



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

**Issue No. 1023, 07 September 2012**

Articles & Other Documents:

**Featured Article:** [US Nuclear Bombs Will Remain in Germany](#)

1. [IAEA Not Authorized to Inspect Parchin Military Site: Iranian MP](#)
2. [Russia to Transfer Full Control of Bushehr N. Power Plant to Iran](#)
3. [Russia Says 'No Signs' of Nuclear Weapons Development in Iran: Interfax](#)
4. [Worries Intensify over Syrian Chemical Weapons](#)
5. [Iran, N.Korea Agree to Cooperate in Science, Technology](#)
6. [N. Korea Accuses IAEA of Aggravating Nuke Standoff](#)
7. [Japan Sees Nuclear Power Plants as Powerful 'Deterrent' against Foreign Attacks](#)
8. [China Must Strengthen its Nuclear Capabilities, Says Daily](#)
9. [N. Korea May Use Biological Weapons: U.S. Gov't](#)
10. [S. Korea, China Keeping 'Close Watch' on Nuclear Reactor Progress in NK](#)
11. [India's Nuclear Arsenal Failed by 'Unreliable' Missiles](#)
12. [Taliban Threat: Nuclear Site in DG Khan Cordoned Off](#)
13. [US Report on Russian Commitment to Arms Treaties 'Unfounded'](#)
14. [Putin: U.S. Military Won't Let Obama Get Flexible on Missile Shield](#)
15. [New Russian ICBM Can Carry Bigger Warhead](#)
16. [US Nuclear Bombs Will Remain in Germany](#)
17. [Trident Review Concerns Voiced after Nick Harvey Loses MoD Job in Reshuffle](#)
18. [Moscow to React to US Asian Missile Defense](#)
19. [IAEA Report Shows Iran Reduced Its Breakout Capacity](#)
20. [U.S. Global Strike Commander on the State of Nuclear Deterrence](#)
21. [Nuclear Edge to Sea Disputes](#)
22. [Three Things You Need to Know about IAEA Report on Iran](#)
23. [Race to the End](#)
24. [The Int'l Politics of Missile Range Extension](#)
25. [What We Know About Iran's Nukes](#)

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Tehran Times – Iran

## **IAEA Not Authorized to Inspect Parchin Military Site: Iranian MP**

By the Political Desk

Monday, 03 September 2012

TEHRAN - Iranian MP Jalil Jafari has said that inspecting military facilities, including the Parchin site in Tehran Province, does not fall within the ambit of inspectors of the International Atomic Energy Agency.

Jafari made the remarks during an interview with the Persian service of the Fars News Agency published on Sunday in reference to IAEA Director General Yukiya Amano's most recent report on Iran's nuclear program, which was released on August 30.

The UN nuclear watchdog has claimed that Iran might have been trying to sanitize the Parchin site, which is located southeast of the city of Tehran, of any incriminating evidence of explosive tests that would indicate efforts to design nuclear weapons. However, Iran has dismissed the claim, calling it "baseless".

Part of the IAEA report reads, "It is a matter of concern that the activities which have taken place since February 2012 at the location within the Parchin site to which the Agency has requested access will have an adverse impact on the Agency's ability to undertake effective verification. The Agency reiterates its request for access to that location without further delay."

Tehran rejected requests by IAEA delegations to inspect the Parchin site during their visits to Iran from January 29 to 31 and February 21 to 22 and has made it clear that access to the site would not be possible before an agreement is reached on a structured approach.

During the interview, Jafari said, "In one of the clauses of the report, the issue of inspecting the Parchin site has been stated once again. But the point that should be taken into consideration is that no nuclear activity has been carried out at the Parchin site and the Parchin site is a military site. And permission to inspect military centers has not been granted to IAEA inspectors under any of the articles of" the nuclear Non-Proliferation Treaty.

"In another part of the agency's report, it has been stated that components of Iran's nuclear activities are in the military sphere, and it has attempted to give the impression that Iran's nuclear activities are military through vague and unclear (phrases), such as 'it may be' and similar (phrases), but raising the issue, when it has not been proven yet, has no legal basis," he added.

Elsewhere in his remarks, the Iranian MP stated that the IAEA is being influenced by political issues and is controlled by the global arrogance, which is an expression used in Iran to describe the forces of imperialism.

<http://www.tehrantimes.com/component/content/article/101155>

[\(Return to Articles and Documents List\)](#)

FARS News Agency – Iran

September 5, 2012

## **Russia to Transfer Full Control of Bushehr N. Power Plant to Iran**

TEHRAN (FNA) - Iran will get full control of its Bushehr nuke plant at the end of 2012 from the Russian contractor, a Russian project manager said Tuesday.

Igor Mezenin, local operation chief of the nuclear plant's Russian contractor, told RIA Novosti news agency that the power unit at Bushehr would be handed over to Iran "in the last week of December".

Before that, Atomstroyexport, the Russian contractor, would conduct a serial of trials, Mezenin said.

The reactor of the plant's unit reached its full capacity on August 31.

**Issue No. 1023, 07 September 2012**

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Russia's state atomic agency Rosatom said in May that it was ready to help Iran build another unit at the Bushehr nuclear power plant.

Atomstroyexport, an engineering company of Rosatom, said Bushehr, the first nuclear power plant in Iran, successfully reached 90 percent of its nominal capacity in routine trials in early May.

Iran's Atomic Energy Organization chief Fereydoon Abbasi Davani said previously the country was to launch a second power unit at Bushehr next year with a capacity of 1,000 MW.

Construction of the Bushehr plant began in 1975 by several German companies. However, work halted when the United States imposed an embargo on hi-tech supplies to Iran after the 1979 revolution.

Iran signed a deal with Russia in 1995, according to which the plant was originally scheduled for completion in 1999. However, the project was repeatedly delayed by the Russian side due to the intense pressure exerted on Moscow by the United States and its western allies. Russia finally completed physical construction of the plant last summer, but the facility still needed one more year to gradually reach full power generation capacity.

On October 26, 2010, Iran started injecting fuel into the core of the Bushehr nuclear power plant in the initial phase of launching the nuclear reactor.

In 2011 Iran started using 500MW of nuclear-generated electricity, half the nominal capacity of the Bushehr power plant.

Iran held a ceremony in September to mark the preliminary launch of the Bushehr plant.

The facility operates under the full supervision of the International Atomic Energy Agency (IAEA).

<http://english.farsnews.com/newstext.php?nn=9106061790>

[\(Return to Articles and Documents List\)](#)

Al Arabiya – U.A.E.

## **Russia Says 'No Signs' of Nuclear Weapons Development in Iran: Interfax**

Thursday, 06 September 2012

By Al Arabiya with agencies

Russia sees no evidence that Iran's nuclear program is aimed at developing weapons, the Interfax news agency quoted Deputy Foreign Minister Sergei Ryabkov as saying on Thursday.

Russian officials have made similar statements in the past, but Ryabkov's blunt remark appeared to underscore Moscow's concerns about the possibility Israel could launch attacks targeting Iranian nuclear facilities.

"We, as before, see no signs that there is a military dimension to Iran's nuclear program. No signs," Interfax quoted Ryabkov as saying.

The U.N. nuclear watchdog showed a series of satellite images on Wednesday that added to suspicions of clean-up activity at an Iranian military site it wants to inspect, Western diplomats said, but Tehran's envoy dismissed the presentation.

The pictures, displayed during a closed-door briefing for member states of the International Atomic Energy Agency (IAEA), indicated determined efforts in recent months to remove any incriminating evidence at the Parchin site, the diplomats said.

In the latest picture, from mid-August, a building where the IAEA believes Iran carried out explosives tests - possibly a decade ago - relevant for nuclear weapons development had been shrouded in what appeared to be pink tarpaulin, they said.



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"It was pretty compelling," a senior Western diplomat said about the briefing by IAEA Deputy Director General Herman Nackaerts and Assistant Director General Rafael Grossi.

"The last image was very clear. You could see the pink," the envoy said.

The purpose of covering the building could be to conceal further clean-up work from overhead satellites, according to a U.S. think-tank, the Institute for Science and International Security (ISIS).

The IAEA said in a confidential report last week that "extensive activities" undertaken at Parchin since February - including the demolition of some buildings and removal of earth - would significantly hamper its investigation there, if and when it was allowed access to the facility southeast of Tehran.

Iran, which denies Western accusations that it seeking to develop the capability to make nuclear bombs, says Parchin is a conventional military site.

Iran's envoy to the IAEA, Ali Asghar Soltanieh, suggested the activities "claimed to be made in the vicinity of these so-called locations which are identified" by the IAEA had nothing to do with the U.N. agency's investigation.

"Merely having a photo from up there, satellite imagery ... this is not the way the agency should do its professional job," he told reporters after the IAEA's briefing.

Give us the documents, Iran says

"Everybody should be careful not to damage (the) credibility of the agency," Soltanieh added.

Iran says it must first reach a broader agreement with the IAEA on how the Vienna-based U.N. agency should conduct its investigation into alleged nuclear bomb research in the Islamic state before it can possibly be allowed access to Parchin.

Last week's IAEA report said "no concrete results" had been reached in a series of high-level meetings with Iran over the past eight months on such a framework accord.

Highlighting one of the main sticking points, Soltanieh said Iran must see the documents which form the basis for the IAEA's concerns of possible military dimensions to the Islamic Republic's nuclear program.

Diplomats say the IAEA is not able to hand over some of those files - which it is believed to have received from foreign intelligence services - because of confidentiality reasons.

"They have to deliver the documents," Soltanieh said, making clear that Iran could not otherwise agree to a deal. "Without documents we cannot prove whether this is baseless or not baseless. We should have the documents."

The IAEA report also said Iran had doubled the number of centrifuges at an underground uranium enrichment facility in the last few months, in defiance of international demands that it suspends the work.

Refined uranium can be used to fuel nuclear power plants, which is Iran's stated aim, or provide the explosive core for a nuclear warhead if processed further, which the West and Israel suspect is Tehran's ultimate aim.

Iran denies any interest in nuclear weapons but has previously avoided public comment on Parchin fears while refusing agency experts access.

<http://english.alarabiya.net/articles/2012/09/06/236356.html>

[\(Return to Articles and Documents List\)](#)

Washington Post

## **Worries Intensify over Syrian Chemical Weapons**

By Joby Warrick

September 6, 2012

**Issue No. 1023, 07 September 2012**

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Western spy agencies suspect Syria's government has several hundred tons of chemical weapons and precursor components scattered among as many as 20 sites throughout the country, heightening anxieties about the ability to secure the arsenals in the event of a complete breakdown of authority in the war-torn nation, U.S. and Middle Eastern officials say.

Officials are monitoring the storage sites, but they expressed growing fear that they have not identified every location and that some of the deadly weapons could be stolen or used by Syrian troops against civilians.

"We think we know everything, but we felt the same way about Libya," said a former American intelligence official who was briefed on U.S. preparations for both conflicts. "We had been on the ground in Libya, yet there were big surprises, both in terms of quantities and locations." The former official was one of several people who spoke on the condition of anonymity to discuss classified information.

The collapse of government control in several Syrian provinces has prompted heightened scrutiny of the weapons depots by the United States and its allies in the region. It also has hastened preparations for securing the sites with foreign troops, the U.S. and Middle Eastern officials said.

Drawing from recent intelligence assessments, the officials believe that the Syrian arsenal contains several hundred tons of chemical weapons and precursors, including sizable quantities of battlefield-ready sarin, the deadly nerve agent.

The stockpile appears to be larger and more widely distributed than originally suspected, according to two officials who have seen the intelligence reports. They said the most dangerous chemical stocks are kept in bunkers in about a half-dozen locations, while as many as 14 other facilities are used to store or manufacture components.

Because of the risks posed by the stockpile, U.S. spy agencies have devoted enormous resources to monitoring the facilities through satellite imagery and to developing plans to safeguard the weapons if the crisis worsens, current and former U.S. officials said.

"It's obvious that ensuring their security is paramount," a U.S. official said. "Planning for different scenarios, consulting appropriately with allies and preparing to manage any new challenges is simply being responsible."

Several current and former officials acknowledged the difficulty of securing chemical depots inside Syria, given the fighting underway and the likelihood of fierce resistance from Syrian forces to any incursions by outsiders. Some of the officials also conceded that there may be yet-undetected facilities within the country, roughly the size of Washington state.

The former U.S. intelligence official said North Korea and Russia have assisted Syria over the decades in constructing weapons facilities that are well-fortified and shielded from spy satellites. "They are masters at concealment," the former official said.

In August, a Syrian Foreign Ministry spokesman, Jihad Makdissi, said the Damascus government would never use chemical arms against its people, but he warned that it would unleash the weapons against what he called foreign invaders. He said the military was guarding the stockpile.

In response, President Obama cautioned the Syrian government that any deployment of its chemical weapons would cross a "red line" and invite an immediate response by the West.

Syria is thought to possess the world's third-largest stockpile of chemical weapons after United States and Russia, whose Cold War arsenals are being dismantled and destroyed. Syria's weapons, predominantly deadly nerve agents that can be delivered by artillery rockets, shells and aircraft munitions, were developed for use in a war against Israel.

### **Heightened terrorism risk**

The increased focus on Syria's stockpile is driven in part by the government's de facto retreat from large portions of the countryside as forces loyal to President Bashar al-Assad concentrate on driving rebels from Damascus, Aleppo and



other key cities. Despite setbacks, the opposition Free Syrian Army says that up to half of the countryside is in rebel hands, a claim that underscores concerns that weapons depots could be abandoned or overrun.

U.S. and Israeli officials fear that the chemical sites could be looted, leading to weapons being sold or given to radical Islamists or to Iranian-backed Hezbollah fighters. A single crate of artillery shells or a few barrels of chemical precursors would contain enough lethal poisons for a series of terrorist attacks, weapons experts say.

Mitigating the risk somewhat is the fact that the most of Syria's stockpile consists of chemical precursors that must be combined and loaded into shells or bombs. Amateurs who attempt to mix ingredients for sarin gas run a strong risk of killing themselves instead of their intended targets.

Still, the terrorism risk has prompted extensive contingency planning by the United States and regional allies, including Israel, Jordan and Turkey, said the U.S. and Middle Eastern officials.

Under the most optimistic scenario, teams of experts could be dispatched into rebel-controlled parts of Syria to secure and remove chemical weapons, as happened in Libya after the fall of Moammar Gaddafi. But if weapons sites are overrun during fighting — or if loyalist forces are seen preparing for a chemical attack — plans call for sending elite foreign military forces to secure the arms under fire, if necessary, according to the officials.

### **Fears of chemical attacks**

Syrian rebels also have grown increasingly concerned about the stockpile, fearful not only about looting, but also about the possibility that Assad will use the weapons against rebel fighters and civilians as a last resort, said Andrew Tabler, an expert on Syria who recently returned from a month-long trip to the region.

"They recognize it as a problem," said Tabler, author of "In the Lion's Den," a book about Syria under Assad. "They think the regime is moving the weapons around, mostly to the coast and other areas where the regime will go if it is forced to contract."

The Obama administration shares the rebels' concern that a desperate Assad might decide to use chemical weapons against his countrymen. But despite reports that Syria has consolidated some of its chemical stockpile in recent weeks, intelligence agencies have not detected evidence that Syrian forces are filling chemical shells or otherwise preparing for a chemical attack.

[http://www.washingtonpost.com/world/national-security/worries-intensify-over-syrian-chemical-weapons/2012/09/06/13889aac-f841-11e1-8253-3f495ae70650\\_story.html](http://www.washingtonpost.com/world/national-security/worries-intensify-over-syrian-chemical-weapons/2012/09/06/13889aac-f841-11e1-8253-3f495ae70650_story.html)

[\(Return to Articles and Documents List\)](#)

Kyiv Post – Ukraine

## **Iran, N.Korea Agree to Cooperate in Science, Technology**

September 1, 2012

By Reuters

DUBAI, Sept 1 (Reuters) - Iran and North Korea have signed an agreement to cooperate in science and technology, Iranian media reported on Saturday, and Iran's supreme leader declared that the two countries had "common enemies."

The two countries will cooperate in research, student exchanges and joint laboratories, and in the fields of information technology, engineering, biotechnology, renewable energy, the environment, sustainable development of agriculture and food technology, the Iranian Labour News Agency (ILNA) reported.

ILNA said the agreement was signed by Iran's Minister for Science, Research, and Technology Farhad Daneshjoo and North Korean Foreign Minister Pak Ui-chun.





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North Korea has had close ties with Iran. Leaked U.S. diplomatic cables from 2010 showed that U.S. officials believe Iran has acquired ballistic missile parts from North Korea.

Pyongyang's Communist government and Iran's Islamic republic share little in the way of ideology, but both were named as part of an "axis of evil" by former U.S. President George W. Bush in his 2002 State of the Union speech.

Iran's Supreme Leader Ayatollah Ali Khamenei also met with North Korea's Kim Jong-nam, seen as a figurehead head of state, who was in Tehran for the Non-Aligned Movement summit held this week.

"The Islamic Republic of Iran and North Korea have common enemies, because the arrogant powers do not accept independent states," Khamenei was quoted as saying by ILNA on Saturday.

There had been rumours that North Korean supreme leader Kim Jong-un would attend the summit of developing countries. The Non-Aligned Movement is one of the few multilateral forums in which the North takes part.

Iran's first vice-president, Mohammad Reza Rahimi, also called on Saturday for greater economic ties between his country and North Korea, Iranian state television reported.

<http://www.kyivpost.com/content/world/iran-nkorea-agree-to-cooperate-in-science-technology-312383.html>

[\(Return to Articles and Documents List\)](#)

Bangkok Post – Thailand

## **N. Korea Accuses IAEA of Aggravating Nuke Standoff**

5 September 2012

By Agence France-Presse (AFP)

North Korea on Wednesday accused the UN atomic agency of aggravating a dispute over its nuclear programme by siding with the United States.

The International Atomic Energy Agency (IAEA) "aggravated the nuclear issue on the Korean peninsula pursuant to the US hostile policy towards the DPRK (North Korea)," the North's foreign ministry said.

"This deprived the IAEA of the qualifications to intervene in (North Korea's) nuclear activities," it said in a statement carried by the official Korean Central News Agency.

IAEA last week called the North's nuclear programme a "serious concern", pointing to significant progress in recent months in building a new light-water reactor.

The North says the reactor is necessary to meet its energy needs.

The ministry also questioned IAEA's role in resolving a dispute over the North's nuclear programme.

"The DPRK, which legitimately accessed nukes to cope with the US persistent hostile policy, has its own standard on which IAEA's function is not workable as the function mainly deals with non nuclear states," it said.

The ministry said the IAEA had not voiced concerns over any other nuclear states, indicating its attitude towards Pyongyang.

The North has been developing nuclear weapons for decades. Its official position has been that it needs them for self-defence against a US nuclear threat.

Pyongyang disclosed in November 2010 an apparently operational uranium enrichment plant, in addition to its plutonium stockpile.

<http://www.bangkokpost.com/news/asia/311012/n-korea-accuses-iaea-of-aggravating-nuke-standoff>

[\(Return to Articles and Documents List\)](#)

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News Track India – India

## **Japan Sees Nuclear Power Plants as Powerful 'Deterrent' against Foreign Attacks**

By Asian News International (ANI)

September 6, 2012

Tokyo, Sep 6 (ANI): A remark made by Japan's Defence chief Satoshi Morimoto, who viewed the nation's nuclear power plants as a 'deterrent' against foreign attack, has been interpreted as indicating that nuclear plants cautioned neighbouring countries to be conscious of Japan's potential capacity to develop atomic weapons to contribute to the nation's defense.

During a Jan. 25 public forum interaction in Sapporo, Morimoto had reportedly said Japan's nuclear plants are "taken by neighboring countries as having very great defensive deterrent functions," as apparently other neighboring countries suppose that Japan could produce atomic weapons quickly if it desired to.

"Now that I have become a member of the government, I would like to observe the government's three nonnuclear principles, not possessing, producing or allowing the presence of nuclear weapons in the country," the Japan Times quoted Morimoto, as saying.

As defense chief, Morimoto, who is not an elected politician, is destined to take part in the Cabinet's imminent decision on the new national energy policy, including the role of nuclear power in future electric power generation.

The government is considering three nuclear share options for 2030: zero percent, 15 percent and 20-25 percent, against 26 percent in 2010. Public opinion is strongly in favor of the zero percent option, the paper said.

However, Morimoto has called for nuclear plants to be maintained for defensive purposes as well as energy security, and indicated that 25 percent should be the appropriate share for atomic power vis-a-vis Japan's electric energy mix, it added.

<http://www.newstrackindia.com/newsdetails/2012/09/06/231-Japan-sees-nuclear-power-plants-as-powerful-deterrent-against-foreign-attacks.html>

[\(Return to Articles and Documents List\)](#)

Irish Sun – Australia

## **China Must Strengthen its Nuclear Capabilities, Says Daily**

Irish Sun, Indo-Asian News Service (IANS)

Friday, 7 September, 2012

China should accelerate the renewal and consolidation of its nuclear deterrence capabilities, said a state-run Chinese daily that wanted the momentum to be continued, so that "other players in the Asia-Pacific region gradually adapt to it".

US media have reported American intelligence agencies have monitored at least three strategic missile tests by China's Second Artillery Corps (SAC) since late July.

The three missiles were a submarine-launched JL-2 ballistic missile, a DF-41 missile outfitted with multiple, independently-targetable re-entry vehicles (MIRVs), and a DF-5 long-range missile with MIRVs.

An article "Time to upgrade China's nuclear capabilities" in the Global Times Friday said: "The US seems especially interested in the DF-41 missile, which they believe could carry as many as 10 warheads. In August, China announced that the SAC had realized the capability of vehicle-mounted mobile launches for most strategic missiles."

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"All these pieces of information leave people with the impression that China has a stronger and more credible nuclear deterrence. This is the cornerstone of China's ability to safeguard its national security within a complex international environment," it said.

The daily said the macro dynamics of international politics will not change based on China's domestic situation.

"China has to accelerate the renewal and consolidation of its nuclear deterrence capabilities."

It noted that a year ago, US Republican presidential candidate Herman Cain seemingly didn't know China already had nuclear capabilities.

"This at least demonstrated China's weak level of nuclear deterrence in foreign eyes."

Describing it as a "risky situation, as it may lead to US society pursuing impractical tough policies toward China", the article said: "In the long run, China should not seek equal nuclear strength with the US, but it should endeavor to build an equal level of nuclear deterrence."

"The SAC has made a great leap in lifting China's nuclear strength. China should continue this momentum, so that other players in the Asia-Pacific region gradually adapt to it," it added.

The daily said: "...As a latecomer in developing nuclear weapons, China lacks experience in using nuclear strength. While building up nuclear hardware, China should also keep exploring how to integrate nuclear strength with its national goals."

<http://www.irishsun.com/index.php?sid/208964450/scat/2411cd3571b4f088>

[\(Return to Articles and Documents List\)](#)

Yonhap News Agency – South Korea

September 7, 2012

## **N. Korea May Use Biological Weapons: U.S. Gov't**

By Lee Chi-dong

WASHINGTON, Sept. 6 (Yonhap) -- The United States believes that North Korea may use biological weapons someday, which poses another major security threat on top of its nuclear weapons drive, according to an annual U.S. government report.

"The United States judges that North Korea may still consider the use of biological weapons as an option," the State Department said in its new report on international agreements and commitments to arms control, nonproliferation and disarmament.

North Korea became a state party to the Biological Weapons Convention (BWC) in 1987.

"North Korea continues to develop its biological research and development capabilities, but has yet to declare any relevant developments as part of the BWC confidence-building measures," the report read.

The department said North Korea's continued nuclear development, including its uranium enrichment activities and ongoing construction of a light-water reactor, violates U.N. Security Council resolutions and the communist nation's own commitments under the 2005 deal with its nuclear negotiation partners -- South Korea, the U.S., China, Russia and Japan.

Pyongyang announced its withdrawal from the Nuclear Non-Proliferation Treaty (NPT) in January 2003.

Although North Korea conducted two nuclear tests in 2006 and 2009, respectively, and may prepare for a third one, it is unable to become a nuclear-weapons state as defined by the NPT, which limits that classification to five nations, the department said.

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"We will not accept North Korea as a nuclear-weapon state," it said.

This year's report struck largely a similar tone on North Korea with the previous one.

A notable difference is the assessment of its suspected nuclear ties with Myanmar, also known as Burma.

In last year's report, the U.S. said it is on alert to any signs of Myanmar's nuclear weapons-related activities or intentions.

The U.S., however, said in the new version that "concerns that the United States expressed in last year's compliance report regarding Burma's interest in pursuing a nuclear program, including the possibility of cooperation with North Korea, were partially allayed."

The U.S. is apparently starting to gain some trust in Myanmar amid its nascent move towards democracy.

<http://english.yonhapnews.co.kr/national/2012/09/07/39/0301000000AEN20120907000300315F.HTML>

[\(Return to Articles and Documents List\)](#)

Korea Times – South Korea

September 7, 2012

## **S. Korea, China Keeping 'Close Watch' on Nuclear Reactor Progress in NK**

South Korea and China are keeping a "close watch" on the progress in North Korea's light-water atomic reactor project that experts say may help expand the North's nuclear weapons capacity, a high-ranking Seoul official said Friday.

Seoul and Beijing shared concerns over the swift progress North Korea has made in building an experimental light-water reactor at its main nuclear complex in Yongbyon, when chief nuclear envoys from the two sides held talks in Beijing this week, said the foreign ministry official with direct knowledge of the talks.

Lim Sung-nam, Seoul's top envoy to the six-party talks aimed at ending the North's nuclear weapons program, met with his Chinese counterpart Wu Dawei and other officials during his two-day visit to Beijing this week to discuss "recent developments in North Korea's nuclear issues," the ministry said earlier.

South Korea is concerned that the North's reactor under construction might be a cover to stockpile enriched uranium, a fissile material used to make bombs, although North Korea claims the project is for producing electricity.

"During the talks in Beijing, the two sides exchanged views that they are keeping a close watch on the North's new light-water atomic reactor," the official said on the condition of anonymity.

"But, both sides don't see any serious situations with regard to the reactor," he said, confirming that the issue was a major topic in talks between Lim and Wu.

Late last month, the International Atomic Energy Agency said North Korea has made "significant" progress in the light-water reactor project. Citing satellite imagery, the U.N. agency said the North has put a dome over the facility.

The official said North Korea also installed "cooling pumps" in the reactor.

Asked whether North Korea could complete building the reactor with its own technology, the official declined to answer.

South Korea and China also see "no immediate sign" of another nuclear test by North Korea, the official said.

Concerns persist that North Korea might carry out a third underground nuclear test after its much-hyped launch of a long-range missile fizzled in April. Media outlets have reported the North appears to have completed preparations for such a nuclear test.



North Korea's previous launches of long-range missiles in 2006 and 2009 were followed by nuclear tests. The international community has warned that the North, already under U.N. sanctions for the nuclear tests, will face tougher sanctions if it goes ahead with another test.

The six-party talks, which involve the two Koreas, the United States, China, Russia and Japan, have been dormant since late 2008. (Yonhap)

[http://www.koreatimes.co.kr/www/news/nation/2012/09/120\\_119357.html](http://www.koreatimes.co.kr/www/news/nation/2012/09/120_119357.html)

[\(Return to Articles and Documents List\)](#)

India Today – India

## India's Nuclear Arsenal Failed by 'Unreliable' Missiles

By MANOJ JOSHI

September 4, 2012

New Delhi: The most authoritative non-governmental assessment of world nuclear forces has revealed that India's nuclear capabilities are seriously lagging behind those of its putative adversaries, Pakistan and China. The evaluation by Hans M. Kristensen and Robert S. Norris in the Bulletin of Atomic Scientists called "Indian nuclear forces, 2012", reveals that for New Delhi, the principal means of weapons delivery remains fixed-wing aircraft like the Mirage-2000 and the Jaguar.

Unlike Pakistan and China which have substantial deployed missile arsenals, India's missile force is lagging, despite the test-launch of the Agni V in 2012. As the Bulletin notes, "the Agni I and Agni II, despite being declared operational, both have reliability issues that have delayed their full operational service".

The other missiles in the Agni series - the Agni III, IV and V - all remain under development. Indeed, the report notes that "the bulk of the Indian ballistic missile force is comprised of three versions of Prithvi missiles, but only one of these versions, the army's Prithvi I, has a nuclear role".

Considering that the lumbering Prithvi I requires hours to get ready for launch and has a range of just 150 km, it indicates that the Indian nuclear weapons capability is short-legged indeed.

Nevertheless, the Bulletin notes, the development of the Agni V has introduced "a new dynamic into the already complex triangular security relationship between India, Pakistan and China".

Lt Gen (ret'd) V.R. Raghavan, advisor with the Delhi Policy Group, does not agree with the Bulletin analysis fully. According to him, "The Agni I is operational and tested, and Agni II and III are almost there and all three can be used if necessary."

According to him, the lack of authoritative information on India's capability "is part of our posture of ambiguity" on matters nuclear.

But Admiral Arun Prakash, former navy chief and chairman Chiefs of Staff Committee, has another view. "We have to rely on the word of our DRDO/DAE scientists as far as performance, reliability, accuracy and yield of missiles and nuclear warheads are concerned. Unfortunately, hyperbolic claims coupled with dissonance within the ranks of our scientists have eroded their credibility," he said.

As of now, according to the Bulletin, "we estimate that India has produced 80-100 nuclear warheads". In the case of Pakistan, whose evaluation was done in 2011, the Bulletin analysis has said that "it has the world's fastest-growing nuclear stockpile", estimating that Pakistan "has 90-110 nuclear weapons".

The Pakistani arsenal, too, consists of mainly aircraft dropped bombs, but with its Chinese-supplied missiles, it has a deployed arsenal of missiles like the Ghaznavi, Shaheen I and Ghauri and is developing longer-range missiles.



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Significantly, Pakistan's India specific arsenal comprises of the Nasr short-range (70 km) ballistic missile, which can use nuclear weapons to take out troop formations and Pakistan is in the advanced stage of developing two cruise missiles - the Babur and the Raad.

If this is dismaying for New Delhi, the comparison with China is positively alarming. Beijing has an arsenal of 240 or so warheads and it is adding to this number, though not at the pace Pakistan is. Its nuclear weapons are primarily delivered through a mature missile arsenal with ranges from 2,000-11,000 km.

A large number of Chinese missiles, including their cruise missiles, are primarily for use in nonnuclear conventional battle role. Raghavan acknowledges that "China is a different kettle of fish", but he says even so, with the Agni V test, "India's progress has been commendable".

But the really big difference between India and China arises from the fact that India's thermonuclear weapon capability is suspect. A Mail Today report (August 27, 2009) had cited K. Santhanam, the DRDO scientist who ran the country's nuclear programme at the time of the Pokhran tests, to say that the single thermonuclear test carried out at the time was a "fizzle".

Responsibility for this state of affairs rests with the government. According to Admiral Prakash, "India's National Command Authority (NCA) not only meets infrequently, but is loath to take decisions when it does. This has an adverse impact on decision-making, financial approvals and production-rate of missiles/warheads".

He says that the management of our deterrent "by a sub-optimal troika consisting of scientists (in the driving seat), bureaucrats and soldiers" is also a debilitating factor.

<http://indiatoday.intoday.in/story/india-indian-nuclear-forces-bulletin-of-atomic-scientists-agni/1/215890.html>

[\(Return to Articles and Documents List\)](#)

The Express Tribune - Pakistan

September 6, 2012

## **Taliban Threat: Nuclear Site in DG Khan Cordoned Off**

*Heavy police, military presence called in to beef up security*

By Abdul Manan

Lahore : It could be the first-ever security threat to a nuclear facility in Pakistan, and the Army and security forces are taking no risks.

Following 'serious' security threats from the homegrown Taliban, the Army and Punjab police have deployed heavy forces at one of Pakistan's largest nuclear facilities in Dera Ghazi Khan (DG Khan), credible sources told *The Express Tribune*.

Besides the deployment inside and around the nuclear installation, three divisions in South Punjab have also been asked to launch a crackdown against banned outfits, sources added.

"DG Khan houses one of the largest nuclear facilities in the country, and has faced the first-ever serious security threat from the Tehreek-e-Taliban Pakistan (TTP)," said a high ranking military officer currently serving at the installation.

According to an official who works at the Pakistan Atomic Energy Commission, a key military and civilian fuel cycle site is located 40 kilometres from DG Khan. The site comprises uranium milling and mining operations, and a uranium hexafluoride conversion plant.

Sources in the military and Punjab Police, on condition of anonymity, told *The Express Tribune* that the nature of threat at the nuclear installation is 'serious,' with an 80% chance of occurrence.

The Inter-Services Intelligence reportedly intercepted a telephone call from the TTP, wherein they were said to have been finalising their strategy for attacks on nuclear installations in DG Khan, sources said.

**Issue No. 1023, 07 September 2012**

United States Air Force Counterproliferation Research & Education / Maxwell AFB, Montgomery AL  
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Three to four vehicles carrying suicide bombers are about to enter DG Khan and can strike the nuclear facilities at any time, the caller concluded according to sources. Sources said that, according to precedents, threats intercepted via phone calls often materialised in the next 72 hours. Direct threats via phone or letters often do not materialise, the source added.

DG Khan District Police Officer Chaudhry Saleem confirmed the threat, while talking to *The Express Tribune*, and said that DG Khan Police has received instructions from the military officer in charge at the nuclear installation to beef up security around the facility as much as possible.

The TTP started to send threats to the installation after the attacks on Kamra air base, Saleem said, adding that the police has established six new pickets around the nuclear installations and deployed heavy forces over the last 24 hours.

Sources said that a heavy contingent of military from the Multan cantonment has also reached the site and beefed up the inner cordon of the security. Military has also been deployed near the border with Balochistan.

Well-placed sources in law enforcement agencies said that when the TTP attacked Kamra air base, they announced that they would take revenge for killing of their South Punjab head Abdul Ghaffar Qaisrani by also attacking nuclear installations in DG Khan.

Sources said the DG Khan Police killed Qaisrani in an encounter in the first week of August, along with eight of his companions, almost clearing his network in the area. The police were able to trace Qaisrani after they interrogated Adnan Khosa, who attacked the Sri Lankan cricket team in Lahore along with Qaisrani, sources said, adding that Khosa is currently imprisoned in DG Khan.

Qaisrani's elimination caused a major loss to the TTP in South Punjab, and the militant outfit vowed to take revenge.

According to local politicians, the DG Khan nuclear site and adjacent areas had previously been a target of ground attacks by Baloch insurgents, but not the TTP.

TTP's threat, therefore, is alarming for the region, they added. Officials in the counter-terrorism department, however, said there are around a dozen pockets in South Punjab, particularly near the border areas of DG Khan, where TTP is increasing its clout.

<http://tribune.com.pk/story/432295/taliban-threat-nuclear-site-in-dg-khan-cordoned-off/>

[\(Return to Articles and Documents List\)](#)

RT (Russia Today) – Russia

## **US Report on Russian Commitment to Arms Treaties 'Unfounded'**

04 September 2012

Moscow has dismissed accusations from Washington it does not fulfill its obligations under the international conventions banning chemical and biological weapons.

*"As in previous years, the US State Department makes unfounded statements with no actual proof that Russia is allegedly violating its commitments under some international agreements,"* the Russian Foreign Ministry said in a statement on Tuesday.

Last week, the US Department of State published a report on the fulfillment of obligations undertaken in arms control, nonproliferation, and disarmament agreements in 2011.

*"Again, the report contains the claims over chemical and biological weapons conventions that are repeated from year to year,"* the Russian ministry pointed out. *"It is perplexing that American experts are unaware or deliberately misrepresent information on the progress of Russia's fulfillment of its commitments under the Chemical Weapons Convention (CWC), which is carried out under the control of the Organization for the Prohibition of Chemical Weapons."*



The US also continues to voice its doubts that Russian statements on the fulfillment of the Biological and Toxin Weapons Convention (BWC) are true.

*"Yet again, Americans do not cite any facts of violations, but cast doubt on Russia's compliance with its commitments to wrap up biological programs, which had been implemented in the USSR,"* the ministry says in its comment.

If a decade ago the US had not torpedoed negotiations to develop an inspection mechanism of the BWC, it would now be possible to avoid such groundless and unproved allegations over "the ambiguity" of Russia's adherence to its commitments, the ministry notes.

As for the Moratoria on Nuclear Testing, the Russian Foreign Ministry says, by now the treaty has been ratified by three out of five nuclear-weapon states, namely Russia, the UK and France.

*"Despite repeated assurances by President Barack Obama to accelerate the process, the US has not ratified the agreement,"* the statement reads.

The Comprehensive Nuclear-Test-Ban Treaty (CTBT) bans nuclear explosions by everyone everywhere. The agreement was signed by 183 and ratified by 157 countries. However, to become a law, the treaty must be signed and ratified by 44 states with nuclear technology. Eight of these – including the US – have not done so yet.

*"The voluntary declaration and observance of the moratoriums on nuclear tests is an important and significant measure, but it cannot replace international legal commitments,"* the Russian ministry stresses.

<http://rt.com/politics/chemical-weapon-biological-obligations-334/>

[\(Return to Articles and Documents List\)](#)

RIA Novosti – Russian Information Agency

## **Putin: U.S. Military Won't Let Obama Get Flexible on Missile Shield**

6 September 2012

Russian President Vladimir Putin has said U.S. President Barack Obama is willing to revive deadlocked talks on a planned U.S. missile shield in Europe, but that a military lobby in Congress and the "conservative" State Department are holding him back.

"Is it possible to find a solution to the problem, if President Obama is re-elected for a second term? In principle, yes, it is," Putin told the RT international news channel in an interview.

"But this isn't just about President Obama," he said. "My feeling is that he is a sincere man and that he sincerely wants to implement positive change. But can he do it, will they let him do it? There is... the military lobby, and the Department of State, which is quite conservative."

Putin also stressed the need for dialogue on the controversial shield, but said he was "not sure" that Washington was "ready for this kind of cooperation."

Negotiations between Russia and the United States on the missile defense project have stalled over Washington's reluctance to give Moscow legally-binding guarantees that the shield will not be used against it. Washington and NATO say they need the shield to defend Europe against a possible missile attack from Iran. Russia says the project could pose a threat to its national security and has threatened a host of countermeasures.

In May, the Russian General Staff said it did not rule out a pre-emptive strike against the U.S. shield in the event of an "aggravation of the situation."

The U.S. Democratic Party said in its 2012 national platform earlier this week that if re-elected, President Obama would "move forward" with the missile shield program regardless of Moscow's stance.





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But Putin told the channel a unilateral move would "not enhance global stability." He added that Russia would "have to think of how we can defend ourselves" if the United States proceeded with the shield.

"You also have to think about its strategic character, it's built not for a year or even a decade," he said.

He also said chances that a figure like Obama's Republican challenger Mitt Romney - who famously described Russia as the United States' "number one geopolitical foe" - could come to power in the United States were "quite high."

"So what are we supposed to do to ensure our security?" he asked.

In 2010, Obama scrapped the previous George W Bush administration's plans to deploy an anti-ballistic missile defense system in the Czech Republic and Poland, in a move welcomed by Moscow.

But Washington later announced it would be replaced by a reconfigured system that will eventually be deployed in the Mediterranean, Poland, Romania and Turkey.

MOSCOW, September 6 (RIA Novosti)

<http://en.rian.ru/world/20120906/175798904.html>

[\(Return to Articles and Documents List\)](#)

Journal of Turkish Weekly – Turkey

## **New Russian ICBM Can Carry Bigger Warhead**

Friday, 7 September 2012

Russia's new heavy intercontinental ballistic missile will have a 5-ton warhead, which is four times that of its predecessors, a former military commander said on Friday.

"The new ICBM will have a payload four times bigger than that of the Yars missile," said Col. Gen. Viktor Yesin (Ret.), advisor to the Russian Strategic Missile Forces (SMF) commander, who served as SMF chief of staff in 1991-93.

"The 45-ton Yars has a payload of 1.2 tons. The new missile will be able to orbit a payload of 5 tons."

The new missile will have a greater capability for missile defense penetration, he said.

SMF chief Col. Gen. Sergei Karakayev said this past Monday that Russia will build a new ICBM by 2018. The new missile is to replace the R-36M2 Voyevoda (NATO reporting name SS-18 Satan) missile.

So far all of Russia's recent ICBM projects, both sea-launched (Bulava) and ground-based (Topol-M, Yars), have been solid fuel.

Karakayev said the new ICBM will have a launch mass of around 100 tons with a better payload-launch weight ratio than in a solid fuel missile.

Such ICBMs can only be deployed in silos.

The Russian Defense Ministry previously said that unless the United States abandons its plans to create a missile defense system in Europe, Russia will take counter measures, including building a new heavy liquid-propellant missile.

-RIA Novosti

<http://www.turkishweekly.net/news/141484/new-russian-icbm-can-carry-bigger-warhead.html>

[\(Return to Articles and Documents List\)](#)

The Local (Germany's News in English) – Germany

## **US Nuclear Bombs Will Remain in Germany**

**Issue No. 1023, 07 September 2012**

*United States Air Force Counterproliferation Research & Education / Maxwell AFB, Montgomery AL*  
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*American nuclear weapons will not be removed from Germany, despite their departure being a long-term aim of the German government, it has emerged.*

5 September 2012

Although Foreign Minister Guido Westerwelle had put the removal of the 20 or so US nuclear warheads from Germany at the heart of his foreign policy aims, signs emerged two years ago that this might not be feasible.

Now, the *Frankfurter Rundschau* newspaper reported on Wednesday, the government has bowed to NATO plans to not only keep the bombs in Germany, but to modernise them.

Billions will be spent on modernising the bombs themselves, while the Bundeswehr is expected to spend around €250 million to keep its Tornado fighter jets – which would be used to drop the US nuclear bombs – serviceable until 2024.

In what it called an about-turn in German defence policy, the newspaper said the move was particularly painful for Westerwelle, who it noted had anchored the withdrawal of the US nukes from Germany in the 2009 coalition agreement.

Officially there are between 10 and 20 nuclear bombs at the Büchel Air Base in Rhineland Palatinate - relics of the Cold War stock of about 200 which were kept there until the 1990s.

Although many do not see the point of keeping the weapons in Germany, the paper said France, Turkey and eastern European states are keen to see them stay, while other countries want to see Russia reduce its tactical nuclear weapons arsenal first.

The *Berliner Zeitung* newspaper heard from military experts that the government had given up its position at the NATO summit in Chicago at the end of May, when Chancellor Angela Merkel and Westerwelle both assented to a joint declaration.

That declaration included a statement saying that nuclear weapons were a central component of the total NATO capacity, and that the current deployment was sufficient to provide an effective defence.

But although the foreign ministry still stresses that NATO is, in principle, working towards disarmament and control, Karl-Heinz Kamp, research director of the NATO Defence College in Rome, said there were several reasons why the Germans had to back down.

“Generally the euphoria about nuclear disarmament has dissipated,” he told the *Frankfurter Rundschau*. “And the relationship between Russia and the USA has cooled again. And with his public foray, Westerwelle did not make negotiations in NATO easier.”

He said the US was planning to spend around \$4 billion to modernise the bombs and make them steerable rather than just drop bombs as they are now, yet this has also brought criticism.

“The modernisation of these weapons by the USA threatens to remove the strict distinction between tactical and strategic weapons,” said Gernot Erler, foreign affairs spokesman for the opposition Social Democratic Party (SPD).

He said the SPD would call on the government to explain what steps it now planned in working towards the aim of removing US nuclear weapons from Germany and Europe.

<http://www.thelocal.de/national/20120905-44779.html>

[\(Return to Articles and Documents List\)](#)

London Guardian – U.K.

## **Trident Review Concerns Voiced after Nick Harvey Loses MoD Job in Reshuffle**



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*Departure of Harvey, who was leading report into alternatives to nuclear missile system, means Lib Dems have no MoD presence*

By Richard Norton-Taylor

Wednesday, 5 September 2012

The future of the government's review on alternatives to the Trident nuclear missile system is in doubt after Liberal Democrat Nick Harvey was stripped of his defence minister post in the reshuffle, according to MPs and campaigning groups.

Harvey, as the armed forces minister, was responsible for monitoring the progress of a report on possible replacements for the existing fleet of Trident submarines, part of the 2010 coalition agreement. "When you have got a review at the request of the Lib Dems, who the hell is going to manage that from now on?" said Tessa Munt, the Lib Dem MP for Wells.

David Laws, the Lib Dem MP for Yeovil, has been brought back into government as a junior education and Cabinet Office minister, and officially given the task of overseeing the Trident review.

However, there is now no Lib Dem presence in the Ministry of Defence and the view in Whitehall is that the Lib Dem leadership does not think it can fight Conservative support for a new Trident system, or at least wants to concentrate its energies elsewhere.

Harvey said on Tuesday night: "Nick Clegg made it clear that the decision was not a reflection on my performance in the job, which he said was widely regarded as having been excellent, but rather a strategic political decision to 'trade' this post for one in another government department."

Trident is not on the agenda of the Lib Dem conference in Brighton later this month.

The Campaign for Nuclear Disarmament (CND) expressed dismay at the decision to remove Harvey from his post. The group's general secretary, Kate Hudson, said: "This is a blow to all those inside and outside the Liberal Democrats who want Trident to be reviewed. Even though they have not opposed nuclear weapons outright, they, and Nick Harvey in particular, forced the Tories to conduct a Trident alternatives review and he pushed the review forward. Now this lone dissenting voice has been purged from the MoD."

In Scotland, the SNP has called for clarification over the status of the Trident alternatives review, which was due to report by the end of the year.

Angus Robertson, the SNP's Westminster leader and defence spokesman, said: "We need clarification from the Lib Dem leadership – have they abandoned the promise they made in the coalition agreement and capitulated to the Tories on Trident?"

"Trident is not wanted in Scotland, and never has been – yet the UK government are proposing to waste £100bn dumping another generation of Trident nuclear weapons on the river Clyde".

He added: "The vast majority of MSPs, as well as the churches, trade unions, and civic society across the nation totally oppose Trident nuclear weapons being based in Scotland. A key advantage of independence is that it is the only constitutional option which gives Scotland the powers to have Trident removed from Scottish waters."

Scrapping the Trident nuclear missile system would save £83.5bn and many of the jobs at risk could be transferred to other defence projects, according to a recent report by Prof Keith Hartley, a leading defence economist.

The government has already agreed to spend £5bn on a new Trident system, most of it on a new submarine design, according to the MoD. Some of the money has gone on research at the Atomic Weapons Establishment at Aldermaston into the capability of a new warhead.

<http://www.guardian.co.uk/uk/2012/sep/05/trident-review-concerns-cabinet-reshuffle>

[\(Return to Articles and Documents List\)](#)

**Issue No. 1023, 07 September 2012**

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RT (Russia Today) – Russia

## Moscow to React to US Asian Missile Defense

07 September 2012

Russia has expressed its concern over American plans to deploy a new missile defense shield in Southeast Asia.

*"The continuing growth of the US potential in what we call the Far East – the Asia-Pacific region – does not go unnoticed in Russia,"* Deputy Foreign Minister Sergey Ryabkov said at a nonproliferation conference in Moscow. *"We are closely following what is happening between the USA and its allies in Asia."*

According to the diplomat, *"important events"* are unfolding in the region and *"a lot has already been achieved,"* cites Interfax.

Moscow's concerns about the situation arise from the technology involved, as well as the *"geography and the US capability to deploy these assets in different locations."*

It is important that Washington eases these concerns. Otherwise, *"there is a set of measures worked out by the Russian leadership,"* Ryabkov noted.

Earlier, it was reported that Washington was planning to expand its missile defense in Asia in response to threats from North Korea and to counter China's growing missile capabilities.

The buildup could include an early-warning radar system on a southern Japanese island and possibly another one in Southeast Asia. These two new radars would supplement the one already installed in Aomori Prefecture in northern Japan in 2006.

The US global missile defense shield – in particular its European sector – has long been a stumbling block in the relations between Moscow and Washington. Russia worries that the planned system may pose a threat to its national security. The US has so far refused to provide legally-binding guarantees that the European missile defense assets would not be targeted against Russia.

*"The US missile defense system – is surely one of the key issues on today's agenda because it involves Russia's vital interests,"* President Vladimir Putin said in an interview with RT.

The differences on the issue can only be solved if both sides accept as an axiom that they are *"reliable partners and allies for each other."* That would mean the parties *"jointly do missile threat assessments and control this defense system together,"* Putin said.

The president stressed that Russia had done what it could and offered to work on the system together. However, the American partners are *"refusing to go along."* Moscow is set to continue the dialogue on the matter, he stressed.

*"But naturally, as our American partners proceed with developing their own missile defense we shall have to think of how we can defend ourselves and preserve the strategic balance,"* Putin added.

In November last year, then-President Dmitry Medvedev said Russia could place offensive weaponry on its borders with Europe as one possible measure against the deployment of American elements of missile defense shield in the region.

<http://rt.com/politics/missile-defense-asia-concerns-577/>

[\(Return to Articles and Documents List\)](#)

Inter Press Service (IPS) News Agency  
OPINION/Analysis

## IAEA Report Shows Iran Reduced Its Breakout Capacity

Issue No. 1023, 07 September 2012

United States Air Force Counterproliferation Research & Education / Maxwell AFB, Montgomery AL  
Phone: 334.953.7538 / Fax: 334.953.7530



September 1, 2012

Analysis by Gareth Porter

WASHINGTON, Sep 1 2012 (IPS) - The International Atomic Energy Agency (IAEA) report made public Thursday reveals that Iran has actually reduced the amount of 20-percent enriched uranium available for any possible “breakout” to weapons grade enrichment over the last three months rather than increasing it.

Contrary to the impression conveyed by most news media coverage, the report provides new evidence that Iran’s enrichment strategy is aimed at enhancing its bargaining position in negotiations with the United States rather than amassing such a breakout capability.

The reduction in the amount of 20-percent enriched uranium in the Iranian stockpile that could be used to enrich to weapons grade is the result of a major acceleration in the fabrication of fuel plates for the Tehran Research Reactor, which needs 20-percent enriched uranium to produce medical isotopes.

That higher level enriched uranium has been the main focus of U.S. diplomatic demands on Iran ever since 2009, on the ground that it represents the greatest threat of an Iranian move to obtain a nuclear weapon capability.

When 20-percent uranium is used to make fuel plates, however, it is very difficult to convert it back to a form that can be enriched to weapons grade levels.

When data in the Aug. 30 IAEA report on the “inventory” of 20-percent enriched uranium is collated with comparable data in the May 25 IAEA report, it shows that Iran is further from having a breakout capability than it was three months earlier.

The data in the two reports indicate that Iran increased the total production of 20-percent enriched uranium from 143 kg in May 2012 to 189.4 kg in mid-August. But the total stockpile of 20-percent enriched uranium that could be more easily enriched to weapons grade – and which has been the focus of U.S. diplomatic demands on Iran ever since 2009 – fell from 101 kg to 91.4 kg during the quarter.

The reduction in the stockpile available for weapons grade enrichment was the result of the conversion of 53.3 kg of 20-percent enriched uranium into fuel plates – compared with only 43 kg in the previous five months.

Iran was thus creating fuel plates for its medical reactor faster than it was enriching uranium to a 20-percent level.

But although that reduction of the stockpile of enriched uranium of greatest concern to the United States was the real significance of the new report, it was not conveyed by the headlines and leads in news media coverage. Those stories focused instead on the fact that production of 20-percent enriched uranium had increased, and that the number of centrifuges at the underground facility at Fordow had doubled.

“Nobody has put out the story that their stockpile is shrinking,” said Joe Cirincione, president of the Ploughshares Fund and a leading independent specialist on nuclear weapons policy, in an interview with IPS.

David Sanger and William Broad of the New York Times asserted in an Aug. 30 story that Iran had “doubled the number of centrifuges installed” at Fordow and had “cleansed” the site where the IAEA believed there had been nuclear weapons development work. The story made no reference to fuel plates or the effective stockpile of 20-percent enriched uranium.

A second story by Sanger and Jodi Rudoren on the same day, datelined Jerusalem, was even more alarmist and inaccurate. It declared that the nuclear programme was “speeding up” and that Iran was “close to crossing what Israel has said is its red line: the capacity to produce nuclear weapons in a location invulnerable to Israeli attack.”

Reuters and AP stories also focused on the doubling of centrifuges as the main message in the IAEA report, and Reuters also said Iran “seems to be struggling to develop more efficient nuclear technology that would shorten the time it would need for any atom bomb bid”.

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The Washington Post headline said that Iran was “speeding up” uranium enrichment, and the lead said Iran had “substantially increased the production of a more enriched form of uranium in recent months”. But in the second paragraph, it added, somewhat cryptically, that Iran “appeared to take steps that would make it harder to use its uranium stockpile to make nuclear bombs”.

Only a few paragraphs later was it made clear that the lead was misleading, because the IAEA had found that Iran had “converted much of the new material to metal form for use in a nuclear research reactor.” It even quoted an unnamed Barack Obama administration official said it could not be “further enriched to weapons-grade material....”

In fact the IAEA data showed that it had converted all of the uranium enriched to 20 percent during the quarter to fuel plates, and had converted some of the production from previous quarters as well.

The media reports of a doubling of the number of centrifuges at the underground facility at Fordow were also misleading. When the information is examined more carefully, it actually provides further evidence that Iran is not striving to amass the higher level uranium needed for a breakout capability but is maneuvering to prepare for a later negotiated settlement.

Although the IAEA report shows that the number of centrifuges in place in Fordow has increased from 696 to 2,140 over the past six months, it also makes it clear that the number of centrifuges actually operating has not changed during that period.

The reason for that striking anomaly in the deployment at Fordow does not appear to be technical problems with the centrifuges. The 1,444 centrifuges that are not operating were never even connected by pipes, as the Institute for Science and International Security (ISIS) observed in its Aug. 30 commentary on the report.

The noncommittal character of the deployment of centrifuges at Fordow suggests that Iran has not decided whether those 1,444 centrifuges are to be committed to 3.5-percent enrichment or to 20-percent enrichment.

The Obama administration appears to understand that this uncertainty about the purpose of the centrifuges is aimed at strengthening Iran’s diplomatic hand in future negotiations. “They have been very strategic about it,” a senior U.S. official told the New York Times just before the report was made public. “They are creating tremendous capacity, but they are not using it.”

The official added, “That gives them leverage, but they think it also stops short of creating the pretext for an attack.”

Cirincione agrees with that senior official’s analysis. “The Iranians are excellent chess players. They are moving their pieces very carefully,” he said. “They are continuing to enhance the value of their bargaining chips.”

The implication of the IAEA report, Cirincione believes, is that Iran is still maneuvering to position itself for a more advantageous agreement in future negotiations. “If you were the Iranians, why would you negotiate right now?” asked Cirincione. “You would want to wait for a better deal.”

In previous rounds of negotiations with Iran in 2012, the United States demanded an end to all 20-percent enrichment and even the closure of the Fordow facility but offered no alleviation of the harsh financial sanctions now being imposed on Iran.

*Gareth Porter, an investigative historian and journalist specialising in U.S. national security policy, received the UK-based Gellhorn Prize for journalism for 2011 for articles on the U.S. war in Afghanistan.*

<http://www.ipsnews.net/2012/09/iaea-report-shows-iran-reduced-its-breakout-capacity/>

[\(Return to Articles and Documents List\)](#)

Popular Mechanics  
OPINION/Interview

## U.S. Global Strike Commander on the State of Nuclear Deterrence

Issue No. 1023, 07 September 2012

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*Air Force Lt. Gen. James M. Kowalski, leader of Global Strike Command, is in charge of some of the nation's more lethal weapons. No minor task, that—the fleets of the B-2 and B-52 bombers and Minuteman III ICBMs are aging, budget cuts are looming, and more nations are becoming nuclear powers. Still, Kowalski took time to visit PM's offices in New York City to talk about the challenges facing GSC, a program to base nuclear missiles, the creation of a new bomber, and other ways to keep America's ultimate weapons ready in the future.*

By Joe Pappalardo  
September 4, 2012

**Q:** The Air Force is beginning to plan the replacement for the B-2, called the Long-Range Strike Bomber (LRSB). It will be an airplane built for conventional and nuclear missions. Which mission comes first?

**A:** The B-2 and the B-1—both of those bombers were produced during the Cold War. So we were in the middle of this ideological conflict, and as they came off the production line they went off and did testing for nuclear weapons because that was the primary mission and role that we had for them. They slowly grew a conventional capability.

It was a very different world. Back then, nuclear deterrence pretty much was strategic deterrence; that's not the case [anymore]. Strategic deterrence is economic deterrence, it's cyber deterrence, it's space. And there is a much smaller piece of nuclear deterrence. So the most probable use of a bomber in the future is really gonna be to influence decision-maker behavior to try to keep a confrontation from becoming a conflict, mostly by positioning the bombers, by demonstrating force, those kind of things.

But nuclear deterrence remains a mission set. After the airplane comes off the line and we have it conventionally certified with those weapons, then we'll transition to the nuke certification. We have never certified an airplane and both weapon types at the same time because it's very different testing and it would drive a whole lot of expense. Frankly, trying to do them simultaneously would slow those tests down. There is a lot of debate about, well, is it nuclear first or is it conventional first? It's going to be both. It's just, what's the priority?

**Q:** How has the nuclear deterrence mission at the Air Force changed as more nations acquire nukes? And our number of nuclear weapons probably will continue to drop, right?

**A:** What's interesting about the multipolar world is that there are more than two players in the game in any scenario—there may be three players or four players.

Let's look out 10 years, a lot of nations that may have 300 to 500 weapons as we continue to come down. As the number of weapons comes down, there's more countries that are closer to parity [with the United States]. And I don't think we really understand what that dynamic does. In the Cold War there were two actors, and deterrence [was] primarily nuclear, because we acknowledged the Soviet and the Warsaw Pact domination of the conventional battlefield in Europe. That's why we ended up with tactical weapons in Europe—to help deter that. That was the role of our strategic weapons—to provide that nuclear umbrella. When you read the mission statement of our command, it talks about nuclear deterrence, which is very different than strategic deterrence. Strategic deterrence includes economics, it includes conventional forces of which the U.S. and the West have fairly significant conventional capability.

[Economics] is a good example. There wasn't much interaction between these two actors—the Warsaw Pact and the Soviet Union, and the U.S. and NATO—economically because that was the competition and the conflict. These were two different economic systems, and it was an ideological conflict that was carried forward. During the Cold War we couldn't use economics as a way to deter the Soviets because there was no leverage. Today, economics is part of the calculus. So when two nations are considering elevating something from a confrontation to a conflict, there's got to be an economic calculus in there.

**Issue No. 1023, 07 September 2012**

United States Air Force Counterproliferation Research & Education / Maxwell AFB, Montgomery AL  
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**Q:** How does making the B-2's replacement nuclear capable change its design?

**A:** There are specific nuclear-safety and nuclear-hardening requirements that are laid out by the Department of Defense. And then just as the Navy has to meet those surety requirements in a submarine, we have to meet those requirements with our ICBMs and our bombers. That reaches down into a whole number of things: into logistics and how you track parts into acquisition; whom you bought the parts from; what's your confidence level in those pieces, in those components; how rigorously are they tested. If some components are required to be electromagnetic-pulse-hardened, so they have to be hardened against electromagnetic pulses—so you have to make that part of the design, part of the requirements that you set out up front, and then you do test them.

We continue to do testing of our bombers and our ICBMs for electromagnetic pulses to make sure that you don't get errant voltage or something in there, and that the system—you still have command and control of the system, and that you don't lose the system because you've had this pulse go through.

**Q:** Global Strike Command also flies conventional missions. When and how does that occur?

**A:** We are the Air Force component to U.S. Strategic Command on what we call a unified command plan mission. This is a post-9/11 development when we realized we didn't have a construct to execute a global strike. We always did it through a regional combatant commander. But that becomes very time-consuming and tedious. What if we wanted to do something quicker—who would do that? So it tends to be U.S. Strategic Command executing this global strike mission, and we're the Air Force component for that. It's sort of similar to what we did in Odyssey Dawn with the B-2 [bombers].

**Q:** But Odyssey Dawn, the U.S. effort in Libya, didn't look much like much a traditional no-fly zone.

**A:** For Odyssey Dawn, the decision was made that we were going to do the no-fly zone a little differently than we did it for a dozen years in Iraq—we would actually blow up their airplanes on the ground and then they wouldn't fly. It's sort of an effects-based targeting. What effect do you want? Well, we don't want them to fly. Okay, well here's one way to do it. So we executed through U.S. Strategic Command . . . They planned and executed the B-2 missions. As the B-2s were executed under U.S. Strategic Command, they were then handed off for the operational control and tactical control to U.S. Africom, so Africom would actually execute and conduct a strike. But they never landed. They would then leave the Africom airspace and transition back to U.S. Strategic Command.

We struck 45 of the 48 planned targets with precision munitions. And the targets were all hardened aircraft shelters. That's where Gaddafi found out that his shelters were not hardened—and they weren't really shelters.

**Q:** How is GSC playing a role in the Air–Sea Battle plan, the Pentagon's solution to get into areas that are protected by missiles, radar, and anti-aircraft weapons?

**A:** When you look at Air–Sea Battle, everybody focuses on China. But it really is about the capabilities of these newer systems that are coming out and are being proliferated by both China and Russia . . . They have greater precision over the horizon, as they're able to push forces, the traditional forces that we use, further from the fight. Well, as you get further from the fight, you now have a time/distance problem, which is: I've gotta cover this distance, and if I can only cover it at this speed, then you're expanding my decision cycle, and that creates vulnerabilities.



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So if I have a target X and I have the intelligence to know what target X is doing, but the defenses for target X are mobile, and I know I have to plan the ingress route for the weapon (not the airplane) over the period of a 4- or 5- or 6-hour flight.

**Q:** So you need to reconfigure the flight path of the weapon, not the airplane that launches it, so it can evade missile defense systems?

**A:** You know, they've demonstrated the ability to move these defenses within 20 minutes. They can pop 'em up, fire, bring 'em down, and move within 20 minutes. As we get in there, we should be watching and say, okay, there needs to be a validity check as we get close to the launch point. So if these guys [mobile enemy air defenses] move, now we've got to change the flight path. We may not change a target, [though] we could. But it's as much about changing the flight path to ensure the success of the weapons.

**Q:** What do you think about the possibility of large cuts coming in the budget?

**A:** My sense, having been doing this for 30-some years, is that when we have had large drawdowns—World War II, Korea, Vietnam, and then what I lived through, the dissolution of the Soviet Union—in every one of those cases missions went away. And so when you saw the budget decline, the [number and type of] mission was going away. And what we're seeing now; the expectation is that as the current operations go away, the operational money goes away, but at the same time the baseline defense budget is going to shrink. So this will really be the first time that we've had a large decline in the baseline defense budget, I think, yet the mission areas are growing. So it becomes a real problem of management.

**Q:** The Minuteman III missile has been steadily upgraded, but it has to last longer than GSC expected. Has the Air Force started thinking about a replacement?

**A:** The Minute Man III right now is good to beyond 2020. We have a mandate from Congress to make it viable past 2030. What that really means for us is, okay, that means after 2030, we probably need to have a follow-on system in the works and prepared if we're not able to achieve all the things that we would like to achieve nationally [and globally] with [reducing] nuclear weapons.

**Q:** Which would be eliminating them completely?

**A:** Right. We're signatories to the non-proliferation treaty, which says that we seek a world with zero nuclear weapons. But as President Obama said in his speech, as long as they exist, we need to keep them safe, secure, and effective.

**Q:** But at the same time we were just talking about the fact that more countries will become nuclear.

**A:** Right, but that doesn't mean that the arsenals have to get larger. These are weapons of statecraft. The decision on the right number of 2000-pound bombs—the Air Force can make that decision. But the decision on the right number of nuclear weapons is a decision made by the president, and usually in concert with Congress. So those are high-level decisions, and we do the organizing, training, and equipping, and we execute and are stewards of whatever that decision is.



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**Q:** So what is the status of America's next nuclear-weapon delivery system?

**A:** We're doing the analysis of alternatives for the ground-based strategic deterrent—that's what we're calling the follow-on to the Minute Man III. That study starts early next year. I think it starts early in calendar year 2013, and then it's about a year-long study.

**Q:** Could this mean the end of silos conceivably?

**A:** It could be, because you're looking across a range of alternatives. Part of what they will consider is what do these things cost; how do you keep them, as the president said, safe, secure, and effective. Are there any other attributes in command and control, or survivability? There's an entire range of attributes that they're going to evaluate.

[http://www.popularmechanics.com/technology/military/missile-defense/us-global-strike-commander-on-the-state-of-nuclear-deterrence-12370030?click=pm\\_latest](http://www.popularmechanics.com/technology/military/missile-defense/us-global-strike-commander-on-the-state-of-nuclear-deterrence-12370030?click=pm_latest)

[\(Return to Articles and Documents List\)](#)

Japan Times – Japan

OPINION/Analysis

Wednesday, September 5, 2012

## Nuclear Edge to Sea Disputes

By MICHAEL RICHARDSON

SINGAPORE — The tug of war over the South China Sea is seen mainly as a struggle among rival claimants — China, Taiwan and several Southeast Asian states — for control of valuable fisheries as well as seabed oil, natural gas and mineral resources.

China's claim to about 80 percent of the 3.5 million square kilometer sea and its hundreds of atolls, rocks and reefs, has also alarmed outside seafaring and trading nations, including the United States and Japan. They regard the South China Sea as an international maritime highway with free navigation for seaborne trade, unimpeded movement of naval vessels, and unfettered over-flight for military aircraft.

But recent developments in China's nuclear weapons program suggest that there is another important dimension to Beijing's increasing assertiveness in enforcing its claimed jurisdiction in the semi-enclosed sea: protecting a new generation of nuclear-powered submarines armed with atomic warheads and based at Sanya on China's Hainan Island. "Without understanding the nuclear dimension of the South China Sea disputes, China's maritime expansion makes little sense," says Tetsuo Kotani, a special research fellow at the Okazaki Institute in Tokyo.

One of the new generation subs was first spotted by a commercial satellite at Sanya in 2008. It was tied up to a pier that analysts said was China's first and so far only demagnetizing facility for submarines. Demagnetization is conducted before deployment to remove residual magnetic fields in the metal of a sub to make it harder to detect by hostile submarines, surface ships and anti-submarine aircraft.

Initially, these new generation Chinese subs and the nuclear-tipped ballistic missiles they could launch while submerged would be able to target potential adversaries in Asia and U.S. bases in the region. Eventually, with longer-range intercontinental missiles, they could cover the whole of the U.S. from launch points in the deep waters of the South China Sea without having to venture too far from their rock shelter tunnels bored into a mountain that forms part of the Sanya naval base for China's South Sea Fleet. This would give China a more effective deterrent against nuclear attack, one that operated from under the sea in addition to land-based nuclear missiles.

**Issue No. 1023, 07 September 2012**

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In recent years, China has built up a relatively small but increasingly impressive arsenal of approximately 140 nuclear ballistic missiles either concealed in silos or mounted on special launch vehicles and moved around to different hiding places on land. Each carries a single nuclear warhead.

But earlier this month, a newspaper controlled by the ruling Chinese Communist Party reported that China was developing the capability do what Russia and the U.S. have the technology to do — put multiple warheads on its intercontinental ballistic missiles (ICBMs), each capable of hitting different targets. This could greatly increase the number of China's operational nuclear weapons and overwhelm any missile defence system.

At the same time, China is building a fleet of new JIN-class nuclear-powered ballistic missile submarines (SSBNs), known as Type-094. Two are in operation, a third is under construction and may already have been launched, and at least two more are expected to be built.

Meanwhile, China is hoping to complete testing of the JL-2 nuclear-tipped missile for the Type-094 sub, which can carry 12 of the missiles. The U.S. Defense Department's annual report to Congress in May on China's armed forces and military strategy noted that the while the JL-2 program had faced repeated delays, it "may reach initial operating capability" within the next two years, giving the Chinese Navy "its first credible sea-based nuclear" deterrent.

The JL-2 submarine-launched ballistic missile (SLBM) is estimated by the Pentagon to have a range of some 7,400 km. This would enable a Type-094 SSBN armed with the missiles and stationed in waters near China to target the state of Alaska, Guam in the western Pacific and other American bases in the Asia-Pacific region, including those in Japan, as well as India and most of Russia (including Moscow), but not the continental U.S.

To reach the U.S. heartland from the South China Sea, the Chinese Navy would either have to develop a longer range SLBM, or send its Type-049 SSBNs through the Philippine or East China seas into the Pacific Ocean through relatively narrow straits that form dangerous choke points for the subs, making them vulnerable to detection and attack in a crisis.

At present, China's longest range land-launched ICBM can strike targets more than 13,000 km from launch point. A new Chinese ICBM, which some reports suggest was flight tested last month, reportedly has a range of at least 14,000 km.

In addition to adding a nuclear dimension to China's interests in the South China Sea, having a sea-based nuclear deterrent may pose serious control problems for the Central Military Commission (CMC) which supervises the country's nuclear arsenal. The CMC and the Chinese Navy have no experience in operating SSBNs in either peacetime or during a crisis. Yet remaining submerged and out of communication for lengthy periods is essential if SSBNs are to remain undetected.

So for the foreseeable future, China's land-based nuclear missile force is expected to be the mainstay of the country's deterrent and retaliatory strike capability against the continental U.S. or other faraway targets. But that will be cold comfort for any regional adversary of China that might soon be targeted by a new SSBN fleet armed with nuclear ballistic missiles.

*Michael Richardson is a visiting senior research fellow at the Institute of South East Asian Studies in Singapore.*

<http://www.japantimes.co.jp/text/ea20120905mr.html>

[\(Return to Articles and Documents List\)](#)

The Hill

OPINION/Congress Blog

## Three Things You Need to Know about IAEA Report on Iran

By Kate Gould, Friends Committee on National Legislation

September 5, 2012

**Issue No. 1023, 07 September 2012**

*United States Air Force Counterproliferation Research & Education / Maxwell AFB, Montgomery AL  
Phone: 334.953.7538 / Fax: 334.953.7530*



As Iran war-fever again breaks out upon the release of another IAEA report, the sage advice from countless top national security officials becomes all the more relevant: diplomacy remains the single best way to prevent a nuclear-armed Iran and a devastating war.

### **1. Iran is still not building nuclear weapons**

The IAEA report highlights troubling developments about Iran's nuclear program, but it also confirms yet again that Iran is still using its enriched uranium strictly for peaceful purposes. Nonetheless, the report has unleashed new speculations about 'how far Iran is from the bomb'. Breathless predictions that Iran is on the verge of obtaining nuclear weapons have persisted for more than a quarter century. In 1992, for example, Benjamin Netanyahu warned that Iran was 3-5 years from the ability to produce a nuclear weapon. Iran, however, never decided to race toward the bomb, and diplomacy has the potential to prevent a nuclear-armed Iran forever.

In contrast, even proponents of a military strike admit that an attack would only delay Iran's (currently civilian) nuclear program for a couple years at best. As U.S. and Israeli officials have warned, an attack could lead to a catastrophic war and encourage Iran to develop nuclear weapons.

### **2. Experts agree: Report is not a game changer**

The Obama Administration and preeminent experts on Iran's nuclear program, including Mark Fitzpatrick from the International Institute for Strategic Studies (IISS) and Daryl Kimball and Tom Collina of the Arms Control Association, all agree that while the report is certainly troubling, it is "not a 'game-changer' and there is still time and space to pursue diplomacy.

Three major findings have defined the latest IAEA report:

#### *A) Iran took a cue from my laundromat*

Iran doubled its enrichment capacity at Fordow by doubling its centrifuges, but Iran has not turned the centrifuges on. An unnamed U.S. administration official told the New York Times, "they are creating a tremendous production capability, but they are not yet using it.

"It reminds me of a laundromat my family frequented when I was growing up. In response to complaints that there weren't enough washing machines, the owner promised new machines. It was clear, however, from the snake of coils around the base of several machines that many of the 'new' washing machines wouldn't be turned on for quite some time, and that this 'expanded capacity' was of questionable value. The administration official mentioned above described how Iran's approach "gives them leverage, but they think it also stops short of creating the pretext for an attack."

#### *B) Iran reduces potentially dangerous stockpile*

While Iran increased its enrichment of 20-percent uranium, there is also some very good news: Iran reduced its stockpile of this uranium that could be used for 'breaking out' to weapons-grade uranium.

The Washington Post summed up this positive development by reporting: "the IAEA also found that Iran had converted much of the new material to metal form for use in a nuclear research reactor. Once the conversion has taken place, the uranium can't be further enriched to weapons-grade material, Obama administration officials said."

#### *C) Iran Fails to Fully Cooperate with IAEA*

The IAEA reports Iran's failure to fully cooperate with its investigations of Iran's nuclear program underscores the urgency for full IAEA cooperation to be a central component of the negotiations with Iran.

### **3. Still time and space for diplomacy to work**





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White House spokesman Tommy Vietor rightfully asserted that “there is still time and space” for diplomacy to prevent a nuclear-armed Iran. However, that time should not be squandered, and the U.S. should seize this opportunity to jumpstart its diplomatic efforts.

Joseph Cirincione of the Ploughshares Fund astutely explained Iran’s calculations in considering future diplomatic initiatives:

“The Iranians are excellent chess players. They are continuing to enhance the value of their bargaining chips. [...] If you were the Iranians, why would you negotiate right now? You would want to wait for a better deal.”

Despite the stalled talks, there is widespread agreement between U.S. and Iranian officials that any crisis-ending deal would require Iran to limit its enrichment program and fully cooperate with the IAEA, while the U.S.-led sanctions siege currently imposed on Iran would end, and normalization of relations with Iran would begin.

That deal will only happen through robust, sustained, and comprehensive diplomacy, which Congress has all too often sabotaged rather than fully supported.

*Gould is legislative associate for foreign policy at the Friends Committee on National Legislation (FCNL).*

<http://thehill.com/blogs/congress-blog/foreign-policy/247743-three-things-you-need-to-know-about-iaea-report-on-iran>

[\(Return to Articles and Documents List\)](#)

Foreign Policy

OPINION/Dispatch

## Race to the End

*Pakistan's terrible, horrible, no-good, very bad idea to develop battlefield nukes.*

BY TOM HUNDLEY

September 5, 2012

ISLAMABAD — One of the more tenacious conspiracy theories that have taken root in the hothouse of Pakistan's capital is that Osama bin Laden was not killed in the May 2, 2011, Navy SEAL raid on his compound in Abbottabad -- that, in fact, he had already been dead for years, killed in the caves of Tora Bora.

According to this theory, the CIA had been keeping bin Laden's corpse on ice, literally, ready to be resurrected at a moment when his "death" could better serve U.S. interests. That moment came when the SEALs decided to conduct a dry run of their long-planned operation to snatch Pakistan's nuclear weapons. Bin Laden's thawing corpse was brought along as cover in case the exercise blew up -- and as a devious bit of political theater to besmirch Pakistan's reputation if all went well.

What keep conspiracy theories like this alive are bits and pieces of half-baked evidence that could be construed to support a deeply held belief. In this case, it is the belief -- accepted across the board in Pakistan, from the top brass of its military down to the dusty gaggle of taxi drivers who awaited me each morning outside my Islamabad hotel -- that the United States has a not-so-secret plan to snatch Pakistan's nuclear arsenal.

The United States, which is duly concerned that Pakistan's nukes could fall into the wrong hands, almost certainly does have a plan to neutralize those weapons in the event of a coup or total state collapse. When the question was put to Condoleezza Rice during her 2005 confirmation hearings to become secretary of state, she replied, "We have noted this problem, and we are prepared to try to deal with it."

"Try" is the key word. Military experts -- American, Pakistani, and Indian -- agree that grabbing or disarming all of Pakistan's nukes at this stage would be something close to mission impossible. As one senior Pakistani general told me, "We look at the stories in the U.S. media about taking away our nuclear weapons and this definitely concerns us, so countermeasures have been developed accordingly." Such steps have included building more warheads and spreading

**Issue No. 1023, 07 September 2012**

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them out over a larger number of heavily guarded locations. This, of course, also makes the logistics of securing them against theft by homegrown terrorists that much more complicated.

Fears of that terrifying possibility were heightened in August, when a group of militants assaulted a Pakistani base that some believe houses nuclear weapons components. Nine militants and one soldier were killed in a two-hour firefight at the Kamra air force base. The local media immediately floated the theory that this, too, was part of the American plot to steal Pakistan's nukes. But more disturbing than any conspiracy theory is the reality that this was the fourth attack in five years on the Kamra base, just 20 miles from the capital. At least five other sensitive military installations have also come under attack by militants since 2007.

Yet, though the danger of a loose Pakistani nuke certainly deserves scrupulous attention, it may not be the severest nuclear threat emanating from South Asia, as I came to realize after interviewing more than a dozen experts in Pakistan, India, and the United States this summer. Since the 9/11 attacks, preventing the world's most dangerous weapons from falling into the hands of the world's most dangerous actors -- whether al Qaeda terrorists or Iranian mullahs -- has understandably been America's stated priority. Yet the gravest danger -- not only for the region, but for the United States itself -- may be the South Asian incarnation of a Cold War phenomenon: a nuclear arms race.

Pakistan, with an estimated 90 to 120 warheads, is now believed to be churning out more plutonium than any other country on the planet -- thanks to two Chinese-built reactors that are now online, a third that is undergoing trials, and a fourth that is scheduled to become operational by 2016. It has already passed India in total number of warheads and is on course to overtake Britain as the world's No. 5 nuclear power. Pakistan could end up in third place, behind Russia and the United States, within a decade.

This April, Pakistan tested a short-range ballistic missile, the Hatf IX, a so-called "shoot and scoot" battlefield nuclear weapon aimed at deterring an invasion by India's conventional forces. This development carries two disturbing implications. First, Pakistan now has the know-how to build nuclear warheads compact enough to fit on the tip of a small missile or inside a suitcase (handy for terrorists). Second, Pakistan has adopted a war-fighting doctrine that does not preclude nuking its own territory in the event of an Indian incursion -- a dubious first in the annals of deterrence theory.

India, meanwhile, has just tested its first long-range ballistic missile, the Agni-V, with a range of 3,100 miles. In April, the Indian Navy added a new Russian-made nuclear-powered submarine to its fleet and is now building its own nuclear subs. One has already been launched and will enter service next year, and India is determined to add submarine-launched ballistic missiles to its arsenal. This puts India on the verge of joining the elite nuclear "triad" club -- states with the ability to survive a first strike by an adversary and deliver a retaliatory strike by land, sea, or air.

India has also said that it has successfully tested an anti-ballistic missile shield that could be deployed "in a short time" to protect New Delhi and Mumbai. The downside of this defensive measure -- putting aside the question of effectiveness -- is that it invites an adversary to build many more warheads in the hope that a few will be able to slip through the shield.

India claims that it is not really engaged in an arms race -- or that, if it is, its opponent is not Pakistan, but China, a nuclear-armed superpower and economic rival with which it shares a disputed border. The Agni-V was dubbed the "China-killer" in some overheated Indian headlines. China's nuclear ambitions are geared toward deterring the United States and Russia, but it obligingly stirs the pot in South Asia by providing Pakistan with plutonium reactors -- in flagrant violation of its obligations as a member of the Nuclear Suppliers Group.

Meanwhile, through a 2008 deal negotiated by George W. Bush's administration, the United States has given India access to nuclear fuel on the international market. In the past, India had been barred from such trade because the Nuclear Non-Proliferation Treaty does not consider its nuclear weapons program legitimate, and its limited supplies of domestic uranium forced it to choose between powering its reactors and building more nuclear weapons. "Power production was the priority; now they can have both," explained Toby Dalton, deputy director of the Nuclear Policy Program at the Carnegie Endowment for International Peace.



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With both sides armed to the teeth, it is easy to exaggerate the fears and much harder to pinpoint where the real dangers lie. For the United States, the nightmare scenario is that some of Pakistan's warheads or its fissile material falls into the hands of the Taliban or al Qaeda -- or, worse, that the whole country falls into the hands of the Taliban. For example, Rolf Mowatt-Larssen, a former CIA officer now at Harvard University's Belfer Center for Science and International Affairs, has warned of the "lethal proximity between terrorists, extremists, and nuclear weapons insiders" in Pakistan. This is a reality, but on the whole, Pakistan's nuclear arsenal appears to be reasonably secure against internal threats, according to those who know the country best.

To outsiders, Pakistan appears to be permanently teetering on the brink of collapse. The fact that large swaths of the country are literally beyond the control of the central government is not reassuring. But a weak state does not mean a weak society, and powerful internal dynamics based largely on kinship and tribe make it highly unlikely that Pakistan would ever fall under the control of an outfit like the Taliban. During the country's intermittent bouts of democracy, its civilian leaders have been consistently incompetent and corrupt, but even in the worst of times, the military has maintained a high standard of professionalism. And there is nothing that matters more to the Pakistani military than keeping the nuclear arsenal -- its crown jewels -- out of the hands of India, the United States, and homegrown extremists.

"Pakistan struggled to acquire these weapons against the wishes of the world. Our nuclear capability comes as a result of great sacrifice. It is our most precious and powerful weapon -- for our defense, our security, and our political prestige," Talat Masood, a retired Pakistani lieutenant general, told me. "We keep them safe."

Pakistan's nuclear security is in the responsibility of the Strategic Plans Division, which appears to function pretty much as a separate branch of the military. It has its own training facility and an elaborate set of controls and screening procedures to keep track of all warheads and fissile material and to monitor any blips in the behavior patterns of its personnel. The 15 or so sites where weapons are stored are the mostly heavily guarded in the country. Even if some group managed to steal or commandeer a weapon, it is highly unlikely the group would be able to use it. The greater danger is the theft of fissile material, which could be used to make a crude bomb. "With 70 to 80 kilos of highly enriched uranium, it would be fairly easy to make one in the basement of a building in the city of your choice," said Pervez Hoodbhoy, a distinguished nuclear physicist at Islamabad's Quaid-i-Azam University. At the moment, Pakistan has a stockpile of about 2.75 tons -- or some 30 bombs' worth -- of highly enriched uranium. It does not tell Americans where it is stored.

"All nuclear countries are conscious of the risks, nuclear weapons states especially so," said Gen. Ehsan ul-Haq, who speaks with the been-there-done-that authority of a man who has served as both chairman of Pakistan's Joint Chiefs of Staff Committee and head of the ISI, its controversial spy agency. "Of course there are concerns. Some are genuine, but much of what you read in the U.S. media is irrational and reflective of paranoia. Rising radicalism in Pakistan? Yes, this is true, and the military is very conscious of this."

Perhaps the most credible endorsement of Pakistan's nuclear security regime comes from its most steadfast enemy. The consensus among India's top generals and defense experts is that Pakistan's nukes are pretty secure. "No one can be 100 percent secure, but I think they are more than 99 percent secure," said Shashindra Tyagi, a former chief of staff of the Indian Air Force. "They keep a very close watch on personnel. All of the steps that could be taken have been taken. This business of the Taliban taking over -- it can't be ruled out, but I think it's unlikely. The Pakistani military understands the threats they face better than anyone, and they are smart enough to take care it."

Yogesh Joshi, an analyst at the Institute for Defense Studies and Analyses in New Delhi, agrees: "Different states have different perceptions of risk. The U.S. has contingency plans [to secure Pakistan's nukes] because its nightmare scenario is that Pakistan's weapons fall into terrorist hands. The view from India over the years is that Pakistan, probably more than any other nuclear weapons state, has taken measures to secure its weapons. At the political level here, there's a lot of confidence that Pakistan's nuclear weapons are secure."

The greater concern -- not only for India and Pakistan, but for the United States and everyone else -- may be the direct competition between the two South Asian states. True, in terms of numbers and destructive capacity, the arms buildup

**Issue No. 1023, 07 September 2012**

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in South Asia does not come close to what was going on during the Cold War, when the United States and the Soviet Union built enough bombs to destroy the planet many times over. India and Pakistan have enough to destroy it only once, perhaps twice.

But in many ways, the arms race in South Asia is more dangerous. The United States and the Soviet Union were rival superpowers jockeying for influence and advantage on the global stage, but these were also two countries that had never gone to war with each other, that had a vast physical and psychological separation between them, that generally steered clear of direct provocations, and that eventually had mechanisms in place (like the famous hotline between Moscow and Washington) to make sure little misunderstandings didn't grow into monstrous miscalculations.

By contrast, the India-Pakistan rivalry comes with all the venom and vindictiveness of a messy divorce, which, of course, it is. The two countries have officially fought three wars against each other since their breakup in 1947 and have had numerous skirmishes and close calls since then. They have a festering territorial dispute in Kashmir. The 1999 Kargil conflict, waged a year after both countries went overtly nuclear, may have come closer to the nuclear brink than even the 1962 Cuban missile crisis. At the height of the showdown, there was credible intelligence that both sides were readying their nuclear arsenals for deployment.

Pakistan lost all three of these wars. It's very large army is still only half the size of India's, whose military budget is more than seven times larger than Pakistan's. Pakistan's generals are well aware that in any all-out conventional confrontation with India, they're toast. The guiding ideology of Pakistan's Army -- from the generals on down to their drivers -- is that India represents a permanent existential threat. This is why Pakistan clings to its nukes and attempts to maintain at least the illusion of what its generals call "bilateral balance."

This conventional asymmetry increases the danger of the nuclear arms race -- it feeds India's hubris and Pakistan's sense of failure. Here are two countries headed in opposite directions. India's \$1.7 trillion economy is eight times the size of Pakistan's and has grown at an enviable 8.2 percent annually over the last three years, compared to just 3.3 percent for Pakistan. India is in the forefront of the digital revolution, and while the country's leaders were embarrassed by this summer's massive two-day blackout, Pakistan's broken-down infrastructure struggles to provide citizens with more than a few hours of electricity each day. India, the world's largest democracy, is on the cusp of becoming a global power; Pakistan, with its on-and-off military dictatorships (off at the moment), ranks 13th on Foreign Policy's most recent Failed States Index.

More significant than these statistics is the mindset behind them. India is brimming with confidence. Pakistan is hobbled by fear, paranoia, and a deep sense of inferiority. India's major cities, New Delhi and Mumbai, are modernizing global metropolises. Checking into the Marriott in Pakistan's capital is like checking into a maximum-security prison -- high walls topped with razor wire, armed guards in watchtowers. Islamabad today looks and feels like a city under siege where there could be a coup at any moment. Soldiers and checkpoints are everywhere. It felt this way the first time I visited, in 1985.

This economic and cultural lopsidedness is strikingly reflected in the countries' nuclear competition.

In perhaps no other major power is the military quite so submissive to civilian authority as it is in India. "The civilian side lords it over the military in a manner that often borders on humiliation -- and there is no pushback from the military," said Ashley Tellis, an India expert with the Carnegie Endowment. The reasons for this are rooted in India's long struggle for independence against a colonial master that filled the ranks of its police and army with natives. "The military was seen as a force that served a colonial occupier," said Tellis. With the Indian officer corps' fondness for whiskey, mustaches, and other Britishisms, "the nationalist leadership looked at them as aliens" and took extreme measures to make sure there would be no coups.

From a nuclear standpoint, the result of this dynamic is a command-and-control system that is firmly in the hands of the civilian political leadership, a clearly stated "no first use" policy, and a view that nukes are political weapons -- a way to project global power and prestige -- not viable war-fighting tools.



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In theory, Pakistan's nuclear trigger is also in civilian hands. A body called the National Command Authority, headed by the prime minister, is supposed to be the ultimate decider of whether to initiate a nuclear attack. In reality, however, it is the military that controls the process from top to bottom. Pakistan has never formally stated its nuclear doctrine, preferring to keep the Indians guessing as to when and where it might use nukes. But now it appears to be contemplating the idea of actually using tactical nuclear weapons in a confrontation with India.

The problem with this delicate state of affairs is not simply the two countries' history of war, but Pakistan's tactic of hiding behind its nuclear shield while allowing terrorist groups to launch proxy attacks against India. The 2001 attack on India's Parliament building and the 2008 Mumbai attack are the most egregious examples. Both were carried out by Lashkar-e-Taiba militants based in Pakistan with well-established links to the ISI and were far more provocative than anything the Americans or Russians dished out to each other during the four decades of the Cold War. (More than 160 people were killed in the attack that held India's largest city hostage for 60 hours.) Terrorism is the classic underdog tactic, but Pakistan is certainly the world's first nuclear-armed underdog to successfully apply the tactic against a nuclear rival.

India has been struggling to respond. "For 15 years this country is bleeding from attack after attack, and there is nothing we can do," said Raja Mohan of the Observer Research Foundation, a New Delhi think tank. "The attacks correlate directly to Pakistan's acquisition of nuclear weapons. From the moment they got nukes, they saw it as an opportunity they could exploit. And India has no instruments to punish Pakistan or change its behavior."

There are encouraging signs that Pakistan may be rethinking this tactic, realizing that over the long run the Taliban and others of its ilk pose a far greater danger to Pakistan than to India. The relentless succession of suicide bombings and attacks on police and military bases and a costly war to wrest control of the Swat Valley from the Taliban seem to have finally convinced Pakistan's military that, in the words of one general, "the threat today is internal, and if it is not pushed back and neutralized, it will continue to expand its influence and we will have an Afghanistan situation inside our own country." But even if the ISI is sincere about ending its relationship with jihadi proxies, India's military planners are still searching for an appropriate weapon with which to punish Pakistan in the event of "another Mumbai."

The problem for India is that even though it holds a huge advantage in conventional forces, its mobilization process is ponderously slow. This shortcoming was humiliatingly exposed after the 2001 attack on the Parliament building, when it took the Indian Army about three weeks to deploy for a retaliatory strike -- enough time for the United States to step in and cool tempers on both sides. A potential nuclear crisis had been averted, but in 2004, India, still smarting from its inability to retaliate, announced a new war-fighting doctrine dubbed "Cold Start," which called for the capability to conduct a series of cross-border lightning strikes within 72 hours. The idea was not to hold territory or threaten the existence of the Pakistani state, but to use overwhelming firepower to deliver a punishing blow that would fall short of provoking a nuclear response.

Pakistan's reaction -- or overreaction -- was to double down on developing its short-range battlefield nuclear weapon, the Hatf IX. Any incursion from India would be met with a nuclear response even if it meant Pakistan had to nuke its own territory. "What one fears is that with the testing of these short-range nuclear missiles -- five in the last couple of months -- this seems to indicate a seriousness about using theater nuclear weapons," said Hoodbhoy, the physicist.

While strategists on both sides debate whether the Hatf IX, with a range of 60 kilometers and a mobile multibarrel launch system, would be enough to stop an advancing column of Indian tanks -- Hoodbhoy argues that "smaller, sub-kiloton-size weapons are not really effective militarily" -- they do agree that it would take more than one missile to do the job, instantly escalating the crisis beyond anyone's control.

The last nuclear weapon state to seriously consider the use of battlefield nuclear weapons was the United States during the first decades of the Cold War, when NATO was faced with the overwhelming superiority of Soviet conventional forces. But by the early 1970s, U.S. strategists no longer believed these weapons had any military utility, and by 1991 most had been withdrawn from European territory.

**Issue No. 1023, 07 September 2012**

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Pakistan, however, seems to have embraced this discarded strategy and is now, in effect, challenging India to a game of nuclear chicken -- which seems to have made India tread carefully. Tellingly, in 2008, when Lashkar terrorists attacked Mumbai, Cold Start was not implemented. These days, Indian officials seem to be backing away from the idea. "There is no Cold Start doctrine. No such thing. It was an off-the-cuff remark from a former chief of staff. I have been defense minister of the country. I should know," veteran Indian politician Jaswant Singh assured me.

Pakistani military planners, however, continue to be obsessed with the idea of Cold Start. It comes up in every conversation about security, and it is the driving force behind the country's program to develop tactical battlefield nukes. For now, the focus is on missile delivery systems, but according to Maria Sultan, director of the South Asian Strategic Stability Institute, an Islamabad think tank, there is growing interest in using nukes in other ways -- such as to create an electromagnetic pulse that would fry the enemy's electronics. "In short, we will look for full-spectrum response options," she said.

The arms race could make a loose nuke more likely. After all, Pakistan's assurances that its nuclear arsenal is safe and secure rest heavily on the argument that its warheads and their delivery systems have been uncoupled and stored separately in heavily guarded facilities. It would be very difficult for a group of mutinous officers to assemble the necessary protocols for a launch and well nigh impossible for a band of terrorists to do so. But that calculus changes with the deployment of mobile battlefield weapons. The weapons themselves, no longer stored in heavily guarded bunkers, would be far more exposed.

Nevertheless, military analysts from both countries still say that a nuclear exchange triggered by miscalculation, miscommunication, or panic is far more likely than terrorists stealing a weapon -- and, significantly, that the odds of such an exchange increase with the deployment of battlefield nukes. As these ready-to-use weapons are maneuvered closer to enemy lines, the chain of command and control would be stretched and more authority necessarily delegated to field officers. And, if they have weapons designed to repel a conventional attack, there is obviously a reasonable chance they will use them for that purpose. "It lowers the threshold," said Hoodbhoy. "The idea that tactical nukes could be used against Indian tanks on Pakistan's territory creates the kind of atmosphere that greatly shortens the distance to apocalypse."

Both sides speak of the possibility of a limited nuclear war. But even those who speak in these terms seem to understand that this is fantasy -- that once started, a nuclear exchange would be almost impossible to limit or contain. "The only move that you have control over is your first move; you have no control over the *n*th move in a nuclear exchange," said Carnegie's Tellis. The first launch would create hysteria; communication lines would break down, and events would rapidly cascade out of control. Some of the world's most densely populated cities could find themselves under nuclear attack, and an estimated 20 million people could die almost immediately.

What's more, the resulting firestorms would put 5 million to 7 million metric tons of smoke into the upper atmosphere, according to a new model developed by climate scientists at Rutgers University and the University of Colorado. Within weeks, skies around the world would be permanently overcast, and the condition vividly described by Carl Sagan as "nuclear winter" would be upon us. The darkness would likely last about a decade. The Earth's temperature would drop, agriculture around the globe would collapse, and a billion or more humans who already live on the margins of subsistence could starve.

This is the real nuclear threat that is festering in South Asia. It is a threat to all countries, including the United States, not just India and Pakistan. Both sides acknowledge it, but neither seems able to slow their dangerous race to annihilation.

*Tom Hundley is senior editor at the Pulitzer Center on Crisis Reporting. This article for Foreign Policy is part of the Pulitzer Center's Gateway project on nuclear security.*

[http://www.foreignpolicy.com/articles/2012/09/05/race\\_to\\_the\\_end?page=full](http://www.foreignpolicy.com/articles/2012/09/05/race_to_the_end?page=full)

[\(Return to Articles and Documents List\)](#)





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OPINION/Editorial

## The Int'l Politics of Missile Range Extension

September 6, 2012

Editorial Writer Ha Tae-won

A missile is a flying object armed with a warhead and designed to strike a target. Those equipped with nuclear warheads or biological and chemical weapons are powerful weapons of mass destruction. No international rules regulate the proliferation of missiles. Ballistic missiles developed by the U.S. and the former Soviet Union rapidly spread across the world in the Cold War era. Iran and Iraq launched Scuds missiles at enemy nations without reservation. The first resolution to the problem as presented by the Group of Seven countries led by the U.S. was the Missile Technology Control Regime of 1987.

The treaty bans the transfer of fully assembled missiles with a range of more than 300 kilometers or those loaded with a warhead weighing more than 500 kilograms and their modules, as well as related parts and technology. The rules, however, are designed to be voluntarily implemented and not binding. Non-member countries of the pact are not obliged to prevent proliferation. South Korea joined the agreement in March 2001 and is subject to the regulations, but North Korea is not. The Korean government agreed to limit its missile range limit of 180 kilometers in separate negotiations with the U.S. in 1979. The range was expanded to 300 kilometers in the first round of negotiations to amend the agreement in 2001. The weight of a warhead has not changed over the past 33 years, however. A missile capable of loading a warhead weighing less than 500 kilograms cannot be loaded with a nuclear warhead.

A second round of negotiations to amend the agreement, which started last year, will likely be concluded next month. Washington has no reason to fear missiles possessed by Seoul, a key ally. Pyongyang has deployed at military bases the Musudan-ho, a ballistic missile with a maximum range of 3,000 kilometers, and test-fired the Taepodong 2 missile, which has a range of 6,700 kilometers and can carry a warhead weighing 650 to 1,000 kilograms. To balance the seriously imbalanced missile capacities between both Koreas, the range of South Korean missiles should be increased to at least 800 kilometers. China and Japan both object to extending South Korea's missile range, however, saying it will lead to placing certain parts of their territories within the range of South Korean missiles.

An unconfirmed news report said Japan conveyed its objection to the expansion of South Korea's missile capacities to the U.S. If the report is confirmed, Tokyo is effectively moving to hinder Seoul's minimal bid to boost national security on its own. Japan possesses the technology to make an intercontinental ballistic missile that could hit the entire Korean Peninsula, and is capable of developing nuclear weapons if it wishes. Tokyo's sensitive response to the test-firing of long-range missiles by Pyongyang is understandable, but interfering with the planned extension of Seoul's missile range to a minimum extent is no different than a diplomatic provocation.

<http://english.donga.com/srv/service.php3?biid=2012090612078>

[\(Return to Articles and Documents List\)](#)

Wall Street Journal

OPINION

September 7, 2012

## What We Know About Iran's Nukes

*The regime's most secure uranium-enrichment site has doubled capacity since May, and its suspected top bomb-maker is back on the case.*

By Olli Heinonen and Simon Henderson

Iranian Supreme Leader Ali Khamenei claimed last week that his government isn't interested in nuclear weapons: "Our motto is nuclear energy for all and nuclear weapons for none," he said. A better perspective was provided almost

**Issue No. 1023, 07 September 2012**

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simultaneously from the world's nuclear watchdog, the International Atomic Energy Agency, which on Aug. 30 released its latest report on Iran's nuclear activities.

The report, written in a mix of bureaucrat-speak and obscure science, nevertheless conveys a worrying message. It shows that Iran continues to expand its capacity for enriching uranium. There are now two new groups of centrifuges installed at Fordow—the hardened site built under a mountain near the holy city of Qom—which signals a doubling of the site's capacity since May.

Crucially, Iran continues to stockpile uranium enriched to 3.5% and 20% purity—levels for which Iran has no immediate use unless it is planning to make an atomic bomb. (Its stockpiles of 20% uranium far exceed Tehran's claimed needs for a reactor making medical isotopes.)

Iran is now operating around 11,000 centrifuges categorized as "IR-1," which are based on a Dutch design acquired by the Pakistani scientist A.Q. Khan. This means that, despite international sanctions and surveillance, Iran has acquired (and perhaps continues to acquire) important supplies from abroad, particularly maraging steel and high-strength aluminum. Alternatively, and no less worrying, is the possibility that Iran is now able to produce such special metals domestically.

A piece of apparent good news is that Iran's IR-1 centrifuges are performing at half their design potential, producing less enriched uranium than they might otherwise. This indicates quality problems, perhaps due to the manufacturing process or to the raw materials used. It also appears that Iran remains slow in developing more advanced centrifuge types. This could be because of design and manufacturing problems. Or Iran could be saving the advanced centrifuges for another secret, yet-to-be-revealed facility. We can only speculate.

Judging from this report, Iran seems determined to achieve the capability of producing nuclear materials suitable for nuclear weapons. Whether it has made a decision to produce a fully operational nuclear weapon is unclear. (The Obama administration says it hasn't, according to its latest declared intelligence on Iran's government.)

Going forward, the matter of advanced centrifuges will be important to watch. If Iran acquires or develops them, it could pursue a "fast break-out"—moving within months to 90%-enriched uranium, which is weapons-grade—using its already sizable and growing inventories of 20%. Once it has five or six bombs-worth of 90% enriched uranium, it would essentially be a latent nuclear-weapon state—whether it has actually tested a bomb or not.

Indeed, given the intelligence uncertainties involved with monitoring whether such a secretive program moves to "break-out," even a stockpile of five or six bombs-worth of 20%-enriched uranium would effectively make Iran a nuclear-weapon state.

Last week's IAEA report also shows that inspectors continue to struggle to get access to the controversial site of Parchin, outside Tehran, where satellite imagery shows that Iran has carried out substantial landscaping and construction activities, presumably to cover up past nuclear work. Similar Iranian obstructionism and destruction of evidence has taken place in the past.

Still, the IAEA has powerful inspection tools—plus information from member states such as the U.S.—which means it could take a view on what earlier happened at Parchin. The suspicion is that Iran used a giant steel chamber at the site to experiment on "implosion," the technique of squeezing a nuclear explosive (such as highly enriched uranium) into a critical mass using conventional explosives. Evidence of such testing would be a "smoking gun" indicating Iranian military nuclear intentions.

Cautious politicians will argue there is still time for diplomacy, plus sanctions and military threats, to succeed. But Iranian leaders give little impression they are about to give in to pressure. And during last week's flurry of news, this newspaper reported that Iran's suspected chief nuclear bomb maker, Mohsen Fakhrizadeh, appears to have been brought back to the fore after several years of apparently being sidelined.



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The IAEA report concludes by saying that Director-General Yukiya Amano "will continue to report as appropriate." But Mr. Amano does not have a sign on his desk saying "the buck stops here." The future of Iran's nuclear program is in the hands of whoever does.

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[\(Return to Articles and Documents List\)](#)

**Issue No. 1023, 07 September 2012**

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