



**USAF COUNTERPROLIFERATION CENTER**  
**CPC OUTREACH JOURNAL**  
MAXWELL AFB, ALABAMA

**Issue No. 994, 03 April 2012**

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Press TV – Iran

## **Soltanieh: Iran Determined to Continue Nuclear Energy Program**

Saturday, March 31, 2012

Iranian ambassador to the International Atomic Energy Agency (IAEA) says Iran is not after acquiring military atomic technology but resolute to continue with its nuclear energy program.

The Islamic Republic “has not been pursuing a nuclear weapon” Ali Asghar Soltanieh said in a recent interview with Fox News television channel.

We “will never, ever suspend our activities, including [uranium] enrichment,” he added.

Pointing to the “politicized” debate on the Parchin site, Soltanieh stressed that while Tehran is willing to cooperate with the IAEA on its nuclear energy program, it will not accede to any demand to visit its military facilities.

“We cannot permit each time any country wants to knock at the door and wants to go to our military sites,” he said.

The Iranian envoy to the UN nuclear body went on to say that Western sanctions against Iran over its nuclear activities have been ineffective.

“Sanctions have had no effect,” he pointed out, adding, “We are more determined to pursue our nuclear activities.”

Soltanieh also downplayed threats of a military attack against Iranian nuclear sites and reiterated that Tehran would give “a strong response with an iron fist” to any such venture.

“Nobody would dare attack Iran,” he said.

The US and the EU say Iran is seeking military objectives in its nuclear energy program and have used the allegation as a pretext to impose sanctions against Tehran, while the Israeli regime has publicly engaged in making threats of military strikes against Iran.

The US government has also made repeated threats of keeping its military “options on the table” against Tehran.

Iran, however, refutes the Western allegations about its nuclear energy program and argues that as a signatory to the nuclear Non-Proliferation Treaty (NPT) and a member of the IAEA, it has the right to develop and acquire nuclear technology for peaceful purposes.

The IAEA has conducted numerous inspections of Iran’s nuclear facilities, but has never found any evidence indicating that Tehran’s civilian nuclear program has been diverted to nuclear weapons production.

<http://www.presstv.ir/detail/234030.html>

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Washington Post

## **U.S. to Meet with Iran over Its Nuclear Program**

By Karen DeYoung

March 31, 2012

ISTANBUL — The United States and its international partners will meet with Iranian negotiators April 13-14 for a new round of talks over Iran’s nuclear program, Secretary of State Hillary Rodham Clinton said Saturday.

“It will soon be clear whether Iran’s leaders are prepared to have a serious, credible discussion . . . to start building the trust we need to move forward,” Clinton said after a security conference held in Saudi Arabia with Persian Gulf Arab states.

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“So far,” she said, “they have given little reason for confidence. What is certain is that Iran’s window to do so will not remain open forever.”

The announcement came the day after President Obama certified that global oil supplies are sufficient to move ahead with the tougher economic sanctions against Iran scheduled to take effect this summer.

Clinton spoke in the country that is expected to make up much of the shortfall when new sanctions take effect against Iran’s Central Bank, which processes payments for nearly all of Iran’s oil exports. A European oil embargo on Iran is scheduled to begin July 1.

She said the talks, over what the West charges is a nuclear weapons program but Iran insists is designed to provide peaceful nuclear power, would be held in Istanbul. But while the negotiating group known as the P5+1 — the five permanent members of the U.N. Security Council, the United States, Russia, Britain, China and France, plus Germany — has proposed the venue, Iran has not formally agreed to it.

Iran had indicated days ago that there was an agreement on the April 13 date, but there was no confirmation from the other side.

Clinton held a news conference with Saudi Arabian Foreign Minister Saud al-Faisal in Riyadh after the inaugural meeting of a new strategic organization between the United States and the Gulf Cooperation Council.

She said the Obama administration plans to help the region develop an integrated, American-supplied missile defense system, outlined for the group in a briefing by Vice Adm. Michael I. Fox, commander of the Bahrain-based U.S. 5th Fleet.

“We are committed to defending the Gulf nations, and we want it to be as effective as possible,” Clinton said. Saudi Arabia, the United Arab Emirates and Kuwait have purchased U.S. missile defense systems. Clinton spoke of a radar system that would coordinate the defenses of the GCC as a group.

“It’s the cooperation, the interoperability that we now need to roll up our sleeves and get to work on,” she said.

The Gulf states, like Israel, are within Iranian missile range and their oil exports pass within miles of Iranian territory through the narrow Strait of Hormuz.

Clinton and her GCC counterparts plan to attend a meeting in Istanbul on Sunday of the Friends of Syria group, about 70 countries and international groups that have called on Syrian President Bashar al-Assad to step down.

The group first gathered last month in Tunis. While members agreed there to increase diplomatic and economic pressure on Assad and pledged international humanitarian assistance, they split on whether to provide weapons to Syrian opposition fighters, as Saudi Arabia and others have advocated.

A communique at the end of the U.S.-GCC gathering did not directly address the weapons issue, but it called on U.N. and Arab League envoy Kofi Annan to “determine a timeline for the next steps if the killing continues.” Assad has agreed on, but not implemented, a plan proposed by Annan to stop regime attacks on civilians that the United Nations estimates has killed 10,000 people since the Syrian uprising began early last year.

“If we believe the propaganda of Syria,” Saud said, “only the terrorists are creating trouble.” The Syrian government, he said, has announced an end to the uprising, “yet the cannons continue to fire and the tanks continue to move. We are living in a world where truth and falsehood have become mixed.”

Opposition activists in Syria said Saturday that government attacks continue. They reported 29 deaths in cities across the country.

“Yes, indeed, we support the arming of the nationalists” in Syria, Saud said. But while “you want disagreement between us, there is none,” he told reporters as Clinton nodded in agreement beside him.

*Staff writer Alice Fordham contributed from Beirut.*

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[http://www.washingtonpost.com/world/middle\\_east/clinton-calls-for-closer-ties-with-persian-gulf/2012/03/31/gIQAsxq7mS\\_story.html](http://www.washingtonpost.com/world/middle_east/clinton-calls-for-closer-ties-with-persian-gulf/2012/03/31/gIQAsxq7mS_story.html)

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Chicago Tribune

## Former Iran Negotiator Says Nuclear Deal Possible

March 31, 2012

By Louis Charbonneau, Reuters

UNITED NATIONS (Reuters) - An end to a nearly decade-long nuclear standoff between Iran and major world powers will be possible if the United States and its European allies recognize Tehran's right to enrich uranium, a former Iranian negotiator said in an editorial.

"Talks between Iran and the five permanent members of the U.N. Security Council plus Germany (P5+1), scheduled for next month, provide the best opportunity to break the nine-year deadlock over Iran's nuclear program," Hossein Mousavian, Iran's former chief nuclear negotiator, wrote in an editorial in the Boston Globe.

Mousavian, now a visiting scholar at Princeton University in New Jersey, had been seen as a moderate when in the Iranian government. Although he is not currently a policymaker, such public presentations of Iranian thinking is rare.

Iran says its nuclear program is peaceful and rejects U.S. and European allegations that it is secretly amassing the capability to produce atomic weapons. Iran has rejected Security Council demands that it halt enrichment and other sensitive nuclear work, saying it has a sovereign right to atomic energy.

This has led to four rounds of increasingly stringent U.N. Security Council sanctions, mostly focusing on its nuclear and missile industries, but also targeting some financial institutions, a few subsidiaries of its major shipping firm, and companies linked to the Islamic Revolutionary Guard Corps.

In recent months there has been increased speculation about possible Israeli air strikes on Iran's nuclear sites - which some analysts fear could spark a Middle East war.

For the talks, expected to take place in mid-April, to open the door to a resolution of the standoff with Iran, Mousavian said the United States and its European allies must make clear that war and coercion are not the only options.

They should seek enhanced engagement with Tehran, as U.S. President Barack Obama has repeatedly called for.

"This could work - since 2003, Iran has been looking for a viable and durable solution to the diplomatic standoff," wrote Mousavian.

### POLITICALLY MOTIVATED CHARGES

Mousavian was Iran's chief nuclear negotiator from 2003 to 2005 before conservative President Mahmoud Ahmadinejad took over from his reformist predecessor Mohammad Khatami. According to Western envoys familiar with Mousavian, he appeared at the time to be genuinely interested in reaching a deal with the West.

After he was removed from the nuclear negotiating team, Mousavian was arrested and briefly jailed in 2007 on accusations of espionage. He was acquitted of that charge, which could have carried the death penalty, but was found guilty of "propaganda against the system."

Analysts and diplomats said the charges against Mousavian were really a reflection of an internal Iranian dispute over how to handle Iran's atomic dispute with the West. Some Iranians favor the moderate line adopted by Mousavian while others have backed Ahmadinejad's more confrontational approach.

Mousavian writes that if a deal that is acceptable to both parties is to be reached, the two sides' "bottom lines" should be identified.



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"For Iran, this is the recognition of its legitimate right to create a nuclear program - including enrichment - and a backing off by the P5+1 from its zero-enrichment position."

"For the P5+1, it is an absolute prohibition on Iran from creating a nuclear bomb, and having Iran clear up ambiguities in its nuclear program to the satisfaction of the International Atomic Energy Agency," Mousavian writes.

The West also needs to abandon calls for regime change and accept that "crippling sanctions, covert actions, and military strikes might slow down Iran's nuclear program but will not stop it."

"In fact, it is too late to demand that Iran suspend enrichment activities," Mousavian writes. "It mastered enrichment technology and reached break-out capability in 2002 and continues to steadily improve its uranium-enrichment capabilities."

The so-called "break-out" capability refers to the ability of a country to construct a nuclear weapon.

A U.S. think tank, the Institute for Science and International Security (ISIS), has said that capping Iranian uranium enrichment at 5 percent purity level compared with the 90 percent needed for a bomb could form part of an interim deal that would give time for more substantial negotiations.

This and other priority measures would "limit Iran's capability to break out quickly," ISIS said in a report.

Among the things the West should offer to Iran is a package that includes recognition of its nuclear rights, ending sanctions, and "normalization of Iran's nuclear file." In return, Iran should offer the IAEA full transparency and permit the most intrusive inspections possible.

*Editing by Philip Barbara.*

[http://articles.chicagotribune.com/2012-03-31/news/sns-rt-us-iran-nuclearbre82u0ce-20120331\\_1\\_hossein-mousavian-sensitive-nuclear-work-nuclear-program](http://articles.chicagotribune.com/2012-03-31/news/sns-rt-us-iran-nuclearbre82u0ce-20120331_1_hossein-mousavian-sensitive-nuclear-work-nuclear-program)

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Seattle Post Intelligencer

## **Clinton to Iran: Show That Nuclear Arms Not Sought**

BRADLEY KLAPPER, Associated Press

Sunday, April 1, 2012

ISTANBUL (AP) — U.S. Secretary of State Hillary Rodham Clinton on Sunday urged Iran to back up its declaration that Islam bars weapons of mass destruction by agreeing to a plan that would prove it does not intend to develop nuclear arms.

Ahead of international talks April 13 in Istanbul on Iran's uranium enrichment program, Clinton talked strategy with Turkish Prime Minister Recep Tayyip Erdogan, who visited Tehran last week with other government officials.

"They were told that the supreme leader (Ayatollah Ali Khamenei) viewed weapons of mass destruction as religiously prohibited, as against Islam," Clinton said at a news conference.

"We are meeting with the Iranians to discuss how to translate what is a stated belief into a plan of action," she said. "It is not an abstract belief, but a government policy. That government policy can be demonstrated in a number of ways. ... The international community now wants to see actions associated with that statement of belief."

She mentioned opening Iran's nuclear facilities to international inspectors and shipping out some of Iran's enriched uranium in exchange for fuel for its research reactor.

Washington and its allies see Iran's nuclear program as designed to develop an atomic bomb. Tehran says the program is for peaceful energy and research purposes.

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The upcoming talks, which Clinton said would not be "an open-ended session," have taken on fresh urgency amid speculation that Israel or the U.S. could take military action later this year. Clinton has made clear that time is running out for diplomacy.

Khamenei, who has the final say on all state matters, issued a religious decree in 2005 declaring nuclear weapons as "haram" or forbidden. The U.S. and its allies discount Iran's claims.

Clinton noted that the Turkish leaders had "lengthy discussions" with Iranian officials. But the U.S. and Turkey, a NATO ally, haven't seen eye to eye on the Iranian threat.

Erdogan has built close economic ties with Iran and has tried to act as a go-between on the nuclear program, breaking ranks with world powers in 2010 by attempting to find a separate settlement with Tehran. The international talks have included the U.S., Britain, France, Germany, Russia and China.

Erdogan's comments upon returning from Tehran suggested further distancing from U.S. and European positions, repeating Khamenei's verdict on weapons of mass destruction.

"After such a statement from such a person, I cannot claim that Iran is building a nuclear weapon," the Turkish leader said. "Does it not have the right to implement a nuclear program for peaceful means?"

<http://www.seattlepi.com/news/article/Clinton-to-Iran-Show-that-nuclear-arms-not-sought-3450855.php>

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Yonhap News – South Korea  
March 31, 2012

## **U.S. Discussing Next Steps on N. Korea: State Dept.**

By Lee Chi-dong

WASHINGTON, March 30 (Yonhap) -- The United States is talking with its allies and others about what to do if North Korea launches a long-range rocket in mid-April in defiance of repeated warnings, an official said Friday.

Mark Toner, deputy spokesman for the State Department, said it is a matter of mutual trust, especially after a Feb. 29 deal between Washington and Pyongyang on nascent confidence-building measures.

"This launch, if it goes forward, would call into question the credibility of all North Korea's commitments," he said at a press briefing.

Under the so-called leap year accord, the communist nation agreed to a moratorium on nuclear testing and long-range missile launches in return for the delivery of 240,000 tons of food assistance.

Two weeks later, however, the North caught the U.S. off guard by announcing that it would send a satellite into orbit between April 12 and 14, coinciding with the 100th anniversary of the birth of national founder Kim Il-sung. It cited a sovereign right to explore outer space, but the U.S. views it as a guise for the test of an intercontinental ballistic missile.

The North is prohibited from using ballistic missile technology under U.N. Security Council resolutions.

"We continue to consult with our allies and partners within the six-party process about next steps," Toner said in reference to the stalled nuclear talks, also involving South Korea, China, Russia and Japan. He did not specify what measures are being considered.

"We've been so vocal about asking or telling North Korea that this planned missile launch is a mistake, that they should back away from it, and that it's jeopardizing the leap year agreement," he added.

He said it's Japan's call to decide whether to make good on its threat to intercept the rocket.

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Japan's defense minister earlier ordered missile units to intercept the North's rocket if it or its debris is believed to threaten Japan.

Meanwhile, Toner said he is unaware of any diplomatic contact between the U.S. and the North since the announcement on the launch plan.

<http://english.yonhapnews.co.kr/northkorea/2012/03/31/39/0401000000AEN20120331000300315F.HTML>

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Asahi Shimbun – Japan

## **Destroyers, Missiles Leave for Okinawa Ahead of N. Korean Launch**

March 31, 2012

The Self-Defense Forces began moving Aegis destroyers and Patriot Advanced Capability-3 (PAC-3) surface-to-air guided missiles to Okinawa and other areas ahead of a North Korean rocket launch.

Pyongyang said it will launch an Earth observation satellite between April 12 and 16, but it is strongly suspected that the launch will really be a long-range ballistic missile test.

The Maritime SDF said the Aegis-class destroyer Kirishima left the Yokosuka Base in Kanagawa Prefecture on the morning of March 31. Two other Aegis destroyers, the Myoko at the Maizuru Base in Kyoto Prefecture and the Chokai at Sasebo Port in Nagasaki Prefecture, are also expected to leave port imminently.

Two of the ships will be deployed in the East China Sea around Okinawa, while the other is being sent to the Sea of Japan.

All three destroyers carry SM-3 sea-based interceptor missiles, for which launch tests were finished off Hawaii. The Kirishima and the Chokai were also deployed when North Korea fired a long-range ballistic missile in April 2009.

On the morning of March 30, Tokyo officially instructed the SDF to "destroy ballistic missiles or other objects" that appear to be falling toward Japan.

Large trailers carrying PAC-3 missiles and other vehicles left the Air SDF Hakusan base in Tsu, Mie Prefecture, after 9 p.m. on the same day. Officials said two PAC-3 missiles were being moved.

[http://ajw.asahi.com/article/behind\\_news/politics/AJ201203310027](http://ajw.asahi.com/article/behind_news/politics/AJ201203310027)

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Korea Times – South Korea

April 2, 2012

## **N. Korea to Hold Party Conference Next Week**

By Kim Young-jin

North Korea said Monday it will convene a rare conference of its ruling Workers' Party next week as the country prepares to observe the landmark 100 birth anniversary of its late founder Kim Il-sung.

A dispatch from the North's official Korean Central News Agency (KCNA) said the meeting would take place April 11 in Pyongyang.

The conference comes ahead of a controversial long-range rocket launch planned for between April 12 and 16. The launch, which the North claims is to put a satellite into orbit, is seen by many in the international community as cover for a long range missile test.

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Both the launch and the party gathering are tied to the anniversary, at which time the North has proclaimed it will emerge as a "strong and powerful state."

Analysts say North Korea's "great successor" Kim Jong-un could be named during the conference as general secretary of the ruling party, a key step for him to consolidate power following the death of his father Kim Jong-il in December.

The North has elected the new leader as a delegate to the conference, reflecting the country's "unanimous will," the KCNA said.

Though the younger Kim has been named commander-in-chief of the nation's 1.1 million-strong military, analysts say he still needs posts left vacant by his father to secure full power.

The conference will be held against the backdrop of Pyongyang's rocket launch, which if carried out would break U.N. Security Council resolutions. Seoul and Washington believe the test would further the North's efforts to develop a long-range missile to carry a nuclear warhead.

Recent satellite imagery showed the North preparing a launch pad in Dongchang-ri in the country's northwest, and a crane apparently loading equipment onto the gantry and trucks delivering fuel.

The Stalinist state says it will allow foreign experts and reporters to visit the launch site before observing the lift-off from the General Satellite Control and Command Center in Pyongyang.

The North claimed in 2009 it fired a rocket that put a satellite into orbit. But Seoul and Washington said it failed to do so and that it was meant to further Pyongyang's weapons program.

The plan has thrown a wrench into momentum to restart negotiations over the North's nuclear weapons program.

In addition to Seoul and Washington, Tokyo and Moscow have reaffirmed that the launch would violate U.N. Security Council resolutions, while China said it was working to persuade its ally to refrain from the act. Those countries, along with Pyongyang, comprise the six-party talks on denuclearizing the North.

Experts say Kim is being shepherded toward roles such as Workers' Party general secretary by an entourage of close aides including his aunt Kim Kyong-hui and her powerful husband Jang Song-thaek.

[http://www.koreatimes.co.kr/www/news/nation/2012/04/113\\_108216.html](http://www.koreatimes.co.kr/www/news/nation/2012/04/113_108216.html)

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London Telegraph – U.K.

## **North Korea Test Build-Up at Rocket Launch Site**

*New satellite images of a North Korean rocket launch site show a mobile radar trailer and rows of empty fuel and oxidiser tanks as preparations get underway for a test launch.*

Associated Press (AP)

02 April 2012

Analysis of images shows Pyongyang "has undertaken more extensive preparations for its planned April rocket launch than previously understood." The images were taken Wednesday.

A mobile radar trailer essential for any launch stands at the end of a new dirt road running from the entrance of the Tongchang-ri site; it has a dish antenna that's probably a radar tracking system, according to the institute's analysis. Radar tracking during a launch gives engineers crucial real-time information on the performance of the rocket's engines, guidance system and other details.

"These pictures are new and important evidence that the North's preparations for its rocket launch are progressing according to schedule," said Joel Wit, visiting fellow at the institute and editor of its website on North Korea, "38 North." The images are from Digital Globe, a commercial satellite photography company.

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North Korea says the launch, set for sometime between April 12 and 16, will fire a satellite into orbit to study the country's crops and natural resources. It is also meant to honor one of the country's most important days - the centennial of the April 15 birth of national founder Kim Il Sung.

Washington says North Korea uses such launches to test missile systems for nuclear weapons that could target the United States. While North Korea has conducted two nuclear tests, analysts don't believe it has yet mastered the technology needed to shrink a nuclear weapon and mount it onto a missile.

Any launch would be the end of a Feb. 29 accord between North Korea and the United States that would ship U.S. food aid to the impoverished North in exchange for a moratorium on missile and nuclear tests, as well as a suspension of nuclear work at its main Yongbyon nuclear facility. The U.S. says plans to provide food to the North are already on hold.

The launch would be the fourth of its kind since 1998, when Pyongyang sent a long-range rocket hurtling over Japan. The last rocket launch, in 2009, led to U.N. condemnation and the North walking away from six-nation nuclear disarmament talks; weeks later, Pyongyang carried out its second nuclear test.

The planned launch could demonstrate if North Korea is closer to perfecting a multistage rocket that could hit the United States. Analysts fear a new launch could spur a chain of events that would mirror 2009 and send tensions soaring again on the Korean peninsula. A year after the last test, 50 South Koreans were killed in attacks blamed on North Korea. The new satellite images show what are likely empty fuel and oxidizer tanks in previously empty, fenced-in areas, the institute's analysis says.

"The tanks were apparently dumped in these locations after their contents were transferred to buildings that will directly fuel the first stage of the Unha-3" rocket, according to the analysis. "The large number of apparently empty tanks indicates that the transfer process may have been close to completion."

The announcement of the latest launch came just two weeks after the U.S.-North Korean nuclear-freeze-for-aid agreement, which had buoyed hopes for improved relations between the wartime enemies under new North Korean leader Kim Jong Un. He came to power after his father Kim Jong Il died of a heart attack in December.

North Korea's ruling party announced Monday that it will hold an important political conference April 11 in Pyongyang. Kim Jong Un is expected to gain new titles at the conference, which comes shortly before the planned launch.

The North's new Tongchang-ri rocket launch site is about 35 miles from the Chinese border city of Dandong. North Korea has said that the southerly flight path from the site was chosen so debris wouldn't hurt neighboring countries.

But there has been widespread fear over falling debris from the rocket. Japan's defense minister has ordered missile units to intercept the rocket if it or its fragments threaten to hit Japan. Seoul has also warned it might shoot down any parts of the North Korean rocket heading for South Korean territory.

South Korean defense officials have said the main body of the three-stage rocket was transported to a building in Tongchang-ri.

<http://www.telegraph.co.uk/news/worldnews/asia/northkorea/9180224/North-Korea-test-build-up-at-rocket-launch-site.html>

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Chicago Tribune

## **IAEA Seeks More Info before any North Korea Trip**

By Reuters

April 2, 2012

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VIENNA, April 2 (Reuters) - The U.N. nuclear watchdog said on Monday it needed more information before it could take up an invitation from North Korea to visit the country three years after its inspectors were expelled.

The International Atomic Energy Agency (IAEA) began talks with North Korea last month over a possible visit.

The invitation appeared to be an attempt by Pyongyang to show it was serious about a nuclear moratorium deal with the United States even though it drew international condemnation for saying it would launch a long-range rocket carrying a satellite.

"The IAEA sent a response to the DPRK on 30 March," the agency's spokesman Greg Webb said in an email. North Korea is known formally as the Democratic People's Republic of Korea (DPRK).

He said issues that would need to be discussed with the reclusive Asian nation included "the timing of the visit; level and composition of the delegation; technical points and other information for the agency's review".

On March 16 North Korea announced plans for a satellite launch this month using ballistic missile technology the United States says is banned by United Nations sanctions. Washington in turn suspended planned food aid to North Korea.

Asked what impact such a satellite launch would have on the potential IAEA visit, Webb said: "We are following up the invitation we received in a constructive spirit. You will appreciate that we can't simply jump on a plane and go, there are a number of technical aspects that require proper preparation."

It is unclear how much scope for inspections the IAEA would get despite Pyongyang's assurances it would grant access to the Yongbyon nuclear complex to verify a moratorium on uranium enrichment.

The country has limited the inspectors' access during two previous periods.

North Korea expelled the IAEA a decade ago when a 1994 deal with Washington unravelled. It threw the organisation out again in April 2009 after rejecting intrusive inspections agreed under a 2005 aid deal with five regional powers.

*Reporting by Michael Shields; Editing by Alessandra Rizzo*

<http://www.chicagotribune.com/sns-rt-nuclear-koreaiaeaal6e8f2616-20120402,0,1542920,full.story>

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Kansas City Star  
Tuesday, April 03, 2012

## **US Faces Limited Options on North Korea**

By MATTHEW PENNINGTON, Associated Press

Despite tough talk from President Barack Obama, the United States and its allies have limited options if North Korea goes ahead with its planned long-range rocket launch this month.

Washington is likely to take the matter to the U.N. Security Council, analysts say, and could tighten its already tough sanctions. But such efforts would struggle without support from China, which can be expected to resist any moves that might threaten the stability of its neighbor.

There's also deep uncertainty about where turning the screws further on North Korea would lead. After the Security Council condemned its previous long-range rocket launch in 2009, the country responded by kicking out U.N. nuclear inspectors, pulling out of aid-for-disarmament negotiations and conducting its second detonation of an atomic device.

"At minimum, there has to be a statement of criticism" at the Security Council, said Gordon Flake, a Washington-based Korea analyst. "The question is how North Korea will react, and history suggests it won't react well."

**Issue No. 994, 03 April 2012**

*United States Air Force Counterproliferation Research & Education | Maxwell AFB, Montgomery AL  
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The stakes are higher than they had been in 2009 since the potential for tensions on the Korean peninsula to escalate into conflict are greater than they were then. South Korea's government came under heavy domestic criticism for what was seen as a weak response to a North Korean artillery barrage that killed four people on a front-line island in 2010. Earlier that year, North Korea was believed to have torpedoed a South Korean warship, killing 46. The North denied responsibility.

North Korea says the missile launch planned for the middle of this month is intended to place an observation satellite into orbit. But the U.S. and others view the launch as a cover for a test of an intercontinental ballistic missile that one day could carry a nuclear warhead.

Crucially for Washington, if the three-stage Unha-3 rocket works, it could demonstrate that parts of the United States are within North Korean missile range.

The launch would violate both a U.N. ban and an accord the impoverished country reached with Washington on Feb. 29, under which North Korea would freeze nuclear activities and observe a moratorium on nuclear and long-range missile tests in exchange for about 265,000 tons of food aid.

The launch plans, disclosed a little more than two weeks after the accord was announced, undermined what little faith Washington and Seoul had in North Korea's sincerity about talks on its nuclear program. It also all but quashed the fleeting prospect that the nation would change after the December death of longtime ruler Kim Jong Il.

Obama, facing re-election and accused by opposition Republicans of naiveté for reaching out to North Korea, pointedly visited the heavily militarized Korean border last week during a trip to South Korea for a nuclear summit - a visit North Korea's new leader, Kim Jong Un, had made previously from the northern side.

Obama implored the North's leaders "to have the courage to pursue peace," but warned that unless they changed their ways the country would face "more isolation." But neither he nor other administration officials have said what steps the U.S. will take if North Korea carries out the missile launch.

The U.S. and allies, including Japan and South Korea, could seek to clamp down further on the North's illicit weapons trade and impose additional financial and banking restrictions that have hurt North Korea in the past.

"The U.S. is highly likely to unveil another round of sanctions to send a clear political message to North Korea," said John Park, a Northeast Asia specialist at Harvard University's Belfer Center.

Fears about the launch have spread farther afield than previously. The Philippines has expressed concern about falling debris. Indonesia says the launch would undermine regional stability. Russia and China - which have longstanding ties with the North - have urged Pyongyang to rethink its plans. Vietnam has called for North Korea to comply with Security Council resolutions.

The breadth of criticism reflects not just recognition that the launch would violate U.N. resolutions, but that this rocket, unlike previous launches, would head not eastward over Japan and into the relatively empty Pacific but toward busier waters off Southeast Asia.

The U.S. is urging China - North Korea's most important ally and trading partner - to nudge its neighbor into line, but the prospects appear slim. North Korea has touted the launch as a sign of the nation's strength and progress as it marks the centennial of the birth of its founder, Kim Il Sung. Recent satellite imagery showed preparations under way at the launch site.

The launch also may be an effort to consolidate the authority of Kim's grandson, Kim Jong Un, who is establishing a third generation of dynastic rule.

Park said that while China doubtlessly is frustrated by the North's conduct and has made a stronger public statement than it did before the 2009 launch, its ultimate concern will be to preserve the still-fragile government of Kim Jong Un and prevent a regime collapse on its own frontier.



He also doubted the U.S. would risk its own relations with China by taking a new step: penalizing Chinese companies that do business with North Korea.

*Associated Press writer Foster Klug in Seoul, South Korea, contributed to this report.*

<http://www.kansascity.com/2012/04/03/3532360/us-faces-limited-options-on-north.html>

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Times of India – India

## **First Test of Nuclear Missile Agni-V in a Fortnight: DRDO Chief**

By Rajat Pandit, Tamil News Network (TNN)

April 1, 2012

NEW DELHI: From the first test of Agni-V in a fortnight, an operational submarine-launched ballistic missile (SLBM) by 2013 and a missile shield for Delhi by 2014 to combat drones, quick-launch micro satellites and Star Wars-like laser weapons in the coming years, DRDO promises to deliver on all fronts.

Defence Research and Development Organization, with its 51 labs, of course, often makes tall claims only to consistently overshoot timelines and cost estimates. But DRDO chief Dr V K Saraswat on Saturday, at the ongoing "DefExpo-2012" here, was all gung-ho about the tactical and strategic weapon systems in the pipeline.

For starters, India's most-ambitious nuclear missile, Agni-V, which classifies as an ICBM (intercontinental ballistic missile) with a strike range of over 5,000-km, will be tested in mid-April, he said.

The three-stage Agni-V, with its advanced ring-laser gyros, composite rocket motors and highly accurate micro-navigation systems, comes close to the top American missiles in terms of technology, said Saraswat.

India will break into the exclusive ICBM club that counts just US, Russia, China, France and UK as its members, once the 50-tonne Agni-V is ready for induction by 2014-2015. The solid-fuelled missile, with a canister-launch system to impart greater operational flexibility, is crucial for India's nuclear deterrence posture since its strike envelope will be able to cover the whole of China.

Concurrently, said Saraswat, "The K-15 SLBM is now getting ready for the final phase of induction after its two recent tests (from submersible pontoons) were successful...We have done over 10 flights of it so far."

The 750-km-range K-15, followed by the 3,500-km K-4, will arm India's homegrown nuclear submarines. INS Arihant, which is undergoing trials now, for instance, has four silos on its hump to carry either 12 K-15s or four K-4s to complete India's long quest for "an operational nuclear weapon triad".

As for the two-tier ballistic missile defence (BMD) system, designed to track and destroy incoming hostile missiles both inside (endo) and outside (exo) the earth's atmosphere, Saraswat said its Phase-I would be completed by 2013 and Phase-II by 2016. "We will test the exo-atmospheric interceptor at 150-km altitude this year, which will be followed by an endo-atmospheric test at 30-km altitude," he said.

With the Capital identified as the first city to get its protection, DRDO has also begun work to add a third tier to the BMD system to intercept cruise missiles, artillery projectiles and the like at lower altitudes, in the line with the overall aim to achieve "near 100% kill or interception probability".

DRDO is now also focusing on "space security", with special emphasis on protecting the country's space assets from electronic, or physical destruction by "direct-ascent" missiles, in the backdrop of China developing advanced ASAT (anti-satellite) capabilities.

Work is also in progress to develop several directed energy weapons (DEWs), including a 25-kilowatt laser system to destroy incoming missiles in their terminal stage and a 100-kilowatt solid-state laser system to take out missiles in their boost phase itself.



"We also need to build the capability to provide launch-on-demand mini or micro satellites to our armed forces for communication and navigation facilities (in the event the country's satellites being destroyed by an enemy)," said the DRDO chief.

[http://articles.timesofindia.indiatimes.com/2012-04-01/india/31269640\\_1\\_agni-v-ballistic-missile-asat](http://articles.timesofindia.indiatimes.com/2012-04-01/india/31269640_1_agni-v-ballistic-missile-asat)

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Deccan Herald – India

Monday, April 2, 2012

## **N-Sub Chakra Takes India into P5 Club**

New Delhi: India will join an elite club of five nations on Wednesday when Russian-origin nuclear power submarine Nerpa will be inducted in the Indian Navy for the next 10 years.

Currently, only P5 – the USA, the UK, Russia, France and China – operate nuclear submarines. India will be the sixth country to join the league when Defence Minister A K Antony completes the formalities at a function inside a high-security dockyard in Vishakhapatnam.

Nuclear submarines have strategic advantages as they stay underwater for several months unlike the conventional diesel-electric submarines that needs to surface after a few hours if it runs in high speed.

The 8,140 tonne Russian-origin submarine – rechristened INS Chakra – can stay under water for 100 days and can travel at a speed in excess of 25 knots. "It's a valuable asset, which will bring a new range of capability. It will provide the Navy an ordnance delivery platform, rapidly anywhere in the Indian Ocean. That's the advantage," said a naval source.

The N-submarine's arsenal includes anti-ship and anti-submarine torpedoes, anti-ship missile and surface-to-air missile. However, it will not complete the nuclear triad, which India was aiming at since the 1998 nuclear tests. The triad will be realised only with the operationalisation of the indigenous SSN, INS Arihant. SSN (Arihant) is a hunter-killer whereas SSBN (Chakra) is a strategic platform designed for second strike capability.

The defence research and development organisation is developing two submarine-launched ballistic missiles for INS Arihant, which will complete the triad. DRDO Director General V K Saraswat said on Saturday that developments of both SLBMs are "progressing well".

"The K-15 SLBM is now getting ready for the final phase of induction after its two recent tests (from submersible pontoons) were successful. We have done over 10 flights of it," he said. The 750-km-range K-15, followed by the 3,500-km K-4, will arm Arihant, which is slated to be on patrol duty before December 2012 and, will complete the trial.

"Chakra will help in training the crew for indigenous programme. Even though, Chakra (SSBN) is different from Arihant (SSN), there are certain training overlaps," said an officer. Two more indigenous nuclear-powered submarines are being constructed.

Though, there are no official confirmation, INS Chakra is understood to have been leased out to India on a contract upwards of \$ 900 million. The platform was handed over to India on January 23 in Russia after which it began its voyage for Vishakhapatnam.

<http://www.deccanherald.com/content/238898/n-sub-chakra-takes-india.html>

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Hindustan Times – India

## **Pak Adds New Force to Safeguard Nuclear Arsenal**



USAF COUNTERPROLIFERATION CENTER  
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Press Trust of India (PTI)  
Islamabad, April 02, 2012

The new Special Response Force created to protect Pakistan's nuclear arsenal held a passing out parade today, with a top official saying that "all available resources" had been put in place to effectively guard the strategic assets.

The newly raised Special Response Force will be part of the security force of the Strategic Plans Division, which is responsible for maintaining the nuclear arsenal.

The passing out parade at the SPD Training Academy near Rawalpindi was reviewed by SPD chief, Lt Gen (retired) Khalid Ahmed Kidwai.

Kidwai said "all available resources have been put in place to safeguard the national strategic assets of the country comprehensively", according to a military statement.

The addition of the Special Response Force to SPD's security force "marked the achievement of a qualitative milestone in its rapid response capability", he said.

He highlighted the new force's responsibilities, saying: "You were chosen, well trained and have been tasked to perform a very important task, and I am sure, if ever challenged, your response actions will serve to make an example of any potential aggressor".

The military statement said this was the "first ever specialised force" to pass out of the SPD Training Academy.

The training was provided by highly qualified instructors from Pakistan's elite Special Services Group and other experts in security and crisis management.

The Pakistani military has been bolstering the strength of the SPD and its security force since last year.

The military has announced that it will induct an additional 8,000 personnel in the SPD to deter "all types of threats" to the country's nuclear weapons and materials.

Hundreds of personnel have completed their training since then.

<http://www.hindustantimes.com/world-news/Pakistan/Pak-adds-new-force-to-safeguard-nuclear-arsenal/Article1-834491.aspx>

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Daily Mail – U.K.

## **Putin Targets Foes with 'Zombie' Gun which Attack Victims' Central Nervous System**

- *Could be used against Russia's enemies and perhaps its own dissidents*

By Christopher Leake and Will Stewart

31 March 2012

Mind-bending 'psychotronic' guns that can effectively turn people into zombies have been given the go-ahead by Russian president Vladimir Putin.

The futuristic weapons – which will attack the central nervous system of their victims – are being developed by the country's scientists.

They could be used against Russia's enemies and, perhaps, its own dissidents by the end of the decade.

Sources in Moscow say Mr Putin has described the guns, which use electromagnetic radiation like that found in microwave ovens, as 'entirely new instruments for achieving political and strategic goals'.

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Mr Putin added: 'Such high-tech weapons systems will be comparable in effect to nuclear weapons, but will be more acceptable in terms of political and military ideology.'

Plans to introduce the super-weapons were announced quietly last week by Russian defence minister Anatoly Serdyukov, fulfilling a little-noticed election campaign pledge by president-elect Putin.

Mr Serdyukov said: 'The development of weaponry based on new physics principles – direct-energy weapons, geophysical weapons, wave-energy weapons, genetic weapons, psychotronic weapons, and so on – is part of the state arms procurement programme for 2011-2020.'

Specific proposals on developing the weapons are due to be drawn up before December by a new Defence Advanced Research Projects Agency.

Research into electromagnetic weapons has been secretly carried out in the US and Russia since the Fifties. But now it appears Mr Putin has stolen a march on the Americans. Precise details of the Russian gun have not been revealed. However, previous research has shown that low-frequency waves or beams can affect brain cells, alter psychological states and make it possible to transmit suggestions and commands directly into someone's thought processes.

High doses of microwaves can damage the functioning of internal organs, control behaviour or even drive victims to suicide. Anatoly Tsyganok, head of the Military Forecasting Centre in Moscow, said: 'This is a highly serious weapon.'

'When it was used for dispersing a crowd and it was focused on a man, his body temperature went up immediately as if he was thrown into a hot frying pan. Still, we know very little about this weapon and even special forces guys can hardly cope with it.'

The long-term effects are not known, but two years ago a former major in the Russian foreign intelligence agency, the GRU, died in Scotland after making claims about such a weapons programme to MI6.

Sergei Serykh, 43, claimed he was a victim of weapons which he said were 'many times more powerful than in the Matrix films'.

Mr Serykh died after falling from a Glasgow tower block with his wife and stepson in March 2010. While his death was assumed to be suicide, his family fear there was foul play.

Last night the Ministry of Defence declined to comment.

<http://www.dailymail.co.uk/news/article-2123415/Putin-targets-foes-zombie-gun-attack-victims-central-nervous-system.html?ito=feeds-newsxml>

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Scotsman – U.K.

## **Scottish Independence: American Think-Tank to Consider 'Scottish Question' – a No-Nukes Nation**

By DAVID MADDIX  
Monday, 2 April 2012

THE UK must consider nuclear disarmament if Scotland becomes independent and removes Royal Navy submarines from the Clyde, according to an international think-tank.

The Washington DC-based Carnegie Endowment for International Peace is holding a seminar tomorrow entitled "The Scottish Question and the Future of UK Nuclear Forces".

The think-tank stated: "A referendum on Scottish independence scheduled for autumn 2014 could have profound ramifications for the UK's nuclear deterrent and for US-UK relations.

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“The UK’s entire nuclear force, made up of Trident missiles on Vanguard-class submarines, is operated out of two bases in Scotland.

“In the absence of a suitable option for re-basing the submarines in England or Wales, the UK’s Royal Navy must consider a range of alternatives – including disarmament.”

The Carnegie Endowment, the oldest international affairs think-tank in the United States, was founded by Dunfermline-born Scottish-American industrialist Andrew Carnegie in 1910, to “hasten the abolition of war”.

Its present board of trustees includes former United Nations secretary-general Kofi Annan.

Tomorrow’s seminar will feature St Andrews University professor of international relations William Walker, who has co-written a book on “nuclear weapons and the Scottish question”, discussing the independence referendum’s implications for the United Kingdom’s nuclear deterrent.

He said: “I think that the Americans are only just waking up to what Scottish independence might mean for the future of the UK’s nuclear deterrent.

“They need to know what the future of Trident is in the UK, not just for defence reasons, but also because the two countries are working together on replacing Trident and, obviously, if the UK is no longer part of that it will have implications for the project.”

According to the Scottish Government’s “Your Scotland, Your Voice” consultation paper, an independent Scotland “would become a non-nuclear weapons state”.

It says: “The UK’s nuclear deterrent would not continue to be based in an independent Scotland and a Scottish Government would need to work in partnership with the rest of the United Kingdom to ensure an appropriate transition and relocation.”

Prof Walker insisted that he believed the future of Faslane was not clear should Scots vote for independence and that it might not mean the end of Trident.

He said that he believed there was no realistic alternative in the UK to Faslane and Coulport as a base for the Vanguard submarines, which means that with independence the facility would either be shut, bringing an end to the UK deterrent, or a compromise would be reached with a new Scottish Government.

He said: “It is possible that a new Scottish Government would come to a compromise in the face of severe pressure from Washington and London, but it is hard to predict.”

However this position was last night dismissed by the SNP, which said one of the attractions of independence was that it was the only constitutional outcome that allowed for the removal of Trident from Scotland.

<http://www.scotsman.com/news/scottish-independence-american-think-tank-to-consider-scottish-question-a-no-nukes-nation-1-2210346#>

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Bloomberg BusinessWeek

## **Scientists Say No Need for Nuclear Tests, Boosting Obama**

By Viola Gienger  
March 30, 2012

The U.S. has the technology needed to detect nuclear tests by other nations and verify the reliability of its own arsenal without resuming nuclear test explosions, a scientific panel said.

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The findings, in a report released today by the U.S. National Academy of Sciences, might help President Barack Obama's push for Senate ratification of the Comprehensive Nuclear Test Ban Treaty, an expected administration goal if Obama wins a second term.

Still, the debate may pivot on politics more than on science. Republican opponents have said they'll fight another push for approval because alternative means of monitoring may not always be sufficient. Also, they say the agreement binds the U.S. without adequate ways for enforcement on others. The Senate rejected the treaty during the Clinton administration in 1999, and President George W. Bush never sought ratification, although the U.S. continued to abstain from testing.

The National Academy panel members "have strengthened the case technically," said Sidney Drell, professor emeritus of theoretical physics at Stanford University in California, who testified in favor of the treaty in 1999. "I would just hope there'll be a serious, non-partisan discussion" of the treaty's merits, he said.

### **Technical Capability**

The U.S. has the technical capability to maintain safe, reliable nuclear armaments "so long as the nation is fully committed to securing its weapons stockpile and provides sufficient resources for doing so," said Ellen Williams, chief scientist at BP Plc (BP/) and chairwoman of the panel. "In addition, U.S. and international technologies to monitor weapons testing by other countries are significantly better now than they were a decade ago."

Seismology has advanced enough to detect an underground blast "well below 1 kiloton in most regions," the Academy said in a statement accompanying the report. The atomic bombs dropped on Hiroshima and Nagasaki in Japan during World War II had yields of 10 to 20 kilotons, the Academy said.

American scientists understand nuclear weapons "a lot better than we did 10 years ago," said Drell, a senior fellow at the Hoover Institution policy group.

The National Academy of Sciences panel said the U.S. program for verifying the safety and reliability of the stockpile without testing has made "significant advances" in knowledge and expertise since a similar 2002 report, including new research facilities.

### **Voluntary Moratorium**

The panel's conclusion, which didn't take a position on treaty ratification, is the second time in 10 years that an Academy panel concluded that nuclear testing isn't necessary to ensure the reliability of the stockpile. The U.S. has observed a voluntary moratorium on nuclear test explosions since 1992.

The main reason the U.S. might need to resume nuclear testing would be an adversary's steps requiring the U.S. to produce a type of bomb it hasn't previously tested, the panel said. In that case, the U.S. could withdraw from the treaty, citing national security concerns, the committee said.

The test-ban treaty is among the biggest goals on Obama's agenda for reducing the nation's reliance on nuclear weapons. Most of those aims have been delayed to a possible second term after a new treaty with Russia in 2010 that aimed for modest cuts in both sides' stockpiles won just 13 Republican votes in the Senate.

Proponents of U.S. ratification for the test-ban treaty say it would prompt other nations to follow suit and then coerce the remaining outliers to fall into line. The U.S. and seven other countries needed for the treaty to go into force have withheld ratification: China, Israel, India, Pakistan, Iran, North Korea and Egypt. China has said it would ratify the treaty once the U.S. does so, Drell said.

### **'Not in Good Company'**

"We're not in good company," said Drell, who wasn't on the National Academy panel.

U.S. ratification probably would persuade India to ratify, which would encourage Pakistan to take the same step, said Daryl Kimball, executive director of the Arms Control Association advocacy group in Washington.



"U.S. ratification would, in the very least, prompt these other holdout states to ratify and would reinforce the existing global taboo against testing," Kimball said in an interview before the report was released.

While supporters of a global test ban say the result would stem the spread of nuclear weapons, opponents of treaty ratification say that's unrealistic.

### **Unlikely to Follow**

North Korea and Iran are unlikely to follow suit, former Central Intelligence Agency Director James Woolsey and a colleague wrote in a report issued this month by the National Institute for Public Policy. Explosive testing isn't even needed to develop more primitive nuclear devices, they said, a point also made by the National Academy panel.

"Ratification is unlikely to rally international cooperation against nuclear proliferation," Woolsey and Institute President Keith Payne said in the Washington group's report. Woolsey is an adviser to Republican presidential candidate Newt Gingrich, and Payne was a deputy assistant secretary under former Defense Secretary Donald Rumsfeld.

"The prospective negative consequences of ratification are not trivial," they wrote, citing the U.S. ability to deter adversaries and extend similar protection to allies.

### **Talking for 38 Years**

The Academy's new assessment was conducted during almost three years by a nine-member committee that includes Director Emeritus Bruce Tarter of Lawrence Livermore National Laboratory in California, former U.S.-Russia nuclear weapons treaty negotiator Linton Brooks, and Richard Garwin, a former director of IBM Corp.'s (IBM) Watson Laboratory who helped develop the first hydrogen bomb.

President Dwight D. Eisenhower initiated negotiations for a nuclear-test ban with the then-Soviet Union and the U.K. in 1958. The talks took 38 years, and President Bill Clinton made the U.S. among the first to sign the treaty in 1996. The number of signatories has grown to 182 of 196 nations, and Indonesia last month became the latest to ratify the pact, bringing the total ratifications to 157.

<http://www.businessweek.com/news/2012-03-30/scientists-say-no-need-for-nuclear-tests-boosting-obama>

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London Guardian – U.K.

## **US Draws up Plans for Nuclear Drones**

*Technology is designed to increase flying time 'from days to months', along with power available for weapons systems*

By Nick Fielding

Monday, 2 April 2012

American scientists have drawn up plans for a new generation of nuclear-powered drones capable of flying over remote regions of the world for months on end without refuelling.

The blueprints for the new drones, which have been developed by Sandia National Laboratories – the US government's principal nuclear research and development agency – and defence contractor Northrop Grumman, were designed to increase flying time "from days to months" while making more power available for operating equipment, according to a project summary published by Sandia.

"It's pretty terrifying prospect," said Chris Coles of Drone Wars UK, which campaigns against the increasing use of drones for both military and civilian purposes. "Drones are much less safe than other aircraft and tend to crash a lot. There is a major push by this industry to increase the use of drones and both the public and government are struggling to keep up with the implications."



The highly sensitive research into what is termed "ultra-persistence technologies" set out to solve three problems associated with drones: insufficient "hang time" over a potential target; lack of power for running sophisticated surveillance and weapons systems; and lack of communications capacity.

The Sandia-Northrop Grumman team looked at numerous different power systems for large- and medium-sized drones before settling on a nuclear solution. Northrop Grumman is known to have patented a drone equipped with a helium-cooled nuclear reactor as long ago as 1986, and has previously worked on nuclear projects with the US air force research laboratory. Designs for nuclear-powered aircraft are known to go back as far as the 1950s.

The research team found that the nuclear drones were able to provide far more surveillance time and intelligence information per mission compared to other technologies, and also to reduce the considerable costs of support systems – eliminating the need, for example, for forward bases and fuel supplies in remote and possibly hostile areas.

A halt has been called to the work for now, due to worries that public opinion will not accept the idea of such a potentially hazardous technology, with the inherent dangers of either a crash – in effect turning the drone into a so-called dirty bomb – or of its nuclear propulsion system falling into the hands of terrorists or unfriendly powers.

Sandia confirmed that the project had been completed: "Sandia is often asked to look at a wide range of solutions to the toughest technical challenges. The research on this topic was highly theoretical and very conceptual. The work only resulted in a preliminary feasibility study and no hardware was ever built or tested. The project has ended."

According to a summary of the research published by the Federation of American Scientists, an independent thinktank, computer-based projections were used to test the concepts. "Based on requirements and direction provided by Northrop Grumman, Sandia performed focused studies to translate stated needs into conceptual designs and processes that could be transferred easily from Sandia to industry design and production personnel," the document says.

So sensitive is the issue that the summary does not spell out the fact that it is referring to a nuclear-powered drone, referring instead to "propulsion and power technologies that went well beyond existing hydrocarbon technologies". However, the project's lead investigator at Sandia, Dr Steven Dron, is well known as a specialist in nuclear propulsion, having co-chaired a session at the 2008 Symposium on Space Nuclear Power and Propulsion, held at the University of New Mexico in 2008.

The research summary also stated that the results "were to be used in the next generation of unmanned air vehicles used for military and intelligence applications", where they "would have provided system performance unparalleled by other existing technologies".

It added that "none of the results will be used in the near-term or mid-term future", due to political constraints.

The potential impact of nuclear-powered drones can be gauged by comparing them with existing aircraft such as the MQ-9 Reaper, which is used extensively in Afghanistan and Pakistan in operations against insurgents. The Reaper presently carries nearly two tonnes of fuel in addition a similar weight of munitions and other equipment and can stay airborne for around 42 hours, or just 14 hours when fully loaded with munitions.

Using nuclear power would enable the Reaper not only to remain airborne for far longer, but to carry more missiles or surveillance equipment, and to dispense with the need for ground crews based in remote and dangerous areas.

Coles believes the increasing sophistication of drones poses many threats: "As they become low-cost, low-risk alternatives to conventional warfare, the threshold for their use will inevitably drop. The consequences are not being thought through."

<http://www.guardian.co.uk/world/2012/apr/02/us-plans-nuclear-drones?newsfeed=true>

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Voice of America (VOA)



April 02, 2012

## Next Arms Talks between US, Russia Might Involve Tactical Weapons

By André de Nesnera, Washington

The New Strategic Arms Reduction Treaty, or New START [in force since February 5], deals only with U.S. and Russian long-range nuclear weapons. There's a question about whether Washington and Moscow will now focus their attention on short-range, or tactical, nuclear weapons.

The New START Treaty sets a limit of 1,550 deployed strategic, or long-range, nuclear weapons on each side. What the new treaty does not address is the issue of tactical, or short-range, nuclear weapons.

Joseph Cirincione is the president of the Ploughshares Fund, a foundation focusing on nuclear weapons policy.

"There is no difference in the explosive power of tactical versus strategic nuclear weapons. They are both hydrogen bombs. They are both weapons that are 10, 20, 50 times more powerful than the bombs the U.S. dropped on Hiroshima. The difference is the range," said Cirincione. "What's the purpose of the weapons? So we consider strategic weapons bombs that are placed as warheads on long-range missiles or carried by bombers that can span the oceans. Tactical weapons are considered useful in battlefield fighting - so this would be short-range artillery, short-range aircraft, short-range missiles."

Experts say neither the United States nor Russia has provided detailed information about their stockpiles of tactical nuclear weapons.

Daryl Kimball, Executive Director of the Arms Control Association, a private research organization, described what is known about the U.S. arsenal.

"The United States has a number of tactical nuclear weapons stored in the United States - but it also has about 180 gravity bombs, nuclear gravity bombs, at five bases in European NATO allies: Italy, Turkey, the Netherlands, Germany and Belgium. And these weapons are, generally speaking, stored in bunkers. They are not deployed on the F-16 fighters or the Tornado fighter bomber jets that can deliver them," Kimball.

### Russia's tactical nuclear weapons supply

Analysts say Russia has between 2,000 and 4,000 tactical nuclear weapons - but not all available for operational use. Many are awaiting dismantlement and others are in deep storage bunkers.

David Holloway, Russia and arms control expert at Stanford University, gives one reason for Moscow's vast superiority in tactical nuclear weapons.

"In the 1990s, when their conventional forces - the army, basically - fell apart, they made the argument that tactical nuclear weapons would compensate for the weakness in conventional forces, just in the way that NATO did during the Cold War. NATO took the position that tactical nuclear weapons would compensate for its inferiority in conventional forces," said Holloway.

Kimball said another reason has to do with China.

"They [the Russians] see tactical nuclear weapons as a way to counterbalance China's larger number of conventional forces on their eastern border. So the Russians have retained, since the Cold War, a relatively larger number of deployed tactical nuclear weapons than the United States," he said.

### Cold War mentality

Many analysts, including Joseph Cirincione, say the tactical nuclear weapons are a throwback to the Cold War.

"Absolutely. These weapons have no military utility. It's inconceivable that NATO would face a military mission that would require the use of a nuclear bomb. Just think about it - the U.S. hasn't used a nuclear weapon in 67 years and it has fought the Korean war, the Vietnam war, two Iraq wars, the Afghanistan war. It has faced threats from a wide



variety of countries - never, never did it seriously consider using a nuclear weapon. And now, with the end of the Cold War, it's hard to imagine a requirement for one nuclear weapon, let alone 10 nuclear weapons or 200 nuclear weapons."

Many experts say the next round of arms control negotiations between Washington and Moscow might involve the issue of tactical nuclear weapons. Analysts say that is not expected to happen anytime soon, though, given the presidential election year in the United States.

<http://www.voanews.com/english/news/europe/Next-Arms-Talks-Between-US-Russia-Might-Involve-Tactical-Weapons-145825895.html>

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Russia Beyond the Headlines – Russia

## **Obama to Host Putin at Camp David**

*Nuclear arms reduction almost certain to be on the agenda when the presidents meet in late May.*

April 3, 2012

By Andrei Ilyashenko

Vladimir Putin will have his first meeting with Barack Obama in his capacity as president at the U.S. president's residency Camp David in late May. The U.S. president's comments at the nuclear summit in Seoul, South Korea, implied that the agenda will focus on nuclear arms reduction.

Speaking in front of students in Seoul, Obama said he intended to discuss arms reductions with his Russian counterpart, and Deputy National Security Adviser Ben Rhodes confirmed that while in Seoul the U.S. president had offered to start talks on reducing non-deployed strategic nuclear warheads and tactical nuclear weapons. To be sure, the issue of American missile defense deployment, which Moscow considers to be the biggest threat to its security, will get its share of attention.

In December 2010, while ratifying the New START treaty, the comments coming out of the U.S. Congress indicated that the next move in arms reduction would be to cut tactical nuclear weapons stockpiles. In February, the U.S. media reported that the Obama Administration was preparing new proposals on strategic arms cuts. Various options are on the table for potentially deep cuts of deployed long-range nuclear weapons, including the possibility of bringing down the number of deployed warheads. Currently each nation is allowed up to 1,550.

Putin's reaction to this information was unequivocal: "further steps (in the nuclear security field) must be comprehensive in character, and all the nuclear powers should be involved in this process. We cannot disarm endlessly while some other nuclear powers are arming themselves. That is not an option." In other words, future disarmament talks can only be multilateral.

There is one other aspect. Putin made it clear that nuclear disarmament must not be used to achieve superiority in other types of weapons. He stressed that Russia must achieve parity in the field of precision weapons, which have potential comparable to that of weapons of mass destruction. "We will only give up nuclear weapons when our forces have such complexes," Putin said.

What's more, Russia is insisting that offensive weapons reductions be linked to American missile defense plans.

This is not to say that the Camp David meeting is doomed to failure. Actually, Obama's private comments to Medvedev, picked up by a live mike, had a note of optimism. Obama asked Medvedev to pass on to Vladimir Putin a request not to press too hard for a solution to the missile defense problem. The U.S. president said: "On all these issues, but particularly missile defense, this, this can be solved but it's important for him to give me space. This is my last election. After my election I have more flexibility."



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At first glance, the comments were a gift to Obama's rivals in the presidential race. Republican frontrunner Mitt Romney, criticized Obama for being soft, calling Russia America's "number one geopolitical foe." Surely, Romney, who, according to the latest polls, trails Obama by 10 percent, needs such exercises in rhetoric.

But it turned out that most Americans consider Mitt Romney's words about Russia more provocative than Obama's remarks on the fringes of the Seoul summit. This much is clear from the results of a *Chicago Tribune* and *U.S. News* poll in which 72 percent of respondents said that the remarks of Romney did more harm than Obama's.

It is also important to bear in mind that all the major U.S. initiatives on building up or reducing strategic arms are the joint product of Republicans and Democrats. Democrat Bill Clinton in 1996 resurrected Republican Ronald Reagan's plans to create a missile defense system and George Bush Jr., a Republican, carried them so far as to withdraw from the 1972 Anti-Ballistic Missile Treaty and to start building up position areas for anti-missile defense in Poland and the Czech Republic. For his part, Democrat Obama used an "adaptive approach" that would allow Russia to take part in the creation of a European missile defense system. The differences are only in tactics, speed and the sequence of moves.

Even so, Obama's off-hand remark shows that the White House is, in principle, committed to negotiating. And the confidential tone of the conversation is precisely what Russian-American relations have lacked during the past year. In any case, it is clear that nobody stands to gain from confrontation.

[http://rbth.ru/articles/2012/04/03/obama\\_to\\_host\\_putin\\_at\\_camp\\_david\\_15240.html](http://rbth.ru/articles/2012/04/03/obama_to_host_putin_at_camp_david_15240.html)

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Brookings Institution  
OPINION/Up Front Blog

## **New Support for the Comprehensive Test Ban Treaty**

By Steven Pifer, *Senior Fellow, Foreign Policy, Center on the United States and Europe*

*The Brookings Institution*

March 30, 2012

In 1996, the United States became the first country to sign the Comprehensive Test Ban Treaty (CTBT), which would ban all nuclear explosions. The Senate, however, failed to ratify the treaty in 1999. If President Obama is reelected, he may ask the Senate to consider it again. On March 30, the National Research Council released a study that bolsters the case for ratification.

Two concerns underlay the Senate vote not to ratify the treaty in 1999: the reliability of the U.S. nuclear deterrent absent testing, and the U.S. ability to verify that other states observed the test ban. The National Research Council report addresses both issues.

Ellen Williams, who chaired the committee that prepared the report, stated that the United States "has technical capabilities to maintain safe, reliable nuclear weapons into the foreseeable future without the need for underground weapons testing." This results from the Stockpile Stewardship Program, which was launched in the 1990s to maintain the deterrent without testing. That program has produced significant knowledge about the reliability, sustainability and operation of U.S. nuclear weapons, including yielding information that U.S. scientists never discovered in 47 years of tests. For example, we now know that the nuclear "pits"—the plutonium packages that are the heart of modern U.S. nuclear weapons—can last 85-100 years, far longer than originally believed.

The National Research Council study also notes that the techniques for monitoring a comprehensive test ban have improved dramatically over the past decade and can reliably detect nuclear explosions with yields well below one kiloton—the equivalent of one thousand tons of TNT—and in some cases much smaller. In addition to U.S. national means, the Preparatory Commission for the CTBT Organization has brought on line more than 80 percent of its planned international monitoring system, which will ultimately consist of 337 facilities worldwide. When the North Koreans tested a small nuclear device in 2006, 61 international monitoring stations reported the event. The report

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adds that, while there may be ways to “hide” a very small nuclear test, such test scenarios involve serious costs and practical difficulties, might nevertheless be detected, and would not require that the United States resume nuclear testing.

The CTBT will enter into force only once 44 designated “nuclear capable” states have ratified. Thirty-five states have thus far ratified the treaty. In not doing so, the United States finds itself in the company of China, Pakistan, Iran and North Korea.

There are two other reasons why CTBT’s ratification is worth considering.

First, no one—not even the staunchest CTBT opponent—has advocated that the United States resume nuclear testing now. But would it even be possible politically? The last U.S. underground nuclear explosion took place in 1992 at the Nevada test site, 40 miles northwest of Las Vegas. A lot has changed in Nevada over the past 20 years. The population of Las Vegas numbers almost three times what it was then. The state’s politicians fought tooth and nail to block a nuclear waste repository at the former test site. Does anyone think Nevada would welcome resumed nuclear weapons testing? And if not there, is there another state eager to host nuclear tests?

Second, the CTBT would lock in a huge U.S. advantage in knowing more about nuclear weapons and nuclear tests than anyone else. In the years between 1945 and 1992, the United States conducted some 1030 nuclear tests—as many as all other nuclear weapons states combined.

And U.S. scientists learned more from tests. Twenty-four years ago, when serving at the American embassy in Moscow, I accompanied a team of U.S. testing experts to the Soviet test site at Semipalatinsk. At one point, our Soviet hosts showed us a three-foot diameter hole dropping hundreds of feet into the earth, ready to receive a nuclear device for an upcoming test. One U.S. expert commented that “the Russians sure will be surprised when they come to Nevada ... we drill our vertical shafts ten feet in diameter.” Why so large, when modern U.S. nuclear weapons are relatively compact? Because the larger diameter of the hole gave U.S. testers a much greater surface area on which to hang instruments to collect data from the blast in the instant before the instruments themselves were vaporized.

The CTBT would codify the current reality in the United States: no plausible need to resume testing and no political possibility that we could. Improved verification means very high confidence that someone else’s test would be detected. And the CTBT would lock in an important U.S. nuclear advantage. This should not be a difficult question.

[http://www.brookings.edu/opinions/2012/0330\\_nuclear\\_pifer.aspx](http://www.brookings.edu/opinions/2012/0330_nuclear_pifer.aspx)

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Bloomberg News  
OPINION/Editorial

## **U.S. Nuclear Arsenal Doesn’t Need Tests to Deter Enemies**

By Editors  
April 1, 2012

It’s horrifying even to imagine the U.S. finding itself in a position where it must use an atomic bomb against an enemy. However, in the event such a crisis occurs, we must be certain the weapon will work.

Equally important, the main purpose of the U.S. nuclear-weapons program today is to provide a deterrent against potential threats, and that can only be achieved if we are confident in our stockpile and aware of the risks we face around the world.

Fortunately, as a report from the National Academy of Sciences last week helped make clear, there is a way to improve security on both fronts: ratifying the Comprehensive Nuclear Test Ban Treaty.

The CTBT, which bans all tests of nuclear weapons, was adopted by the United Nations General Assembly in 1996, and President Bill Clinton was the first world leader to sign it. It was shelved, however, by the Republican-held Senate in

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1999, over some legitimate concerns: that computer modeling alone might not ensure the integrity of the U.S. stockpile, and that global monitoring systems were not up to the task of detecting explosions around the globe.

But the world has changed. Seismic science has advanced tremendously -- North Korea's very low-yield underground tests in 2006 and 2009, for example, were picked up by South Korean, American and other detection systems. The CTBT calls for an international web of 321 monitoring stations and 16 radionuclide laboratories, which is about 75 percent complete.

As for maintaining our arsenal, the U.S. has not seen the need to conduct a test since 1992. Last week's report stated that the U.S. is "now in a better position than at any time in the past to maintain a safe and effective nuclear weapons stockpile without testing and to monitor clandestine nuclear testing abroad."

It's simply hard to see how ratifying the treaty and pushing for its global adoption would harm U.S. interests. And, if it did, the treaty has an opt-out clause in cases of "supreme national interest."

The more pertinent objection is that it would do little to curb the behavior of rogue states, which are unlikely to join the treaty or to abide by it if they did. (In fact, as written, the pact cannot even go into full force unless Iran and North Korea, among others, ratify it.) Nonetheless, the U.S. signing on would further isolate bad actors in world opinion and engender goodwill for the increasingly promising American effort to curb Iran's nuclear efforts. Also, China has indicated it will follow the U.S.'s lead on the issue, and Senate ratification might help tame the arms race (and accusations of U.S. hypocrisy) among other budding nuclear powers such as India and Pakistan, neither of which has signed the CTBT.

How could the Barack Obama administration gather the necessary 67 Senate votes? First, by pointing out that such Republican luminaries as former Secretary of State George Shultz, former National Security Adviser Brent Scowcroft and former Secretary of Defense Robert Gates have all said that approving the treaty now makes sense. Second, it could commit to several crucial recommendations of the National Academy of Sciences report -- improving U.S. global monitoring systems, maintaining a strategic computing capability and pledging to finance nonexplosive testing in hydrodynamics, radiography and fusion technology.

The White House could also make some deals. One option is making military's new F-35 fighter capable of carrying a nuclear payload. (Although we would like to see the now-scaled-back F-35 program killed for budgetary reasons, if it is to be produced, it should become a factor in our deterrent strategy.) Another is to resume the now-shelved Reliable Replacement Warhead project, which would create a simpler, next-generation warhead without resuming nuclear testing.

Ratifying the CTBT, further diversifying the U.S. nuclear program and developing a more reliable warhead would not just make America more secure, they would be part of a broader strategic goal we have endorsed: shifting our deterrent capacity away from Cold-War-legacy ballistic missiles and toward a smaller, smarter tactical arsenal adapted to the threats we face in the 21st century.

<http://www.bloomberg.com/news/2012-04-01/u-s-nuclear-arsenal-doesn-t-need-tests-to-deter-enemies.html>

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Los Angeles Times  
OPINION/Op-Ed

## **A Nuclear Iran Is Too Much to Risk**

*The Islamist regime usually behaves rationally. But occasionally, it doesn't*

By Alan J. Kuperman  
April 1, 2012

As calls mount, especially in Israel, for military action against Iran's nuclear program, the main counterargument has been seductively simple: Iran is rational. Indeed, our country's top military official, Army Gen. Martin E. Dempsey,

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recently rejected the need for airstrikes because, as he put it, "We are of the opinion that the Iranian regime is a rational actor."

By this logic, we should not risk war to prevent Iran from going nuclear because even if Iran acquired nukes, it would never use them offensively, never share them with terrorists and never utilize them as a shield for regional adventurism. To do so would risk nuclear retaliation, which would be irrational.

Although I disagree with the general's conclusion that we shouldn't take action, I do believe his underlying assumptions are mainly right. The Iranian regime is mostly rational most of the time. Its rhetoric is blustery, but its actions typically are moderated to avoid provoking retaliation.

For example, Iran has so far avoided kicking out international inspectors and launching a crash program to build nuclear weapons, the steps most likely to provoke airstrikes. Instead, Iran permits inspectors to verify that it is enriching uranium to a significant degree, in direct contravention of U.N. Security Council resolutions, in amounts for which it has no civilian need but that would facilitate a bomb program.

Although this strategy has provoked economic sanctions, it has also permitted Iran to both proceed steadily toward a nuclear weapons capability and avoid military retaliation. According to the latest inspection, Iran is producing enough 20%-enriched uranium each year to fuel its one nuclear research reactor for 15 years, which would make no sense. But that production rate is also sufficient for one bomb per year, if further enriched for just a few weeks, which suggests a perfectly rational strategy.

The problem is that Iran does not always act quite so rationally. Rarely, but repeatedly over the years, it has launched attacks that seemed to invite massive retaliation, for apparently little gain. Iran's targets have included the U.S. Embassy and Marine barracks in Lebanon in 1983, the Israeli Embassy and a Jewish community center in Argentina in the early 1990s, and the U.S. military's Khobar Towers in Saudi Arabia in 1996. Just last year, the Iranians were behind a botched scheme to assassinate the Saudi ambassador in the United States.

Some might argue that even these attacks were rational because Iran avoided massive military retaliation. But that was partially luck, and in any case Iran did suffer significant economic and diplomatic punishment. By any objective measure, the Iranian regime ran risks that greatly exceeded expected material benefits, the very definition of irrationality.

We don't know exactly why Iran acts so irrationally from time to time. One possibility is that the regime itself is rational but lacks full control, so that extremist factions act autonomously on occasion. Another is that domestic politics drive the regime to appease extremist factions from time to time. Or it's possible that the regime's own radical Islamist ideology sometimes overwhelms its rationality.

Whatever the reason, the reality is that Iran seems to act rationally most — but not all — of the time. This has two major strategic implications.

First, if Iran acquired nuclear weapons, it probably would not use them, share them or ramp up regional aggression with them. Yet there is a nontrivial chance — let's call it 5% — that Iran would utilize its nuclear weapons in such an aggressive fashion.

Second, if Israel or the United States launched surgical strikes on Iran's key nuclear facilities, Iran probably would act rationally by not retaliating broadly against U.S. interests, which would risk provoking a major U.S. military escalation that could end the Iranian regime. Yet there is a nontrivial chance — again, perhaps 5% — that Iran would retaliate in such a broad manner, drawing the United States into a larger military conflict.

This clarifies the strategic choice for the United States: a small chance of Iran using nuclear weapons offensively in the future if we don't launch airstrikes fairly soon, or a small chance of escalated conventional war with Iran in the near term if we do.



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Is it a 2% chance? A 10% chance? We can't know; but we do know, based on Iran's past irrational actions, that it's not zero.

So, which of the two should President Obama choose? The small chance of an escalated conventional war against Iran, in which we would enjoy overwhelming military superiority? Or a similarly small, but significant, chance that Iran would use nuclear weapons aggressively, inflicting massive casualties?

Is there really any question?

*Alan J. Kuperman teaches military strategy at the LBJ School of Public Affairs, University of Texas at Austin, where he also coordinates the Nuclear Proliferation Prevention Project ([www.nppp.org](http://www.nppp.org)).*

<http://www.latimes.com/news/opinion/commentary/la-oe-kuperman-iran-nuclear-threat-20120401,0,3384700.story>

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Los Angeles Times

OPINION/Op-Ed

## **McManus: The Nuclear Countdown in Iran**

*For more than two years, experts have been saying that the Islamic Republic is about 18 months from being able to build a bomb.*

By Doyle McManus

April 1, 2012

Not long ago, an astute reader noted that it has been nearly two years since I wrote in a column that "most experts now estimate that Iran needs about 18 months to complete a nuclear device and a missile to carry it."

His point — that those estimates were way off — was a good one, especially since experts are still estimating that Iran is 18 months away from being able to build a nuclear weapon. So what gives? Why does Iran always seem to be about 18 months away from a nuclear bomb, at least in the eyes of U.S. officials?

For starters, estimates are only estimates. It's hard to get a fix on the state of Iran's research when Tehran refuses to allow full access for international inspectors to its military facilities.

The experts cite two other factors for why their forecasts were so far off. One is that Iran's leaders seem not to have actually decided to build nuclear weapons; for the moment, they appear to prefer being a potential nuclear power to actually owning the weapons.

The other factor is sabotage. Those estimates of 18 months were based on what Iran could accomplish if all went well in its nuclear facilities. "But all never has gone well, and all will continue to not go well," a U.S. official told me recently.

Israel's vice prime minister, Moshe Yaalon, put it more bluntly last week. "All sorts of things are happening" in Iran, he told Israel's Army Radio. "Sometimes there are explosions. Sometimes there are worms there, [computer] viruses — all kinds of things like that."

Neither the United States nor Israel admit that they are behind a sabotage campaign that has made Iran's nuclear centrifuges unreliable, its computer software buggy and its precision steel defective. And the Obama administration has condemned the assassination plots, presumably the work of Israel, that have killed at least four Iranian nuclear scientists. But both Israeli and American officials predict that more sabotage is to come.

Oddly enough, all that sabotage may turn out to be the sturdy handmaiden of diplomacy — and an alternative to all-out war.

This month, Iran and six of the world's major powers, including the United States, are scheduled to resume negotiations over Tehran's nuclear program. The Obama administration hopes that the pressures of sabotage, military

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threats and economic sanctions — including a European embargo on Iranian oil that takes effect July 1 — will prompt Iran to accept fuller international inspections of its facilities and limits on its nuclear enrichment.

Obama and others have warned that this may be the last chance for diplomacy to avert military action.

And there is considerable sentiment against a war. Military officers in both the United States and Israel have warned that airstrikes against Iranian nuclear facilities, while they might delay Tehran's ambitions, wouldn't end the threat, and they could prompt Iran's supreme leader, Ayatollah Ali Khamenei, to order a full-scale commitment to nuclear weapons.

Of course, negotiations aren't likely to be a quick fix either.

An international agreement to stop Iran's nuclear work, reduce its stocks of uranium and set up an international inspection regime would likely take years to negotiate. Iranians are deeply suspicious of U.S. intentions — and not without reason, since many American leaders have called for regime change in Tehran.

Meanwhile, Israel has insisted that it only has months to wait, not years — because it worries about Iran building enough defenses around its nuclear facilities to create what Defense Minister Ehud Barak calls a "zone of immunity" against attack.

What's the alternative?

Once again, it's likely to come back to sabotage — a middle option between all-out war and acceding to continued progress toward a nuclear Iran.

In a recent article, Michael O'Hanlon and Bruce Riedel of the Brookings Institution proposed relying on sabotage as part of a strategy they dub "constriction."

"Essentially, we would continue to delay and minimize the scale of Iran's nuclear program as we have been doing through sanctions and other means," they wrote in the Washington Post. "We would keep doing this indefinitely, even if Iran gets a nuclear weapon."

"There is little near-term prospect of reaching an agreement with Iran. But we can pursue the same goal with other means," they argued. "Non-military methods have already slowed Iran's nuclear program by two to three years.... That is every bit as much as we could hope to slow Iran with an airstrike campaign."

The goal would be to find a way to freeze Iran's nuclear work where it stands — which means that on Groundhog Day two years from now, I just might be writing another column to explain why Tehran is still, oh, about 18 months from a nuclear weapon.

*Doyle McManus, Washington columnist for the Los Angeles Times, has reported on national and international issues from Washington for more than 25 years. His weekly Op-Ed column delivers original reporting and analysis on a wide range of national issues.*

<http://www.latimes.com/news/opinion/commentary/la-oe-mcmanus-column-iran-nuclear-program-20120401,0,7315534.column>

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Foreign Policy

OPINION/The World of Threats

## **We Now Know**

By David E. Hoffman

Monday, April 2, 2012

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Twelve years ago, in October, 1999, the Senate rejected the Comprehensive Test Ban Treaty. Only 48 senators supported the treaty, falling short of the 67 required. All 51 Republicans opposed it. In the debate, serious doubt was expressed about whether the U.S. nuclear arsenal could be kept safe, secure and reliable without nuclear explosive tests.

At the time, six former secretaries of defense in Republican administrations wrote a letter saying that if the test ban were to be ratified, "over the decades ahead, confidence in the reliability of our nuclear weapons stockpile would inevitably decline, thereby reducing the credibility of our nuclear deterrent."

The six former secretaries also said the relatively young Stockpile Stewardship Program, started in the Clinton administration, "will not be mature for at least 10 years" and could only mitigate, not eliminate, a loss of confidence in the weapons without testing. Although the treaty was rejected, the United States has continued to abide by the test ban.

Today, many fears voiced in the Senate debate have not materialized. That is the core message in an important report issued last week by a nine-member committee of the National Research Council. The panel, which focused on technical issues in the treaty, said the stockpile stewardship program "has been more successful than was anticipated in 1999."

They concluded that "the United States is now better able to maintain a safe and effective nuclear stockpile and to monitor clandestine nuclear-explosion testing than at any time in the past."

That is quite a milestone, and one that I have heard from other sources as well. Bruce T. Goodwin, principal associate director for weapons programs at the Lawrence Livermore National Laboratory, told me in an interview last year, "We have a more fundamental understanding of how these weapons work today than we ever imagined when we were blowing them up."

The Stockpile Stewardship Program includes such things as surveillance of the weapons -- taking them apart and checking them. It includes non-nuclear experiments, and periodic life-extension programs for the existing weapons.

There is also a massive supercomputing program to simulate nuclear explosions, which has advanced by leaps and bounds since the 1990s. According to the committee's report, the computing capability available to weapons designers "has increased by a factor of approximately one hundred thousand" since 1996. I wrote a story about this for The Washington Post in November. What I found in talking to scientists at Livermore is that they are using some of the world's most capable computers to create realistic models of what happens inside a nuclear explosion, when tremendous pressures and temperatures squeeze metals, including uranium and plutonium, to set off the nuclear blast.

The computer simulations produce a virtual window into what happens in an explosion. "This is millions of times finer than you could ever do in a nuclear test," Goodwin told me. "You could never see this process go on inside a nuclear explosion."

Such progress depends, in part, on the use of hard data from past nuclear explosions. Also, computer simulations are impressive, but they must be validated by modern laboratory experiments. All this is expensive: state-of-the-art supercomputers, advanced laboratory facilities, a modernized infrastructure and the need to recruit and sustain the best and brightest workforce. The committee said funding each of these is essential. But it seems a relatively small price to pay for an end to U.S. nuclear explosions.

We really have come a long way since 1999.

*David E. Hoffman is a Pulitzer Prize-winning author and a contributing editor to Foreign Policy.*

[http://hoffman.foreignpolicy.com/posts/2012/04/02/we\\_now\\_know](http://hoffman.foreignpolicy.com/posts/2012/04/02/we_now_know)

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OPINION/Guest Post

## Guest Post: Scientists Report on the Comprehensive Nuclear Test-Ban Treaty

By Frank G. Klotz  
April 2, 2012

*This is a guest post by CFR senior fellow Frank Klotz.*

The National Research Council (NRC) released its long-awaited update on the Comprehensive Nuclear Test-Ban Treaty (CTBT) last Friday. Given the renown of the scientists and former officials who authored the report, it is likely to have an important impact on the longstanding debate over whether the United States should ratify the CTBT.

The report itself concludes that over the past decade the United States has significantly improved the technical capabilities needed both to maintain a reliable nuclear weapon stockpile without nuclear explosion testing and to detect clandestine testing by others. By thus addressing two of the major concerns raised when the treaty was rejected by the Senate in 1999, the report clearly strengthens the position of those who favor ratification now.

The CTBT prohibits states from carrying out “any nuclear weapon test explosion or any other nuclear explosion.” It also lays out in great detail the means for monitoring compliance, including the establishment of a worldwide network of more than 300 detection stations and provisions for on-site inspection. Interestingly, the treaty does not specifically define “nuclear explosion.” The United States and the other major nuclear powers have consistently held that the CTBT is a “zero yield” treaty. In other words, it bans weapon tests that produce a self-sustaining, fission chain reaction; but, it does not preclude weapon experiments that do not. Such experiments—and the subsequent analysis performed on increasingly powerful computers—have played a critical role in assessing the health of the nuclear weapons stockpile since the United States unilaterally stopped testing in 1992.

For the CTBT to actually enter into force, it must be ratified by all forty-four nations that possessed nuclear power or research reactors and participated in the treaty negotiations from 1994 to 1996. Of these, only eight have not yet done so: China, Egypt, Iran, Israel, India, Pakistan, North Korea, and the United States. Ironically, the United States played a leading role in negotiating the treaty, and President Clinton was the first world leader to sign it in 1996. However, when the Senate formally considered ratification three years later, treaty proponents failed to muster the necessary two-thirds vote. It has languished in political limbo ever since.

The Obama administration signaled early on that it intended to renew efforts to ratify the treaty as part of a broader agenda to curb the proliferation of nuclear weapons and to prevent nuclear terrorism. In the wake of the successful, but politically contentious approval of the U.S.-Russian New Strategic Arms Reduction Treaty (New START), senior officials openly acknowledged that a renewed Senate debate over CTBT would likely be “spirited.” Accordingly, they have avoided setting a time table for taking up the treaty and concentrated instead on laying the groundwork for a push when the time seems right. With this objective in mind, the Obama administration has publicly emphasized the merits of the treaty, as well as the steps taken to mitigate previously-expressed concerns about monitoring compliance and ensuring the continued reliability of the U.S. nuclear weapon stockpile without explosive testing.

While the NRC report avoids taking a policy position on treaty ratification, it notes that these steps have been even more effective than originally anticipated. It concludes in fact that “the United States is now in a better position than at any time in the past to maintain a safe and effective nuclear weapon stockpile without testing and to monitor clandestine nuclear testing abroad.” This is very encouraging news for treaty supporters.

The NRC report is, however, unlikely to persuade the more ardent opponents of the treaty. They argue that U.S. ratification will do little to eventually bring the treaty into force since some of the remaining hold-outs—such as Iran or North Korea—will probably not follow suit. They also contend that ratification will hardly dissuade nations who feel it is in their best interest to develop nuclear weapons or to improve the ones they already have. Finally, they assert that

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the United States may ultimately need to resume testing to ensure the reliability of existing nuclear weapons, or eventually to replace them in order to satisfy new strategic requirements.

In reality, the U.S. has refrained from nuclear explosive testing for nearly twenty years. Successive administrations of both parties have determined a unilateral testing moratorium to be U.S. policy. Absent a radical change in the international environment, the political barriers to a resumption of testing would be practically insurmountable. While the United States probably garners some credit for exercising this self-imposed restraint, it is likely to be in a far better position to rally international pressure against would-be proliferators and to constrain regional arms races if it joined the 157 nations who have already ratified the CTBT.

Most treaties have a "supreme national interest clause" that allow nations to opt out if fundamental conditions change. The CTBT is no exception. So, if the direst predictions of its opponents did in fact come true, there are provisions within the treaty itself for withdrawal. In the meantime, it only makes sense to seek maximum diplomatic leverage for something the United States is already doing anyway by ratifying the treaty.

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<http://blogs.cfr.org/zenko/2012/04/02/guest-post-scientists-report-on-the-comprehensive-nuclear-test-ban-treaty/>

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Wall Street Journal

OPINION

April 2, 2012

## **What's at Stake in the Missile-Defense Debate?**

*The U.S. government has no higher moral obligation than to protect the American people from nuclear attack.*

By JON KYL

When President Obama beseeched the Russian president to give him "space" until after the November election to deal with Moscow's concerns about U.S. missile defenses, it was with his larger objective of a world without nuclear weapons in mind. In explaining his remarks, the president said: "I want to reduce our nuclear stockpiles; and one of the barriers to doing that is building trust and cooperation around missile-defense issues."

It appears the president is willing to compromise our own missile-defense capabilities to secure Russian support for another round of nuclear-arms reductions. To accomplish that, he may have to ignore or circumvent commitments he made to Congress to secure support for the 2010 New Strategic Arms Reduction Treaty (Start)—among them, that he would deploy all four phases of planned U.S. missile-defense systems for Europe, and that he would modernize the Ground-based Midcourse Defense (GMD) system for the protection of the U.S. homeland.

The president's re-election prospects could suffer if concessions on these systems were to be openly discussed before the election.

The Russians have made clear their concern about the range and speed of U.S. missile-defense interceptors planned for deployment later this decade, as well as American plans to base those interceptors in Poland, in Romania, and on naval vessels. In particular, the Russians decry the development of the SM-3 block IIB missile, which is planned for deployment at the beginning of the next decade. This potential missile would be the only U.S. theater missile-defense system capable of catching intercontinental-range Iranian missiles, making it important for the defense of our homeland.

Russia also wants increased involvement in actual operation of NATO missile defenses and would not want to see expansion and improvement of our existing national missile-defense system (which already has been curtailed by the president).

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It is questionable whether concessions on missile defense would induce Russia to further reduce its nuclear arsenal. Unlike the U.S., Russia maintains a robust nuclear warhead production capability, and its national security strategy is to increase reliance on nuclear weapons. Russia is also modernizing ICBMs and submarine-launched ballistic missiles.

In addition to worrying about our missile-defense capability, the American people should question the assumptions behind the president's quest to reduce the number of nuclear weapons well below New Start Treaty levels. While in South Korea last month, President Obama said that he "can say with confidence that we have more nuclear weapons than we need."

U.S. military planners don't necessarily share that view. During Senate hearings in 2010 on the New Start Treaty, the then-Commander of U.S. Strategic Command Gen. Kevin Chilton testified that, "I think the arsenal that we have is exactly what is needed today to provide the deterrent."

Would the world be safer and more peaceful if the U.S. had fewer nuclear weapons? Is the current nuclear balance unstable? Are there incentives to strike first during a crisis? Are there pressures to increase the numbers of nuclear arms? Do our allies worry about the credibility of the U.S. nuclear umbrella?

The answer to all of these questions is "no." Yet very low numbers of deployed nuclear weapons, as the president appears to have in mind, could engender instability. Lower numbers of U.S. and Russian nuclear forces could encourage China and other nations to seek equivalence. Our allies would be less certain about American nuclear guarantees, and they would then have an incentive to develop their own nuclear arsenals.

Very low numbers could prove destabilizing during a crisis, when even small amounts of cheating could tip the balance. With a very small nuclear arsenal, we would be less able to respond quickly to new threats and strategic challenges. It is far from certain that the supposed benefits of the additional reductions favored by the president outweigh the risks of lower numbers in our nuclear stockpile.

As the president has noted, any new arms-control treaty would have to be supported by the Senate. His failure to request full funding to modernize our nuclear weapons laboratories—another pledge he made to secure ratification of New Start—is another reason his proposals would be met with strong skepticism in the Senate.

As he said on his recent trip to South Korea, President Obama believes that, because we are "the only nation ever to use nuclear weapons," we now have a "moral obligation" to pursue nuclear disarmament. In fact, the United States used two atomic weapons to end World War II in order to fulfill a moral obligation to save the lives of perhaps a million American GIs.

Today, the federal government has no higher moral obligation than to protect the American people and to help ensure the human race never again experiences the ruin and destruction of the wars that occurred before the advent of nuclear weapons. Supporting a robust nuclear deterrent and an effective missile defense is a moral obligation for all those who are entrusted with ensuring our nation's security.

*Mr. Kyl is a Republican senator from Arizona.*

<http://online.wsj.com/article/SB10001424052702303816504577311601745664294.html>

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Eurasia Review – Spain

OPINION/Analysis

## **China's Traditional ShaShaoJian Strategy – Analysis**

April 2, 2012

By Debalina Chatterjee

The traditional strategy by Sun Tzu whereby the inferior would defeat the superior has become a growing concern for the United States. President Jiang Zemin during his tenure had demanded for accelerated development in assassin's

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weapons. The strategy is referred to as 'silver bullet weapons' or 'hand kill mace' to enable China to win local wars under high tech conditions by surprising and paralyzing the enemy, the US. By this strategy, China believes that it could lure the superior enemy to take drastic steps which could enable China to win the war without fighting as it cannot counter the US threat face to face. The assassin mace is probably China's version of Revolution in Military Affairs.

China has never been transparent with its nuclear strategies leaving the West befuddled as always. However, this is nothing unusual as Chinese military doctrines are always neibu (restricted). Sun Tzu is his 'Art of Warfare' had "strategic ambiguity" and "deception" as some of its important components. 'While it has 'no first use' as its nuclear doctrine, it also makes clear that the doctrine does not apply to Taiwan. China's advancements with its nuclear weapons program which include development of thermonuclear weapons, enhanced radiation weapons, nuclear artillery and anti ship weapons have left the US worried and concerned.

China's Second Artillery Corps has started to play an important role in this strategy as it operates China's land based, tactical missiles, strategic nuclear weapons and conventionally armed SRBMs. China's Short range ballistic missiles like the DF-15s could be fitted with MIRVs or MARVs to be able to defeat its enemy completely. Chinese ICBMs could hit as far as Alaska, Hawaii and many more. The DF-31 category of ICBMs could hit mainland in the United States. China could also use Land Attack Cruise Missiles or Submarine Launch Cruise Missiles to "puncture" the "acupuncture points" of the Pentagon. The Chinese have developed cruise missiles like the YJ22s, KH31A/Ps, C301s, C-802s, SS-N-22s and many more. On January 8, 2011, the Secretary of Defence Robert Gates had stated that the dragons had the "potential" to put some of the "capabilities" of the Pentagon at risk.

China is building active air defence systems to negate any threat from US air crafts. Air defence missiles like the QW category and S-300s would be a prowess to China. China is acquiring electromagnetic pulse bombs which could be used in both strategic and tactical warfare by China which can nullify Theatre Ballistic Missile Defences being deployed in Taiwan by the US by destroying the command, control and communication systems of the BMD. These bombs could be easily delivered by an Intercontinental Ballistic Missile, though cruise missiles could be the best option to deliver EMP bombs. Counter measures like decoys or use of solid propelled missiles which has enabled in reduction in launch times are also threats to the US. Chinese Intercontinental Ballistic Missiles are no longer just confined to silos just and have been road mobile, thereby enhancing their survivability. China is also working on High Powered Microwave Weapons.

Chinese Anti Satellite Weapons which China is developing are capable of identifying and tracking satellites. Manoeuvrable nano satellites are able to neutralise enemy satellites by electronic jamming, electro magnetic pulse generation, or by simply 'clinging to target and physically destroying it', 'bumping the target out of orbit', and such nano satellites could be launched by DF-21s also. Land based lasers also could be used to destroy satellites of enemy countries. Plasma weapons could be used to destroy sensor systems of the USA. The Chinese are also striving hard to enhance the survivability of their strategic nuclear weapons, to improve the striking ability of these strategic nuclear weapons, and enhance their penetration technology. China has also developed long range satellite navigation aided multi launch rocket systems. China does not just aim at destroying satellites, but a complete process of involving 'hard and soft kill', terrestrial infrastructure of launch sites, tracking, telemetry, control (TT&C) facilities, and the data link that could bind the system together. China is also trying to improve joint operations amongst PLA, PLAAN and PLAAF which would be similar to the US Gold-waters Nicols which would enhance America's security with "effective diplomacy" and with military forces that are ready to "fight and win".

China is enhancing its naval capabilities near the Spratley Islands. China's growing interests in the South China Sea has motivated it to concentrate on modernising the PLAAN which include anti ship ballistic missiles, land attack cruise missiles, anti ship cruise missiles which could be fired from submarines like KILO, YUAN, surface to air missiles, anti ship ballistic missiles, medium range ballistic missiles, manned and unmanned aircrafts and also modernising its command and control systems. According to the US Department of Defence, the Chinese A2AD capability, known as Anti Access Area Denial Capability could control access to land, sea and air spaces which is within China's periphery. This is similar to the Soviet's Anti Access Anti Denial Capabilities seen during the Cold War days. This could make the US Navy power projections in the Asia Pacific region risky and also costly. This could enable China to get adequate time to "seize and



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occupy" Taiwan. China's Anti Ship Ballistic Missiles fitted with MARVs could pose a threat to the US naval bases in the Asia Pacific regions. The assassin mace term to some means the use of supersonic cruise missiles which could sink aircraft carriers. Rocket torpedoes or SHKVAL or Squall could also become a threat for the US. Obsolete warplanes could be converted to Unmanned Combat Aerial Vehicles which could fire anti ship missiles. The US are already working on Air Sea Battle Concept (ASBC) to counter the A2AD strategy whereby they have called in for their Navy and Air force to cooperate together to overcome the Chinese strategy.

China has been apprehensive of the United States which was a big paradigm shift in bloc politics after the collapse of the Soviet Union. Several incidents like the bombing of the Chinese Embassy in Belgrade in 1999 by the US led NATO forces, US withdrawal from the Anti ballistic missile treaty in 2002, enhanced military cooperation between Japan and the US, naval exercises with South Korea in the Yellow Sea had annoyed the Chinese. The US setting up of a military base in Kyrgyzstan which is a few kilometres away from China's border close to Lop Nor has also made the Chinese suspicious of America's influence in the Central Asian countries which the Chinese would never want.

China is not only enhancing its military capabilities but also building relations with states to create a strategic disadvantage for the Americans. China has already improved relations with Russia and is now trying to improve its relations with Turkey. China had offered to Turkey missile defences which could expose them to the crucial information about the NATO missile defence shield and develop counter measures accordingly. Chinese submarines in ambush with bottom rising sea mines like the EM-52s which are hard to detect could create a problem for the Americans to cross the Sea Lines of Communications. China's growing relations with Iran and Russia could also enable the dragons to cut off oil supplies to the USA. Iran could easily stop oil supplies coming from the Persian Gulf and this is a major reason why China is developing economic, political and economic ties with Iran.

Sun Tzu in his 'Art of War' had mentioned "attaining one hundred victories in one hundred battles is not the pinnacle of excellence. Subjugating the enemy's army without fighting is true pinnacle of excellence". Cyber-warfare is another effective way of defeating the enemy especially of higher calibre. China routinely intervenes into official classified documents of the West through the medium of cyber theft. Critical Information Infrastructure Protection is important for security of information and national security policy. Quite often China meddles with the enemy country's Critical Information Infrastructure Protection. Many have also felt that the strategy is 'killer application' in computer application.

China has also tried to work on 'informationalisation', whereby it plans to improve its command, control, communication, intelligence, surveillance and reconnaissance.

However, the Assassin Mace Weapon Strategy is still a dubious game as most analysts are unsure if it is a weapon or a doctrine. The strategy would be a complex strategy and would be implemented by all three services: the PLA, PLAAF, and PLAN and thereby enhance their Joint Operations techniques, but how far could it be successful in defeating the strategies of the super power would be a matter of concern.

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<http://www.eurasiareview.com/02042012-chinas-traditional-shashaojian-strategy-analysis/>

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