic solution. The years 2007 and 2008 marked significant diplomatic progress, which resulted in a rollback of operations at the Yongbyon nuclear complex, the return of international inspectors, and the presence of an American technical team. However, in the summer of 2008, the Bush administration pulled back





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followed by a similar response by the North in August. Kim Jong Il suffered a stroke shortly thereafter. Succession planning in the North was done in an environment greatly influenced by the hardline approach of South Korea's new president Lee Myung-bak. All of these events likely contributed to diplomacy not getting back on track before time ran out on the Bush administration.

By the time our Stanford team visited Pyongyang in February 2009, we were told that times had changed—the North was going to launch a long-range rocket and that matters would get much worse. And, so they did. The launch was followed by UN condemnation and Pyongyang's expulsion of the international inspectors and American team. Then in May, the North conducted its second nuclear test, which, unlike the first, appeared successful. Seoul and Washington apparently rebuffed Pyongyang's overtures in the summer of 2009 to get back on a diplomatic track and the DPRK was off and running on a determined path for more and better bombs, combined with greatly increasing its missile threat.

The death of diplomacy, namely the Obama administration's retreat to "strategic patience" and the demise of the Six Party Talks, opened the door to an unrelenting expansion of the North's nuclear weapons program, as best as one can tell, unconstrained by international opprobrium and escalating sanctions.

Construction activities at Yongbyon picked up steadily in the latter half of 2009. Pyongyang made numerous claims of nuclear progress—declaring it had achieved nuclear fusion and that it was successful in enriching uranium, which it stated was now required to fuel the new indigenous light water reactor it was going to build. Most of these pronouncements were dismissed outside the DPRK, but then came its remarkable revelation of a modern, industrial-size uranium centrifuge facility during our Stanford delegation's last visit in November 2010. Then, the curtain descended on foreign visitors to Yongbyon, while construction and testing picked up and has continued to the present.

Based on commercial satellite imagery, the 5 MWe Reactor in Yongbyon has operated off and on since August 2013. It is capable of producing up to 6 kg plutonium annually, but also is capable of producing tritium for fusion bombs if Lithium-6 targets are irradiated in the reactor. The Radiochemical Laboratory is operational again allowing plutonium to be separated from the spent reactor fuel. The North also has hot cell facilities near its IRT-2000 Reactor to recover tritium that may be produced in either reactor. It has rebuilt the fuel fabrication facilities to allow more metallic 5 MWe Reactor fuel to be fabricated. It has completed the external construction of the Experimental Light Water Reactor (ELWR), including having developed fuel fabrication facilities for its ceramic fuel. It has doubled the size of the Yongbyon centrifuge hall, enabling it to enrich uranium for ELWR fuel and produce the feed material that is likely taken to a covert facility to be enriched to weapons-grade HEU. The expansion of Yongbyon facilities, all visible from above, has been nothing short of breathtaking.

I was puzzled for many years by the slow pace of North Korea's medium-to-long-range missile testing program. However, at about the same time as the Yongbyon expansion began, Pyongyang also mounted a major construction effort on a new launch facility on its west coast, from which it has launched three long-range rockets since 2012. Much of the world laughed as the North paraded what looked like dummy missiles through the streets of Pyongyang during military parades, but they are not laughing any more, as the pace of missile tests during the past year has been just as intense as its nuclear buildup. Beyond the satellite launches, the North has now demonstrated its capability to fire a submarine-launched ballistic missile and a solid-fuel, two-stage medium range missile.



This brings us full circle to the fifth nuclear test. This test must be viewed with great concern, not for any specific capabilities it may have demonstrated, but as part of this enormous buildup of North Korea's nuclear arsenal. Five tests conducted over a ten-year period, sufficiently spaced that the test results can inform the next test, are deeply alarming.

What are the greatest threats from the rapidly expanding North Korean nuclear program? Left unchecked, Pyongyang will likely develop the capability to reach the continental United States with a nuclear tipped missile in a decade or so. Much more troubling for now is that its recent nuclear and missile successes may give Pyongyang a false sense of confidence and dramatically change regional security dynamics. The likely ability of the DPRK to put nuclear weapons on target anywhere in South Korea and Japan and even on some US assets in the Pacific greatly complicates the regional military picture. That situation would be exacerbated if Pyongyang decides to field tactical nuclear weapons as its arsenal expands and its confidence in its nuclear arsenal grows.

More bombs and better bombs also increase the potential of accidents and miscalculations with greater consequences as the number and sophistication of bombs increase. Rendering the nuclear enterprise safe and secure in case of internal turmoil or a chaotic transition in the North becomes more difficult. We also cannot rule out that a financially desperate leadership may risk the sale of fissile materials or other nuclear assets, perhaps to non-state actors.

So, what to do? The latest nuclear test demonstrates conclusively that attempting to sanction the DPRK into submission and waiting for China to exert leverage over Pyongyang's nuclear program do not work. Increasing sanctions and adding missile defenses in South Korea to that mix will also not suffice and make China even less likely to cooperate. What's missing is diplomacy as much as Washington may find it repugnant to deal with the Kim regime.

*Siegfried Hecker is a senior fellow and affiliated faculty member at Stanford University's Center for International Security and Cooperation (CISAC) and the Freeman Spogli Institute for International Studies. He is also a research professor in the Department of Management Science and Engineering at Stanford. He is director emeritus of the Los Alamos National Laboratory, where he served as director from 1986 to 1997 and as senior fellow until July 2005.*

### Notes

[1] "DPRK Succeeds in Nuclear Warhead Explosion Test," KCNA, September 9, 2016.

[2] John Bistline, et al. "A Bayesian Model to Assess the Size of North Korea's Uranium Enrichment Program," *Science and Global Security* 23 (2015): 71-100.

[3] Chaim Braun, Siegfried Hecker, Chris Lawrence, and Panos Papadiamantis, "North Korean Nuclear Facilities After the Agreed Framework," Center for International Security and Cooperation, Stanford University, May 27, 2016, <http://fsi.stanford.edu/publication/north-korean-nuclear-facilities-after-agreed-framework>.

<http://38north.org/2016/09/shecker091216/>



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

People's Daily Online – Beijing, China

OPINION/Commentary

### **Commentary: US Has No Grounds to Act as Judge on North Korea Nuclear Issue**

(People's Daily Online)

September 14, 2016

North Korea launched its fifth nuclear test on Sept. 9, in defiance of international guidelines. The test not only violated the international nuclear non-proliferation system, it also threatened regional peace and stability. All parties involved are now forced to deal with the issue in a way that avoids further escalation of tensions.

Nevertheless, Washington once again has put the blame on China, brushing aside the complexity and severity of this issue.

"It's China's responsibility," U.S. Secretary of Defense Ash Carter claimed at a press conference, adding that China shares responsibility for this development and is duty-bound to reverse it. However, the U.S. has no right to pass the buck and put the blame on other countries, especially when the essence of this issue is a conflict between the U.S. and North Korea.

As the largest neighboring country of the Korean Peninsula, China has committed itself to realizing the denuclearization of the peninsula, safeguarding peace and stability, and resolving roadblocks through dialogues and consultations. How to accomplish these things? By clinging to the big picture of regional security.

China has so far been a team player on this issue, implementing every one of the resolutions adopted by the UN Security Council. After North Korea's latest nuclear violation, China made a series of proactive diplomatic moves. China will also continue participating in UN Security Council discussions so as to contribute to the final resolution of the issue. Thus, the ongoing assignation of blame to China by the U.S. calls into question whether the U.S. really even wants to find a solution.

After North Korea's fourth nuclear test at the beginning of 2016, the U.S. did its utmost to promote the deployment of a Terminal High Area Altitude Defense (THAAD) system in South Korea. Such a push only escalates tensions on the peninsula and undermines the strategic security interests of the region. Undoubtedly, the U.S. knows that THAAD is not a cure-all solution to the nuclear issue; the country's insistence on THAAD comes across mostly as an excuse to further its own interests.

In recent years, the U.S. has developed a habit of causing trouble in the international community, and the North Korea nuclear issue is only one example of this behavior.

On the Ukrainian issue, the U.S. refused to honestly assess its own wrongdoing, simply labeling Russia a troublemaker and passing the blame ahead. Besides, the U.S. used the South China Sea issue to protect its hegemony in Asia and contain China, which has been the country's goal ever since floating the policy of Asia-Pacific Rebalance. On one hand, the U.S. calls itself a guardian of rules, but on the other hand keeps instigating conflicts and pointing fingers at China.

All in all, the U.S. has not only violated fundamental morals, but also made it harder to resolve a number of important issues. What the U.S. should keep in mind about North Korea is that speculation on the nuclear issue is risky, and neglecting the big picture will only aggravate tensions.

Issue No.1223, 16 September 2016

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Given the current state of the Korean Peninsula, all parties must examine the big picture and take prudent actions to avoid further escalation. The U.S., too, should seriously consider practical solutions and shoulder its due responsibility.

*This article is edited and translated from 人民日报钟声：朝核问题，美国不是局外人和裁判官*

<http://en.people.cn/n3/2016/0914/c90000-9115255.html>

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The National Interest – Washington, D.C.

OPINION/The Skeptics

## **Should the U.S. Continue to Guarantee the Security of Wealthy States?**

By Michelle Newby

September 15, 2016

*The Center for the National Interest partnered with the Charles Koch Institute to host a foreign policy roundtable. Among the issues addressed was: Should the United States continue to guarantee the security of wealthy states like Japan and South Korea?*

The United States has been providing security for Japan since the U.S. occupation began at the end of World War II. At the time, Washington intended to transform the country into a parliamentary democracy and thwart Soviet influence in the Pacific. Similarly, the United States has been providing security for South Korea since the 1950s, when the Korean War ended with an armistice rather than a peace treaty. The United States viewed protecting South Korea—then a poor and underdeveloped state—as necessary to preventing the spread of communism.

However, decades after the Cold War's end, is it still necessary for the United States to protect two friendly democracies that have grown economically prosperous and militarily capable?

In this portion of the Center for the National Interest and Charles Koch Institute foreign policy round table, Richard K. Betts and a panel of foreign policy experts debate this question. Their discussion emphasizes the potential rise of China, the realities of potential buck-passing, the spread of nuclear weapons, and the United States' role in Asia.

Betts suggests that the United States should maintain its security guarantees because they ensure a “comparatively cheap way of preventing instabilities and miscalculations that are potentially more problematic and dangerous than they are elsewhere.”

Before answering, though, Betts explains that his opinion probably differs from the rest of the panel. Taken aback by the disclaimer, Andrew Bacevich asks, “Who disagrees with that?” Just about half the panel answers affirmatively.

Ultimately, the panelists' differing levels of concern about the rise of China significantly influence their range of opinions on whether the United States should continue to provide security guarantees in Asia. Some scholars perceive China as a threat, which tempers their views on allies in Asia accordingly. For example, Stephen Walt acknowledges that “if we care at all about balancing against a rising China ... we want to maintain the connections to Japan and South Korea and get them to pull their weight.”

Yet Barry Posen proposes that “a nuclear-armed Japan and a nuclear-armed Republic of Korea are the vehicles for buck-passing in Asia.” His main concern is to “genuinely empower the locals to deal



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with the Chinese threat. ...[which means] having their own nuclear weapons and getting our troops out of their countries." "It's a very interesting and promising way to contain China on the cheap," he concludes.

The panelists also discuss North Korea as a factor in U.S. decision-making about the need for a military presence in Asia. Betts argues that "North Korea is probably the wildest and craziest state in the world. The American deterrent function there ... is probably worth continuing, just because of the complete unpredictability of what might happen otherwise."

Eugene Gholz disagrees, arguing, "I don't want to be next to the wild and crazy place. ... I'm totally grateful that there's a Pacific Ocean between them and me."

Did the panel reach a consensus about what the U.S. role in Asia should be and how the United States should consider allies and adversaries in their modern context? Watch the [other videos in this series on allies and adversaries](#) to find out.

<http://nationalinterest.org/blog/the-skeptics/should-the-us-continue-guarantee-the-security-wealthy-states-17720>

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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.

Issue No.1223, 16 September 2016

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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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