

#### Issue No. 1056, 03 May 2013

Articles & Other Documents: Tiniest Nuclear Strike Will Invite Massive Response, India Warns Pak

#### Featured Article:

- 1. Syria: Al-Qaeda's Battle for Control of Assad's Chemical Weapons Plant
- 2. Israeli Credibility on Line over Iran Nuclear Challenge
- 3. <u>Israel Inaugurates 5th Dolphin-Class Sub</u>
- 4. Official: Iran Self-Sufficient in N. Fuel Material Production, Likely to Launch New Reactor
- 5. Egypt Withdraws from Preparatory Committee of NPT Conference
- 6. What could UN Sleuths Unearth at Iran's Parchin Base?
- 7. The Biggest Korean Nuclear Risk Could Come From the South
- 8. S.Korea to Buy State-of-the-Art Interceptor Missiles from U.S.
- 9. Satellite Imagery Indicates N. Korea close to Operating Light-Water Reactor
- 10. Japan's Nuclear Plan Unsettles U.S.
- 11. Pentagon: N.Korea Moving Toward Nuke Missile
- 12. China Will Not Accept N. Korea as 'Nuclear-Armed State': Official
- 13. N. Korea to Use Nuclear Deterrence as Basis for Economic Growth
- 14. N Korea Provided Libya with N-Material through A Q Khan Ring
- 15. Tiniest Nuclear Strike Will Invite Massive Response, India Warns Pak
- 16. US Asks India, Pak to Restrain their Nuke, Missile Programmes
- 17. Moscow Warns Against Wrong Use of WMD Claim
- 18. Postponement of 4th Stage of U.S. Missile Defense Increases Chances of Agreement with Russia Official
- 19. Building New Ballistic Missile Subs Could Demand Smaller Fleet, Navy Says
- 20. Inside the Ring: Russia Builds Up, U.S. Down
- 21. Canada Evaluates Participating in US Missile Shield
- 22. Pentagon Bulks Up 'Bunker Buster' Bomb to Combat Iran
- 23. Russia Responds to U.S. with Air Base in Belarus
- 24. Reconverting Iran's U308 to UF6
- 25. Nuclear Arms Card for Japan
- 26. State Department: Syria must Answer Questions about Secret Nuclear Program
- 27. Budget Cuts Could Reshape the Country's Ship Supply, Official Says.
- 28. Editorial: Due Diligence on Missile Defence

Welcome to the CPC Outreach Journal. As part of USAF Counterproliferation Center's mission to counter weapons of mass destruction through education and research, we're providing our government and civilian community a source for timely counterproliferation information. This information includes articles, papers and other documents addressing issues pertinent to US military response options for dealing with chemical, biological, radiological, and nuclear (CBRN) threats and countermeasures. It's our hope this information resource will help enhance your counterproliferation issue awareness.

Established in 1998, the USAF/CPC provides education and research to present and future leaders of the Air Force, as well as to members of other branches of the armed services and Department of Defense. Our purpose is to help those agencies better prepare to counter the threat from weapons of mass destruction. Please feel free to visit our web site at http://cpc.au.af.mil/ for in-depth information and specific points of contact. The following articles, papers or documents do not necessarily reflect official endorsement of the United States Air Force, Department of Defense, or other US government agencies. Reproduction for private use or commercial gain is subject to original copyright restrictions. All rights are reserved.

#### Issue No.1056, 03 May 2013

The following articles, papers or documents do not necessarily reflect official endorsement of the United States Air Force, Department of Defense, or other US government agencies. Reproduction for private use or commercial gain is subject to original copyright restrictions. All rights are reserved.



The London Daily Telegraph – U.K.

#### Syria: Al-Qaeda's Battle for Control of Assad's Chemical Weapons Plant

A battle near a factory believed to be one of the Syrian regime's main chemical weapons plants shows just how close such weapons could be to falling into al-Qaeda's hands, writes Colin Freeman.

By Colin Freeman

27 April 2013

Set amid the rolling plains outside Aleppo, the town of al-Safira looks just like another vicious battleground in Syria's civil war. On one side are lightly-armed rebels, on the other are government troops, and in between is a hotly-contested no-man's land of bombed-out homes and burned-out military vehicles.

The fight for al-Safira is no ordinary turf war, however, and the prize can be found behind the perimeter walls of the heavily-guarded military base on the edge of town. Inside what looks like a drab industrial estate is one of Syria's main facilities for producing chemical weapons - and among its products is sarin, the lethal nerve gas that the regime is now feared to be deploying in its bid to cling to power.

Last week, Washington said for the first time that it had evidence of Sarin being used in "small" amounts during combat operations in Syria, a move that President Barack Obama has long warned is a "red line" that President Bashar al-Assad must not cross.

But as the West now ponders its response, the fear is not just that President Assad might start using his chemical arsenal in much greater quantities. Of equal concern is the prospect of it falling into even less benign hands - a risk that the stand-off at al Safira illustrates clearly.

For among the rebel lines in al-Safira flutters the black flag of the al-Nusra Brigade, the jihadist group that recently declared its allegiance to al-Qaeda. Known for their fighting prowess honed in Iraq, they are now taking the lead in nearly every frontline in the Syrian war, and earlier this month, pushed to within just over a mile of al-Safira, only to for the Syrian troops to regain the ground last week.

Should the tide of battle turn in al-Nusra's favour again, though, there is the possibility of the West's worst-case scenario unfolding - Syria's weapons of mass destruction falling into al-Qaeda's control. More than 500 times as toxic as cyanide and deadly in milligram-sized doses, a single canister of sarin could unleash carnage if released on a Tube network in London or New York.

Such grim possibilities are now uppermost in the minds of Western officials as they try to work out how to prevent Syria's vast chemical stockpiles being unleashed, be it by President Assad on his own people, or by his more extreme opponents on the outside world.

Yet it is not just at al-Safira that the danger lies. As the Syrian uprising has intensified in the past year, the regime has been secretly moving its stockpiles to weapons dumps all over the country, much of which it barely controls anymore. Nobody knows, therefore, when or where a cache might be captured by the opposition's more militant factions.

"The West may be saying: 'A red line has been crossed, let's do something'. But the question is what exactly can they do?" said Dina Esfandiary, an expert on Syria's WMD programme with the International Institute for Strategic Studies, the London-based defence and security think-tank. "Syria's stockpiles of chemical weapons are huge, and President Assad has done a very good job of hiding them all over the country."

The Syrian regime's chemical warchest is indeed vast - the biggest in the Middle East, and the fourth largest in the world. Started in the 1970s ranks with help from Syria's Cold War sponsor, Russia, today its programme includes facilities for making mustard gas, sarin and another nerve agent, VX, which stays lethal for much longer after dispersal.

In charge of the programme is the innocuous-sounding Scientific Studies and Research Centre outside Damascus, a body officially tasked with academic research. In practice, it reports directly to President Assad and operates a string of chemical production facilities, some allegedly developed with help from Iran and North Korea.



As Syria has not signed the international Chemical Weapons Convention, it has never declared details of its stockpiles to the outside world. But outside intelligence estimates reckon that Damascus has between 100 and 200 warheads filled with sarin for its Scud missiles, and thousands of chemical artillery bombs filled with sarin and VX.

Nobody outside the Assad regime now knows for certain where the stockpiles are now: the contents of the plant at Safira, for example, may have been moved to other, more secret storage spaces for safekeeping. But that uncertainty adds to the challenge. With such a vast arsenal scattered nationwide, the West would face a formidable task were it to attempt to secure it by force.

In December, the Pentagon told the Obama administration that it would require upward of 75,000 troops - almost half the number it took to topple Saddam Hussein. Such numbers would amount to an invasion in everything but name, and would doubtless attract hostility from both of Syria's warring sides.

An alternative would be smaller, ad hoc strikes of the sort that Israel has already admitted to doing to stop the weapons falling into the hands of its Lebanon-based enemy Hezbollah, whose Assad-backed fighters are now in Syria helping defend the regime. But these would not be practical for a large-scale neutralisation of the country's chemical threat, according to Ms. Esfandiary.

"Airstrikes aren't reliable because they can just release all the chemical agents into the air," she said. "Alternatively, they only do half the job and then render a secure site open to looters."

Nor, she added, would quick-fire raids by small teams of special forces be an alternative. "You would have to first secure the sites and then do a careful analysis of what was there, followed by controlled explosions. It is, frankly, a labour intensive job, and that is why the Pentagon assessed it as requiring 75,000 men.

"Besides, there may be any number of caches hidden all over the place, and even if you could look for them properly - which is difficult with a civil war going on - you would run the risk of some being left behind."

Not all the sites represent a genuine danger. Some store only the basic component chemicals, which must be mixed first before being weaponised, processes which require technical know-how. But others have cannisters full of battle-ready nerve agents, which could be operated in crude fashion simply by breaking them open.

"They might not be quite as effective in amateur hands, but the fact is that they are containers full of very nasty stuff, and if they were opened on a Tube train it would very dangerous," said Ms. Esfandiary. "As an instrument of terror, they also have a fear factor that more conventional weapons don't have."

Despite that, many analysts believe that the "red line" is now simply being blurred rather than crossed. With only limited evidence of Sarin use so far, they suspect Damascus is deliberately using such weapons just occasionally to test - and gradually undermine - Washington's resolve. President Assad, they reason, knows all too well that a major chemical attack would leave the US no option but to take action. But successive, smaller ones are a harder call, while still having the desired effect of spreading terror among Damascus's foes.

Outside of Syria, it also has another desired effect - underlining the differences between Mr Assad's opponents in the West. Last week, the hawkish US Republican senator, John McCain, who lost to Mr. Obama in the 2008 presidential race, called on America to send in troops to secure factories such as al Safira. But Mr. Obama shows no enthusiasm for doing so, and this weekend he even appeared to adjust his language slightly, saying that America would not permit the "systematic" use of chemical weapons. Critics pointed out that proscribing the use of chemical weapons on a "systematic" basis is not the same as proscribing their use altogether.

Yesterday, the Syrian information minister, Omran al-Zohbi, described the US claims of chemical weapons use as a "barefaced lie", insisting that for both legal and "moral" reasons, Damascus would never deploy them. But with Syria's civil war escalating daily, nobody - least of all a Syrian government minister - can guarantee that al Safira's deadly concoctions will remain safe forever.



http://www.telegraph.co.uk/news/worldnews/middleeast/syria/10022753/Syria-Al-Qaedas-battle-for-control-of-Assads-chemical-weapons-plant.html

(Return to Articles and Documents List)

Al Arabiya – U.A.E.

#### Israeli Credibility on Line over Iran Nuclear Challenge

By Reuters

Sunday, 28 April 2013

Reuters, Jerusalem - Israel risks a loss of credibility over both its "red line" for Iran's nuclear program and its threat of military action, and its room for unilateral maneuver is shrinking.

After years of veiled warnings that Israel might strike the Islamic Republic, Prime Minister Benjamin Netanyahu laid out an ultimatum at the United Nations last September.

Iran, he said, must not amass enough uranium at 20 percent fissile purity to fuel one bomb if enriched further. To ram the point home, he drew a red line across a cartoon bomb, guaranteeing him front page headlines around the world.

However, a respected Israeli ex-spymaster says Iran has skillfully circumvented the challenge. Other influential voices say the time has passed when Israel can hit out at Iran alone, leaving it dependent on U.S. decision-makers.

"If there was a good window of opportunity to attack, it was six months ago - not necessarily today," said Giora Eiland, a former Israeli national security adviser. Pressure from Washington, he said, had forced Israel to drop its strike plan.

Israel has long insisted on the need for a convincing military threat and setting clear lines beyond which Iran's nuclear activity should not advance, calling this the only way to persuade Iran that it must bow to international pressure.

Serving officials argue that Netanyahu's repeated warnings of the menace posed by Iran's nuclear project have pushed the issue to the top of the global agenda and helped generate some of the toughest economic sanctions ever imposed on a nation.

But some officials have also questioned the wisdom of his red line, arguing that such brinkmanship can generate unwelcome ambiguity - as the United States has discovered with its contested stance on the use of chemical weapons in Syria.

Amos Yadlin, a former military intelligence chief who runs a Tel Aviv think-tank, suggested last week that Israel had also got itself into a tangle, saying Iran had expanded its nuclear capacity beyond the Israeli limit, without triggering alarms.

"Today it can be said that the Iranians have crossed the redline set by Netanyahu at the U.N. assembly," Yadlin told a conference at the Institute for National Security Studies (INSS), which he heads.

#### **Drum beat resumes**

Netanyahu's office declined to respond to Yadlin's remarks, noting that the prime minister, in recent public statements, had said Iran was "continuing to get closer to the red line".

Tehran denies there is any military component to its nuclear activities, saying it is focused only on civilian energy needs. It charges that Israel, widely believed to have the Middle East's only nuclear arsenal, is the greater regional threat.

Keeping in step with Netanyahu, Israeli defense and military officials issued clear warnings this month that Israel was still prepared to go it alone against Iran, once more beating the drums of war after months of relative quiet.

"We will do what is necessary when it is necessary," armed forces chief of staff Benny Gantz told Israel Radio on April 16.



But there is increasing skepticism within diplomatic circles about the viability of such an option. Envoys doubt that the Israeli military could now make much of a dent on Iran's far-flung, well-fortified nuclear installations.

"If nothing happened last year, I struggle to see why it will happen this year," said a top Western diplomat in Tel Aviv, speaking on condition of anonymity given the sensitivities.

Israeli President Shimon Peres has done little to bolster belief in unilateral action, making clear this month that he thought U.S. President Barack Obama would be the one to go to war against Iran if nuclear diplomacy failed.

"He knows no one else will do it," Peres told Israeli TV.

The United States offered Netanyahu a new array of military hardware last week, including refueling tankers that could be used to get fighter jets to and from Iranian targets.

However, Israel cannot match the sort of firepower that the United States could bring to a battlefield. For example, Israel lacks the biggest bunker-busting bombs that experts say would be needed to penetrate Iran's underground Fordow enrichment plant.

Such limitations always cast doubt on a possible Israeli assault and the more time passes, the more the doubts grow.

Ehud Barak, the previous Israeli defense minister, said in November 2011 that within nine months it would probably be impossible to halt Iran because it was increasing the number of centrifuges and its network of sites, creating what he termed a "zone of immunity". Seventeen months have gone by since then.

#### **Reconversion rates**

Washington has promised Israel it will not let Iran develop a nuclear bomb. Israelis get jittery, however, because they have set a very different clock for when they believe it would be necessary to intervene - hence the importance of the red line.

The Israelis make no distinction between Iran developing the capacity to build an atomic bomb and having the actual weapon. Yadlin told the INSS conference that as soon as Tehran could put just one rudimentary device on a boat and sail it to an Israeli port, it was a de-facto nuclear-armed nation.

Some analysts question whether Iran would indeed attack Israel if it had an atom bomb, or even try to build one, rather than just establish an apparent nuclear capability to project deterrence and regional power. To fire a nuclear weapon at Israel, they say, could spell the ruin of the Islamic Republic in counter-strikes by a foe with a far bigger nuclear arsenal.

Gantz himself said last year he felt Iran's leadership was "very rational" and unlikely to build an atomic bomb.

The U.S. concern is to prevent Iran, which has called for Israel's destruction, from reaching the verge of acquiring a nuclear bomb - a nuance at variance with Israel's position that provides a longer window of opportunity to continue diplomacy.

Exasperated by Washington's refusal to set a clear ultimatum, Netanyahu came up with his 240-250 kg (530-550 pound) limit for 20 percent enriched uranium, hoping this would concentrate minds. The Iranians stayed below this threshold by converting 110 kg of the gaseous material to solid form that they say is destined to power a research reactor.

Yadlin said that rather than turn all of this into solid reactor fuel, Iran had kept 80 kg of it in the interim powdered state. That, he said, could be converted back to original gas form in around a week, inflating the stockpile beyond 250 kg.

With the red line in possible jeopardy, and unilateral military action in doubt, one security official suggested that Israel might turn to covert sabotage, with renewed focus on those specifically working on the 20 percent enrichment.



Five Iranian scientists and academics have been killed or attacked since 2010 in incidents believed to have targeted Iran's nuclear program. Israel has remained silent about the attacks and other known acts of sabotage at Iranian sites.

http://english.alarabiya.net/en/News/middle-east/2013/04/28/Israeli-credibility-on-line-over-Iran-nuclear-challenge.html

(Return to Articles and Documents List)

DefenseNews.com

## Israel Inaugurates 5th Dolphin-Class Sub

April 29, 2013 By BARBARA OPALL, Rome

TEL AVIV — Israel inaugurated its fifth nuclear-capable Dolphin-class submarine April 29 in Kiel, Germany, home of the shipbuilding division of Thyssen-Krupp Marine Systems (TKMS).

The INS Rahav, the fifth of six Israeli submarines built at the German shipyard with funding assistance from Berlin, is expected to arrive here sometime next year following weapon system integration and sea trials.

It follows the May 2012 inauguration of Israel's fourth Dolphin-class submarine, the INS Tanin, which is scheduled for operational deployment in the coming months.

Like its predecessor and the sixth submarine now undergoing hull construction at the TKMS shipyard, INS Rahav features an air-independent propulsion (AIP) system that allows for extended mission range and endurance.

By mid-2017, the Israel Navy should have full operational command of its strategic undersea fleet.

The Israel Navy's Dolphin-class submarines are the product of two decades of strategic cooperative program between Israel and Germany. Constructed in Germany according to Israeli design specifications, the submarines host Israeli-developed command, control and combat systems including, according to foreign reports, land-attack and cruise missiles capable of carrying tactical nuclear warheads.

German fully funded construction costs for Israel's first two Dolphins, shared half the cost of Israel's third submarine, and has underwritten about a third of the costs for the fourth and fifth vessels now undergoing sea trials. Under a government-to-government contract signed last year for Israel's sixth and final Dolphin-class sub, Berlin agreed to underwrite some €135 million (US \$175.8 million) on an acquisition that sources here say will exceed €600 million.

The April 29 inauguration ceremony was attended by Udi Shani, director-general of the Israeli MoD; Vice Adm. Ram Rothberg, Israeli Navy commander; and German counterparts.

http://www.defensenews.com/article/20130429/DEFREG04/304290008/Israel-Inaugurates-5th-Dolphin-Class-Sub (Return to Articles and Documents List)

FARS News Agency – Iran April 30, 2013

# Official: Iran Self-Sufficient in N. Fuel Material Production, Likely to Launch New Reactor

TEHRAN (FNA) - Head of the Atomic Energy Organization of Iran (AEOI) Fereidoun Abbasi announced the country's self-sufficiency in producing nuclear fuel materials, and said Iran will likely launch a new research reactor in the Northwestern city of Bonab in East Azarbaijan province.

"Iran is self-sufficient in producing nuclear fuel materials and can even export specialized services (in this field)," Abbasi said, addressing a number of local officials in Bonab Sunday night.



Meantime, he referred to Iran's progress in producing radiomedicine, and said, the country is exporting radiomedicine to the neighboring and the Middle-Eastern countries in addition to providing for its domestic needs.

Abbasi also raised the possibility of launching a nuclear reactor in Bonab city's research center in the future, and said if the relevant studies yield positive results, "a pool-type reactor which is harmless and is merely used for research purposes will be built at the center".

Earlier on Sunday, Abbasi also announced that the country plans to establish a center to develop the quality and quantity of agricultural products through nuclear technology.

"We hope to increase agricultural products as well as under-cultivation lands by 20% with the help of nuclear agriculture," Abbasi said in a meeting with local officials in Bonab city on Sunday.

"To this end, sample agricultural farms should be developed in the region to promote and develop agriculture qualitatively after the establishment of the center," he added.

http://english.farsnews.com/newstext.php?nn=9107165504

(Return to Articles and Documents List)

Daily News Egypt – Egypt

### Egypt Withdraws from Preparatory Committee of NPT Conference

Foreign ministry cites 'continued failure' to establish conference to rid the region of nuclear weapons By Joel Gulhane April 30, 2013

The Ministry of Foreign Affairs announced on Monday that Egypt has withdrawn from the second session of the Preparatory Committee for the United Nations Non-Proliferation Treaty (NPT) Review Conference currently being held in Geneva.

The decision to withdraw from the committee, according to a ministry statement, is in protest against "the continued failure of the conference" to implement a 1995 resolution to establish a nuclear weapon free zone in the Middle East.

The ministry highlighted that the decision to postpone a conference to establish a zone free of nuclear weapons in the Middle East violated the decision made in the 2010 NPT conference to hold the conference in 2012. The ministry added that this "may affect the credibility of the NPT system".

In its statement the ministry said: "The goal of the Egyptian decision is to send a strong message that it does not accept the continued lack of seriousness in dealing with the issue of establishing a zone free of nuclear weapons in the Middle East." The ministry pointed out that this issue is "an essential part of Egyptian national and Arab security and impacts upon international security and stability."

The ministry accused "some of the parties to the NPT, as well as some non-state parties" of hindering the establishment of the conference. It added that Egypt has sought the establishment of a nuclear weapon free zone since the launch of the initiative at the United Nations in 1974. It called on the member states of the treaty, the UN, the International Atomic Energy Agency (IAEA), and the international community to uphold their responsibility in implementing resolutions.

Minister of Foreign Affairs Mohamed Kamel Amr announced Egypt was heading an initiative to hold the conference but was waiting for "key players, especially the UN, to fulfill their obligations".

The conference was originally scheduled to take place in 2012, but was postponed by the four sponsors of the conference, the UN, the United States, Russia and the United Kingdom. The conference was postponed because not all states in the region had agreed to attend.



At the time of the original postponement the ministry and the Arab League both placed the blame on Israel's lack of cooperation.

The meeting of the second session of the NPT Review Conference began on 22 April in preparation for a 2015 conference. Last week, during one of the preparatory meetings, Egypt urged Israel to sign the NPT and to place all its nuclear facilities under IAEA safeguards.

http://www.dailynewsegypt.com/2013/04/30/egypt-withdraws-from-preparatory-committee-of-npt-conference/
(Return to Articles and Documents List)

Toronto Sun - Toronto, Canada

#### What could UN Sleuths Unearth at Iran's Parchin Base?

By Fredrik Dahl, Reuters Wednesday, May 01, 2013

SEIBERSDORF, Austria - The self-styled "Sherlock Holmes" of the UN nuclear watchdog, now seeking access to a major Iranian base, say they have the capability to find tiny traces of atomic material at a site even if a country were to try to cover it up.

In talks later this month, the International Atomic Energy Agency will once again press Tehran to allow its inspectors to visit Iran's sprawling Parchin military complex. That would enable them to bring back swab samples for thorough checks at the IAEA's high-tech laboratory near Vienna.

Western diplomats have accused Iran of trying to cleanse the Parchin site of possible signs of tests relevant for the development of nuclear weapons, casting doubt on whether UN investigators would discover anything even if they could go.

Iran says Parchin, located south-east of the capital Tehran, is a conventional army base. It dismisses allegations that it has carried out atomic bomb research and says its disputed nuclear programme is for energy and other peaceful aims only.

Experts say that while it may now be difficult to find any evidence, it would still be possible to locate traces of nuclear materials with equipment that can study particles 10,000 times smaller than a grain of sand.

Tell-tale particles could not be removed completely from a facility where uranium was used, said Stephan Vogt, a senior IAEA official, who emphasized that he was speaking generally and not specifically about Iran or Parchin.

"You cannot get rid of them by cleaning, you cannot dilute them to the extent that we will not be able to pick them up. It is just a matter of time," Vogt, who heads the IAEA's Environmental Sample Laboratory, said.

"We won't find it maybe the first time we go there," he said. But, "the more often we go, the higher the probability that we will pick up (traces) in some corner, at some table, in some plumbing".

Former chief IAEA inspector Olli Heinonen said any attempt by Iran to purge Parchin of clues would make the agency's task considerably harder, but "complete sanitization is very difficult to achieve if nuclear materials were actually used".

Like others at the IAEA's Seibersdorf laboratory complex outside the Austrian capital, Vogt was not authorized to discuss Iran, Syria or any other specific cases which have made the agency a key player in international nuclear diplomacy.

But he made clear his confidence in the sophisticated techniques at the scientists' disposal, including a new 3.8 million euro (\$5 million) instrument to study tiny particles.

**NUCLEAR "SHERLOCK HOLMES""** 



Likening the IAEA's investigative work to that of fictional detective Sherlock Holmes, Vogt said: "You are running around, looking for the right spot to sample and then you look for microscopic particles, they can tell you stories."

Installed in a purpose-built building, the Large Geometry Secondary Ion Mass Spectrometer can analyze 100-150 samples per year - up from 30-40 previously - collected around the world by inspectors using small pieces of cotton on surfaces.

"We have a much larger magnifying glass, we see much smaller particles," Vogt said, showing the machine, which occupies a room of its own. It "opens brand new doors into what we can see and what we can interpret."

The Seibersdorf facility gained a more prominent verification role in the 1990s after the first Gulf War when the IAEA was given wider powers to detect undeclared activity following the discovery of Iraq's clandestine nuclear programme.

Iraq shut down its nuclear, chemical and biological weapons programmes under orders from the United Nations. Suspicions that it was not co-operating with investigators were used by the United States and Britain to justify their invasion in 2003.

The IAEA has shown it can find particles even when a country has worked hard to hide them. It picked up tiny traces of enriched uranium at Kalaye Electric in Tehran in 2003, even though Iran had removed equipment and renovated parts of the facility.

The IAEA also uses a network of member states' laboratories to help it study samples taken during its inspections globally.

In order to strengthen its capabilities, it is now modernizing Seibersdorf, housed in an anonymous-looking complex of white, low buildings.

As part of an 81 million euro (\$106 million) upgrade, the IAEA is building a new Nuclear Materials Laboratory where uranium and plutonium samples will be checked to make sure that materials that can be used for bombs are fully accounted for.

Hundreds of samples from nuclear reactors and fuel plants are pored over every year by experts dressed in white coats and protective gear in the present 1970s-era building. The vast majority of tests turn up nothing suspicious.

"People working here don't know where the sample comes from. We are not doing politics here. We are only doing technical analysis," said chemistry team leader David Amaraggi.

#### **TUNGSTEN TROUBLE?**

But despite the IAEA's insistence that it is a technical organization serving 159 member states, its monitoring of Iran's nuclear programme can have geopolitical implications.

It regularly inspects Iran's declared nuclear facilities - including the Natanz and Fordow uranium enrichment sites - but has so far failed to persuade Tehran to enable it to resume a stalled investigation into suspected nuclear weapons research.

In a tenth round of talks since early 2012, an IAEA team led by chief inspector Herman Nackaerts will meet Iranian officials in Vienna on May 15 to try to end the deadlock.

The IAEA's priority is to visit Parchin, where it believes Iran built a steel chamber for explosives tests more than a decade ago, possibly using non-nuclear materials like the metal tungsten as substitutes for uranium.

Citing satellite imagery, Western diplomats have said that Iran appeared to be rebuilding the specific part of Parchin the IAEA wants to see, after earlier razing smaller buildings and removing soil. Iran denies it has anything to hide.

IAEA Director General Yukiya Amano says the UN agency still wants to inspect Parchin, even though it fears that the suspected clean-up will have seriously undermined its ability for "effective verification" at the site.



Robert Kelley, a former IAEA inspector in Iraq, said there would be a good chance to discover particles of man-modified uranium if such tests were conducted at Parchin, but if substitutes were used they would be harder to find.

"Environmental sampling is thousands of times less sensitive for detecting non-radioactive things like tungsten," Kelley said.

http://www.torontosun.com/2013/05/01/what-could-un-sleuths-unearth-at-irans-parchin-base (Return to Articles and Documents List)

Business Insider - U.S.

## The Biggest Korean Nuclear Risk Could Come From the South

Geoffrey Ingersoll April 30, 2013

While the world fights to rid North Korea of its limited nuclear arsenal, South Korea is pushing for its own nukes.

"A less obvious, but increasing, possibility is that South Korea might dash hopes of keeping the Peninsula non-nuclear," writes Ted Galen Carpenter, a senior defense analyst with the Cato Institute, in Real Clear Politics.

The effects of South Korea getting nukes could be devastating to the region.

"With every other country in Northeast Asia then having nuclear weapons — including Japan which would over time push to develop its own weapons — then you have the potential for a regional nuclear arms race," Dr. Bruce W. Bennet, a Korean nuclear deterrence expert at the Rand corporation, told Business Insider.

Though the U.S. and a South Korea just inked an extension to America's "nuclear umbrella" over the South, some experts say that the agreement can only last so long. Especially if South Koreans continually question whether the U.S. will actually pull the trigger, when push comes to shove.

"Unless [Washington] can induce North Korea to give up its nuclear program, there is a growing possibility that South Korea will not sit idly by and depend solely on the United States ... South Korean political leaders can resist a pronuclear majority in public opinion for only so long," wrote Carpenter.

Around two of every three South Koreans think the country should develop its own nuclear capacity. There have even been outspoken politicians advocating for it.

Bennet says the two-thirds majority is more indicative of a population that just wants its government to do something, anything, to deter North Korean aggression — but it doesn't necessarily mean building nukes.

"The closest analogy I can draw is France in the 1950s," says Bennet, "many of the French conservatives thought that the United States, though we had promised to do so, would not protect against a Soviet invasion."

Except France eventually developed its own nuclear program.

Bennet said the South is unlikely to do so as of yet, but, depending on the effects of budget cuts in the U.S., may decide in the coming years that it is in their best interest.

"That kind of arms race could get nasty. The development is expensive, and the leaders have to justify the budgets to their people — so you have to say things like during the Cold War, like 'better dead than red' — where suddenly you've got countries accusing each other of posing mortal threats," say Bennet.

This would unleash a dangerous destabilizing effect from Seoul to Beijing, says Bennet.

As for North Korea, most analysts say that it can't produce a nuclear ballistic missile — and that may be a problem. Bennet says U.S. taunts about not having the capability to nuke anything actually serve as motivation to try and nuke something, though most likely only a test.



"China's fourth nuclear test was a missile out over their deserts. North Korea could do the same thing, or it may just put one out over the sea areas just to demonstrate that it can," said Bennet.

http://www.businessinsider.com/risk-of-south-korean-nuke-development-2013-4

(Return to Articles and Documents List)

The Chosun Ilbo – South Korea May 2, 2013

#### S.Korea to Buy State-of-the-Art Interceptor Missiles from U.S.

The Joint Chiefs of Staff are following a Navy recommendation to buy American-made SM-3 interceptor missiles for Aegis ships.

The SM-3 missile is capable of intercepting an incoming enemy ballistic missile at an altitude of 150 km, much higher than the ground-based PAC-3 missiles now in use.

The Navy recommended the purchase because the new PAC-3 system has a high failure rate because it leaves only 5 to 7 seconds to intercept North Korea's Scud or Rodong missiles.

A government source said the SM-3 missiles can be deployed on the Aegis ships like the Sejong the Great once the Navy's software is upgraded.

South Korea has only an improved version of the Patriot PAC-2 missile and has been eyeing a better version, the PAC-3.

One SM-3 missile costs W15 billion (US\$1=W1,104), seven times as much as the PAC-3. SM-3s are a key component of the U.S. missile defense system, but experts question whether they would be suitable against North Korean missiles, which fly at a low altitude over short ranges.

During a visit to South Korea, China, and Japan recently, Gen. Martin Dempsey, the chairman of the U.S. Joint Chiefs of Staff, said, "Now is the right time, with the right capabilities in place, to seek to establish a collaborative, trilateral ballistic missile defense architecture incorporating U.S., Japanese and South Korean military assets."

He also proposed that "senior military officers of all three countries advise their political leaders to integrate air and missile defense systems."

This spawned speculation that the U.S. is trying to deploy its own SM-3 missiles in South Korea following their deployment on the U.S. mainland and in Japan.

South Korea is pushing for its own defense system against ballistic missile attacks from the North rather than joining the U.S. shield.

"There are some historic sensitivities," Dempsey said, referring to suspicions in South Korea and China against Japan over its past aggression. But he added, "All three nations should be mature enough to set aside their differences and focus on the common, prolonged threat of ballistic missiles from Pyongyang."

http://english.chosun.com/site/data/html dir/2013/05/02/2013050200560.html

(Return to Articles and Documents List)

Yonhap News Agency - South Korea

# Satellite Imagery Indicates N. Korea close to Operating Light-Water Reactor

By Kim Eun-jung



SEOUL, May 2 (Yonhap) -- North Korea is nearing completion of a light-water reactor for civilian purposes and startup activities could begin in the coming weeks, a specialist North Korea Web site said Thursday, citing recent satellite pictures.

38 North, a Web site about North Korea operated by Johns Hopkins University in the United States, said satellite imagery taken in March and April indicated Pyongyang appears to be in the final "cleanup" stage of completing its light-water reactor in Yongbyon.

"If the North has fuel on hand it will then need to conduct a number of activities during the startup period, which normally takes nine to 12 months for commercial power reactors before moving to a full power test and the facility becomes operational," researchers Jeffrey Lewis and Nick Hansen wrote on 38 North.

Pyongyang's lack of expertise in that stage, however, could delay the process, they added.

While the authors claimed the reactor seems designed to produce electricity for the civilian economy, they didn't exclude the possibility of the North having the residual capability to produce nuclear weapons.

The latest finding triggered fresh concerns as the self-proclaimed nuclear power has threatened to carry out nuclear strikes against South Korea and the U.S., and expand its arsenal for defensive purposes after its third nuclear test in February.

The reclusive regime publicly disclosed an enrichment facility in Yongbyon to a U.S. scientist in late 2010 and has claimed it has begun enriching uranium that could be used to manufacture fuel rods. It could give the North an alternative route to create bombs.

Seoul's defense ministry said further analysis is needed to figure out whether it's clearly a light-water reactor or another kind of nuclear reactor.

Unlike a light-water facility that has limited capacity in building atomic bombs, another type of nuclear facility could provide another route to build more plutonium as its present facility is very old, ministry spokesman Kim Min-seok said.

"If it turns out to be a new type of nuclear reactor, it would be very worrisome," Kim said during a briefing, without giving further details due to the information being classified.

As part of aid-for-disarmament talks in 2007, the impoverished nation blew up the Yongbyon reactor's cooling tower in a symbolic move to show its commitment.

Amid heightened tension over South Korea-U.S. joint drills, Pyongyang in early April announced it would resume the mothballed Yongbyon five-megawatt research reactor that yields bomb-grade plutonium.

Pyongyang reportedly used plutonium as fissile material for its first and second nuclear tests in 2006 and 2009, but it is not yet known if the North used plutonium or uranium in its latest detonation. The North is known to have the capability to make nuclear weapons using enriched uranium.

http://english.yonhapnews.co.kr/northkorea/2013/05/02/71/0401000000AEN20130502006700315F.HTML (Return to Articles and Documents List)

Wall Street Journal May 2, 2013

## Japan's Nuclear Plan Unsettles U.S.

By JAY SOLOMON and MIHO INADA Page – A9



TOKYO—Japan is preparing to start up a massive nuclear-fuel reprocessing plant over the objections of the Obama administration, which fears the move may stoke a broader race for nuclear technologies and even weapons in North Asia and the Middle East.

The Rokkasho reprocessing facility, based in Japan's northern Aomori prefecture, is capable of producing nine tons of weapons-usable plutonium annually, said Japanese officials and nuclear-industry experts, enough to build as many as 2,000 bombs, although Japanese officials say their program is civilian.

Japanese officials have said the plutonium would strictly be used for power generation, even as just two of Japan's 50 power reactors are running because of the safety concerns raised by the 2011 Fukushima nuclear accident. As the only country to have suffered a nuclear attack, Japanese officials have long opposed the use of nuclear weapons.

Yasufumi Fukushi, a spokesman for Rokkasho's operator, Japan Nuclear Fuel Ltd., said that under Prime Minister Shinzo Abe's ruling Liberal Democratic Party, idled nuclear-power plants that meet new safety measures will reopen. He also said the government is pushing ahead with Rokkasho as part of a national energy policy that seeks to recycle used nuclear fuel. But with North Korea actively testing nuclear weaponry and the region brimming with territorial tensions, U.S., South Korean and Japanese officials have expressed concerns that the plant would have a far-reaching affect on other nuclear programs.

U.S. officials believe Japan's neighbors, particularly China, South Korea and Taiwan, are closely monitoring Rokkasho and its possible commissioning to gauge whether they also should seek to develop their own nuclear-fuel technologies, or in Beijing's case, expand them.

"As a practical matter, if it operates Rokkasho, it will force China to respond to re-establish that it, Beijing, not Tokyo, is the most dominant nuclear player in East Asia," said Henry Sokolski, who heads the Nonproliferation Policy Education Center, a Washington think tank. "Such nuclear tit-for-tats-manship could get ugly."

Underscoring the concerns are calls by hawkish South Korean and Japanese politicians to consider whether their governments should pursue nuclear weapons after North Korea began a series of atomic-weapons tests in 2006. North Korea's latest bomb test took place in February.

A second U.S. concern has to do with the security of Japan's plutonium stockpile. Given that the country has drastically reduced the number of operating reactors that could burn plutonium-based fuels to produce electricity, the excess plutonium would have to be stored. Rokkasho has been seen as a facility that will allow Tokyo to reduce radioactive wastes from its nuclear power plants by reprocessing spent nuclear fuel.

Japan's government and private companies have invested more than \$21 billion in the Rokkasho facility since its construction began in 1992. The startup of the plant, however, has been delayed 19 times because of technical and financial problems, said Japanese officials.

The Obama administration widely believes Rokkasho had been mothballed as a result of these delays, said U.S. officials who have worked on nuclear policy. This belief was further cemented by the Fukushima accident and Tokyo's subsequent announcement that it was drastically scaling back its nuclear-power program.

"For the Obama administration...there wasn't any real need to focus on [Rokkasho]," said Gary Samore, who oversaw nuclear-proliferation issues in the White House during President Barack Obama's first term.

The December election of Mr. Abe, however, has bred new life into Japan's nuclear-power program and the prospects for the Rokkasho facility, said government and industry officials. Mr. Abe is pro-nuclear power, but his office said he wouldn't comment on Rokkasho.

Tokyo's ability to both enrich uranium and reprocess spent reactor fuel has allowed it to amass roughly nine tons of weapons-usable plutonium on its soil. Activating the Rokkasho plant would produce that much each year, said officials and industry experts. Japan had a reprocessing center in central Japan, called Tokai Mura, that harvested roughly seven tons of plutonium before the plant was shut in 2007.



Japan's reactors are almost all fueled by enriched uranium, not plutonium-based fuel. Reactors can be fueled by either, depending on the technology in use. Nuclear weapons, too, can be produced using either uranium enriched to weapons-grade or plutonium. Iran, by comparison, is producing near-weapons-grade uranium, but it also has a heavy-water reactor being developed that could produce weapons-usable plutonium.

The Obama administration has conveyed its concerns about the security of surplus plutonium to Japan in recent weeks, said U.S. and Japanese officials.

Tatsujiro Suzuki, vice chairman of the Japan Atomic Energy Commission, met in April in Washington with Obama administration officials, and paraphrased what he said was their message: "Allowing Japan to acquire large amounts of plutonium without clear prospects for a plutonium-use plan is a bad example for the rest of the world."

Mr. Suzuki met with the administration's point man on nuclear-proliferation issues, including Deputy Energy Secretary Daniel Poneman, and with Assistant Secretary of State Thomas Countryman, said U.S. and Japanese officials.

The State Department said the U.S. wasn't advising Japan on whether to rely on nuclear energy in the future. But U.S. officials said they believe Tokyo needs to put in place effective regulatory bodies in the wake of the Fukushima accident to effectively operate facilities like Rokkasho.

Both the Japan Atomic Energy Commission and Japan Nuclear Fuel have cited October as the startup date for the facility. But the country's Nuclear Regulation Authority, which was created in response to the Fukushima disaster, has said meeting this date is "impossible" as new safety regulations won't be released until December. The construction of the Rokkasho facility is largely completed, and nuclear-industry experts believe it could reach full capacity in a number of months.

Japan Nuclear Fuel's Mr. Fukushi stressed that the United Nations' nuclear watchdog, the International Atomic Energy Agency, will closely monitor Rokkasho's operation to guard against potential diversion of the weapons-usable plutonium.

"Japan accepts regular and irregular inspections from the IAEA and makes public how it handles and uses plutonium, which proves that Japan makes a peaceful use of it," he said.

Japanese nuclear regulators are taking a more cautious approach toward the timing of Rokkasho's commissioning.

The Obama administration fears that whenever Rokkasho starts operating, it will add a new dimension of friction in the region, prompting other countries to seek greater nuclear capabilities and more control over them.

A new nuclear-cooperation agreement with South Korea, which would allow for the continued sale of U.S.-origin fuel and equipment to the Asian ally, has ben delayed.

South Korean negotiators had been seeking a new nuclear-cooperation agreement with the U.S. that would allow it to begin enriching uranium and reprocessing spent reactor fuel, arguing these technologies are crucial for Seoul to expand and secure its civilian nuclear-power program.

But Washington resisted and the two agreed last week to extend the current agreement—without those prerogatives—for another two years, while negotiations continue.

South Korea believes—and has argued to the U.S.—that it should have the same capabilities as Japan, a longtime rival and former colonial occupier, current and former U.S. officials said.

U.S. officials said the commissioning of Rokkasho will only increase pressure from Seoul that it be formally allowed to follow Tokyo and begin producing its own nuclear fuel.

"If the Koreans are left with the impression that Japan can do things that South Korea can't, then it's not a sustainable concept," said Christopher Hill, a former American ambassador to Seoul.



China last week said it signed an agreement with French nuclear-power company Areva SA AREVA.FR +1.35%to construct a new facility to reprocess spent nuclear fuel. The plant is expected to be built at the same scale as Rokkasho and capable of producing nine tons of plutonium annually.

Beijing said the plant will be used only for civilian purposes. But China is estimated to have thousands of nuclear warheads in its arsenal. And nuclear experts believe any sign Japan is expanding its ability to produce weapons-usable fissile materials will likely be matched by Beijing.

http://online.wsj.com/article/SB10001424127887324582004578456943867189804.html (Return to Articles and Documents List)

The Seattle Times May 2, 2013

## Pentagon: N.Korea Moving Toward Nuke Missile

North Korea "will move closer" to its announced goal of being able to strike the U.S. with a nuclear-armed missile if it keeps investing in tests of nuclear and missile technology, the Pentagon said Thursday in a report to Congress.

By ROBERT BURNS, Associated Press (AP) National Security Writer

WASHINGTON — North Korea "will move closer" to its announced goal of being able to strike the U.S. with a nuclear-armed missile if it keeps investing in tests of nuclear and missile technology, the Pentagon said Thursday in a report to Congress.

The unclassified version of the report, which was required by a 2012 law, offered no estimate of when North Korea might achieve that capability. It said the pace of progress will depend in part on how many resources are invested.

The report fits an established U.S. intelligence picture of North Korea making an enormous effort to become a nuclear power and of an economically poor country directing a disproportionate amount of resources to its military.

Much about North Korea is a mystery to Western intelligence agencies, including the intentions of its leader, Kim Jong Un, who came to power after his father, Kim Jong II, died in December 2011. The Pentagon report said the U.S. foresees little change in North Korea's key strategic aims, which it said to include using "coercive diplomacy" to compel acceptance of its security interests, as well as developing a nuclear arsenal and undermining of the U.S.-South Korean alliance.

"We anticipate these strategic goals will be consistent under North Korea's new leader, Kim Jong Un," it said.

U.S. intelligence agencies are not fully in agreement on how far North Korea has advanced in its effort to make a nuclear weapon small enough to fit atop a ballistic missile. In April, a U.S. congressman disclosed that the Defense Intelligence Agency believes with "moderate confidence" that the North could deliver a nuclear weapon by ballistic missile but with "low reliability." The DIA assessment did not mention the potential range of such a strike.

Director of National Intelligence James Clapper, the top U.S. intelligence official, said shortly after the DIA assessment was made public that its conclusion was not shared by other intelligence agencies. Clapper said North Korea has made progress but has not "fully developed, tested or demonstrated the full range of capabilities necessary for a nuclear-armed missile."

In its report Thursday, the Pentagon made no mention of the DIA report.

The Pentagon asserted that North Korea wants to leverage the perception that it poses a nuclear threat in order to counter technologically superior forces. South Korea, which does not have nuclear weapons, has a modern military that benefits greatly from a close alliance with the U.S. There are about 28,500 American troops based in the South.



The Pentagon report noted that North Korea has recently showcased its advances in missile technology, including an April 2012 parading of a new road-mobile intercontinental ballistic missile that the Pentagon says has not been flight tested.

"These advances in ballistic missile delivery systems, coupled with developments in nuclear technology ... are in line with North Korea's stated objective of being able to strike the U.S. homeland," the report said.

After a February 2013 nuclear test, North Korea made what the Pentagon called "authoritative public announcements" of its desire to field nuclear-armed missiles with sufficient range to attack targets in the United States.

"North Korea will move closer to this goal, as well as increase the threat it poses to U.S. forces and allies in the region, if it continues testing and devoting scarce regime resources to these programs," the report said.

Earlier this year, North Korean leader Kim Jong Un made a series of bellicose threats to attack South Korea, Japan or the United States with nuclear weapons, sparking tough rhetoric in return. In response, the Pentagon in April announced plans to beef up its missile defenses by deploying 14 additional missile interceptors at a military base in Alaska.

Thursday's Pentagon report said the North's work on a space-launch vehicle has contributed heavily to its effort to build a missile capable of reaching the U.S. with a nuclear warhead. That work was highlighted by the launch of a satellite into space last December.

But it added that the North has yet to test a re-entry vehicle, without which it cannot deliver a warhead to a target. A workable re-entry vehicle is necessary to get a warhead back into Earth's atmosphere with protection against severe heating.

The report also projected that North Korea under Kim will stick to its current strategic priorities, including developing nuclear weapons to deter any attack from outside powers and trying to undermine the alliance between the United States and South Korea.

http://seattletimes.com/html/politics/2020907193 apususnorthkorea.html (Return to Articles and Documents List)

Yonhap News Agency – South Korea May 3, 2013

## China Will Not Accept N. Korea as 'Nuclear-Armed State': Official

SEOUL, May 3 (Yonhap) -- China's chief nuclear envoy has told his South Korean counterpart that Beijing will not accept North Korea as a "nuclear-armed state," a high-ranking Seoul official said Friday, adding that Seoul, Washington and Beijing reached a consensus on the stance.

The Chinese envoy Wu Dawei made the remarks when he held talks on Thursday in Beijing with his Seoul counterpart Lim Sung-nam, said the official at Seoul's foreign ministry who is familiar with the Lim-Wu talks.

The remarks come amid signs that recent tensions might hurt ties between Beijing and Pyongyang, highlighting China's waning tolerance for its neighbor's provocations.

"During the talks, Wu made it clear that China will not accept North Korea as a nuclear-armed state," said the official, who spoke on the condition of anonymity.

"With regard to the issue, I think that we, the U.S. and China have shared a united stance," the official said, adding he "sensed" a growing impatience by China with North Korea's increasing saber-rattling, particularly after the North's December rocket launch and its third nuclear test in February.



The official said Chinese officials have shown a "significant difference" in their attitude toward North Korea's provocations during the Beijing talks.

Wu's comments also echoed remarks made by U.S. Secretary of State John Kerry when he visited Beijing and Seoul last month and told reporters in Seoul that, "The United States will not accept the DPRK (North Korea) as a nuclear state."

The Seoul official also confirmed some media reports that China has ordered its provincial government to strictly implement the latest U.N. sanctions that punished the North for conducting the third nuclear test.

"I think that China has been increasingly disappointed by the North's provocations, including the December rocket launch and the third nuclear test," the official said.

Tensions have been high since North Korea's February nuclear test. Angered by the latest U.N. sanctions and the Seoul-Washington military exercises, North Korea has issued a torrent of warlike rhetoric and suspended operations at the Kaesong Industrial Complex in the North's border city of Kaesong.

In what was seen as a veiled swipe at North Korea, Chinese President Xi Jinping said last month that, "No one should be allowed to put a region and even the entire world into chaos for selfish gains."

As North Korea has rejected an offer of dialogue from South Korea to normalize the Kaesong zone, most remaining South Korean managers have returned home, but seven stayed behind to negotiate unpaid wages for North Korean workers.

The seven remaining South Koreans were set to return on Friday, Seoul officials said, pushing the last-remaining symbol of inter-Korean economic cooperation one step closer to permanent closure.

http://english.yonhapnews.co.kr/northkorea/2013/05/03/92/0401000000AEN20130503008400315F.HTML (Return to Articles and Documents List)

The Korea – South Korea May 3, 2013

#### N. Korea to Use Nuclear Deterrence as Basis for Economic Growth

North Korea said Friday that it will take full advantage of the deterrence provided by its nuclear weapons to inject more resources into the building of its economy.

The Rodong Sinmun, an organ of the ruling Workers' Party of Korea (WPK), said in an editorial that plans to simultaneously build up its economy and nuclear capabilities are a permanent strategy of the communist state.

"Only if the country becomes a nuclear power, can we pour funds and energy into the economic sector and strive for rapid growth," said the paper, which effectively represents the views of the ruling party.

It added that nuclear arms will speed the process of unification of the fatherland that is the ultimate aspiration of all Koreans.

This view is a repeat of the policy goal outlined at the WPK's Central Committee meeting on March 31.

The media outlet said the country has the nuclear industrial base forged by past leaders, the manpower and uranium resources to expand its nuclear weapons capability and alleviate power shortages.

On the current state of affairs, the Rodong Sinmun said that depending on what actions are taken by the country's enemies, a nuclear war may erupt, or there may be a temporary easing of tensions. It, however, stressed that there should be no illusions about the ultimate intent of the United States, saying its goal is to destroy the country.



The daily, meanwhile, emphasized that all national endeavors must be based on practicality, which forms the basis of meaningful change. It cautioned that all measures taken by the state, party, education and cultural fields should not fall into rigidity and dogma.

http://www.koreatimes.co.kr/www/news/nation/2013/05/511 135049.html

(Return to Articles and Documents List)

Economic Times - India

## N Korea Provided Libya with N-Material through A Q Khan Ring

By Press Trust of India (PTI) 3 May, 2013

WASHINGTON: North Korea used disgraced Pakistani nuclear scientist A Q Khan's notorious network to supply atomic materials to Libya and Syria, the Pentagon has said, as it warned against Pyongyang's proliferation efforts.

"One of our gravest concerns about North Korea's activities in the international arena is its demonstrated willingness to proliferate nuclear technology," Defence Secretary Chuck Hagel said in a report running into 20 pages.

"North Korea provided Libya with uranium hexafluoride, a compound used in the uranium enrichment process that produces fuel for nuclear reactors and nuclear weapons, via the proliferation network of Pakistani nuclear scientist A Q. Khan," the Defence Secretary said.

North Korea also provided Syria with nuclear reactor technology until 2007, said the report titled 'Military and Security Developments Involving the Democratic People's Republic of Korea 2012'.

Hagel said North Korea uses a world-wide network to facilitate arms sales activities and maintains a core group of recipient countries including Myanmar, Iran and Syria.

He informed the US Congress about North Korea's pursuit of nuclear capabilities and development of long-range ballistic missile programmes, saying it makes Pyongyang one of the most critical US security challenges.

"North Korea has an ambitious ballistic missile development programme and has exported missile technology to other countries, including Iran and Pakistan. North Korea has produced its own version of the SCUD B, as well as the SCUD C, an extended-range version of the SCUD B," Hagel said.

"North Korea has exported conventional and ballistic missile-related equipment, components, materials and technical assistance to countries in Africa, Asia, and the Middle East. Conventional weapons sales have included ammunition, small arms, artillery, armored vehicles, and surface-to-air missiles," he said.

"In addition to Burma, Iran and Syria, past clients for North Korea's ballistic missiles and associated technology have included Egypt, Iraq, Libya, Pakistan and Yemen, "he said.

Hagel said Pyongyang remains a security threat because of its willingness to undertake provocative and destabilizing behavior, including attacks on the Republic of Korea, its pursuit of nuclear weapons and long-range ballistic missiles, and its willingness to proliferate weapons in contravention of its international agreements and UN resolutions.

"The United States remains vigilant in the face of North Korea's continued provocations and steadfast in commitments to Allies in the region, including the security provided by extended deterrence commitments through both the nuclear umbrella and conventional forces," Hagel added.

http://economictimes.indiatimes.com/news/news-by-industry/et-cetera/n-korea-provided-libya-with-n-material-through-a-q-khan-ring/articleshow/19857950.cms

(Return to Articles and Documents List)



The Nation - Pakistan

## Tiniest Nuclear Strike Will Invite Massive Response, India Warns Pak

May 01, 2013

By Independent News Pakistan (INP)

NEW DELHI - India has warned Pakistan that it will retaliate massively even if Pakistan used tactical nuclear weapons against it.

As Pakistan is developing "tactical" nuclear warheads to miniaturise its weapons to be carried on short-range missiles, India will protect its security interests by retaliating to a "smaller" tactical attack in exactly the same manner as it would respond to a "big" strategic attack.

Shyam Saran, convener of the National Security Advisory Board, said, "India will not be the first to use nuclear weapons, but if it is attacked with such weapons, its nuclear retaliation will be massive and designed to inflict unacceptable damage on its adversary. The label on a nuclear weapon used for attacking India, strategic or tactical, is irrelevant from the Indian perspective."

Saran was placing on record India's official nuclear posture with the full concurrence of the highest levels of nuclear policymakers in New Delhi.

Saran argued that as a result of its tactical weapons, Pakistan believes it has brought down the threshold of nuclear use.

"Pakistani motivation is to dissuade India from contemplating conventional punitive retaliation to sub-conventional but highly destructive and disruptive cross-border terrorist strikes such as the horrific 26/11 attack on Mumbai. What Pakistan is signalling to India and to the world is that India should not contemplate retaliation even if there is another Mumbai because Pakistan has lowered the threshold of nuclear use to the theatre level.

This is nothing short of nuclear blackmail, no different from the irresponsible behaviour one witnesses in North Korea," he said.

One of the main reasons for Pakistan miniaturising its nukes is actually to keep its weapons from being confiscated or neutralised by the US, a fear that has grown in the Pakistani establishment in the wake of the operation against Osama bin Laden. "Pakistan has, nevertheless, projected its nuclear deterrent as solely targeted at India and its strategic doctrine mimics the binary nuclear equation between the US and the Soviet Union which prevailed during the Cold War," Saran said.

However, warning Pakistan, he added, "A limited nuclear war is a contradiction in terms. Any nuclear exchange, once initiated, would swiftly and inexorably escalate to the strategic level. Pakistan would be prudent not to assume otherwise as it sometimes appears to do, most recently by developing and perhaps deploying theatre nuclear weapons."

There have been significant shifts in Pakistan's nuclear posture recently. First is the movement from uranium to a newer generation of plutonium weapons, which has enabled Pakistan to increase the number of weapons, outstripping India in weapons and fissile material production. Although they are still to be verified, Pakistan has claimed it has miniaturised nuclear weapons to be used on cruise missiles and other short-range missiles. The newer generation of Pakistan's weapons are also solid-fuelled rather than liquid, making them easier to transport and launch, he said.

http://www.nation.com.pk/pakistan-news-newspaper-daily-english-online/international/01-May-2013/tiniest-nuclear-strike-will-invite-massive-response-india-warns-pak

(Return to Articles and Documents List)

The Economic Times - India



#### US Asks India, Pak to Restrain their Nuke, Missile Programmes

By Press Trust of India (PTI) 1 May 2013

Washington, May 1: Expressing concern over the continuing buildup of nuclear weapons in South Asia, the US has asked India and Pakistan to restrain their atomic and missile programmes and play a positive role in the global non-proliferation community.

"The United States remains deeply concerned by the dangers posed by the continuing buildup of nuclear weapons and their delivery systems in South Asia," Assistant Secretary of State for International Security and Nonproliferation Thomas Countryman said in his address to the 2015 Review Conference of the States Parties to the Treaty on the Nonproliferation of Nuclear Weapons in Geneva on Monday.

"Consistent with our shared vision of a world without nuclear weapons, the United States has repeatedly called on India and Pakistan to restrain their nuclear and missile programmes; end the production of fissile material for use in nuclear weapons; and support the commencement of negotiations in the Conference on Disarmament of a Fissile Material Cutoff Treaty," he said.

"In that regard, it is with concern and deep disappointment that we note Pakistan's reluctance to support the start of such negotiations," the US official said.

"We would welcome meaningful trust and confidence-building between these nuclear-armed states; we must find ways to reduce regional tensions and diminish the risk that nuclear weapons could be used, either intentionally or accidentally, in a crisis," he said.

The United States, he said continues to encourage both India and Pakistan to play a positive role in the global non-proliferation community and take steps to prevent proliferation, including bringing their strategic trade controls in line with the guidelines of the multilateral supplier regimes.

"We support, in a phased manner, India's goal of joining the four multilateral export control regimes," he said, adding that the US remains cognizant of its non-proliferation commitments and objectives when considering how to conduct its bilateral relations with any country.

"Our activities with both India and Pakistan continue to be consistent with our NPT (Nuclear Non-proliferation Treaty) obligations and with our commitment as members of the Nuclear Suppliers Group," Countryman said according to a copy of the speech provided here.

http://economictimes.indiatimes.com/news/politics-and-nation/us-asks-india-pak-to-restrain-their-nuke-missile-programmes/articleshow/19816377.cms

(Return to Articles and Documents List)

RIA Novosti – Russian Information Agency

## **Moscow Warns Against Wrong Use of WMD Claim**

29 April 2013

MOSCOW, April 29 (RIA Novosti) - Moscow believes using the issue of the alleged deployment of weapons of mass destruction (WMD) in the Syrian conflict to attain geopolitical goals is unacceptable, Foreign Minister Sergei Lavrov said on Monday.

"Perhaps there are some states that believe any methods are good as long as they can help overthrow the Syrian regime. However, the subject of the use of weapons of mass destruction is far too serious," he said, commenting on US and UK statements last week to the effect that chemical weapons may have been used in Syria.

"I think it is unacceptable to use it, to speculate on it for geopolitical purposes."



The White House said in a letter to lawmakers on Thursday that intelligence gathered by the United States, with the help of opposition forces in Syria, shows "with varying degrees of confidence that the Syrian regime has used chemical weapons on a small scale in Syria." Damascus has denied using chemical weapons, but said the opposition might have used them.

US President Barack Obama has described the use of chemical weapons in the conflict a "red line" for potential American intervention, but held back from saying what the US might do about the latest disclosures. The White House letter said the attack very likely originated with Assad's forces.

The US has been in contact with neighboring states including Israel, Jordan and Turkey over what measures to take to stop chemical weapons stockpiles in Syria falling into the hands of terrorist groups, the New York Times reported last November. Israel is concerned in particular that Lebanon's Hezbollah movement could get hold of chemical warheads that it could fire from rockets into Israel.

If Assad's forces has indeed use chemical weapons, Washington has a chance to press Russia and China, as UN Security Council members which have previously blocked sanctions against Syria, to take action, said Bruce Riedel a former veteran Middle East analyst at the US Central Intelligence Agency (CIA).

Lavrov said last Tuesday that any reports of the alleged use of chemical weapons in the conflict must be carefully investigated to avoid a repetition of the "Iraqi scenario."

In 2003, unconfirmed intelligence that former Iraqi dictator Saddam Hussein's regime possessed weapons of mass destruction were used as justification for a US-led invasion. That information later proved to be almost totally unfounded, according to weapons inspectors who searched for the weapons after that war.

http://en.rian.ru/russia/20130429/180903138/Moscow-Warns-Against-Wrong-Use-of-WMD-Claim.html (Return to Articles and Documents List)

Russia Beyond the Headlines - Russia

# Postponement of 4th Stage of U.S. Missile Defense Increases Chances of Agreement with Russia - Official

May 1, 2013 Interfax

The decision of the U.S. side to postpone the fourth stage of the adaptive program of missile defense increases the window of opportunities for reaching an understanding on missile defense that would suit both sides, Russian Deputy Defense Minister Anatoly Antonov has said.

"The cancellation of the fourth stage is not the problem. Essentially nothing has changed," he said answering questions from journalists in Brussels on Wednesday.

He noted that the U.S. side has admitted that it does not intend to make concessions to Russia but proceeds from its own national interests in the context of a shortage of funds and technological problems.

"It alarms us that such declarations don't contain even a hint of our colleagues taking care of strategic stability, consideration for the security of other key players on the international arena, not just themselves. That's the problem," Antonov said.

He added that the postponement of the fourth stage of deployment of U.S. missile defense is in question and there are no final guarantees that in the future there will be no return to it or that the fifth and sixth stages won't follow.

"One of our greatest problems with Americans is the absence of predictability. How can you get involved in any project, if you don't know how the results of the project are going to be used? Or to be more exact, if you definitely



know that after a while the results of the project will be used against your interests. So will you invest your energy, funds and so on in such a sphere," Antonov wondered.

On Tuesday he met U.S. Under Secretary of Defense James Miller for consultations on missile defense in Brussels.

"The window of opportunities exists today to agree on missile defense, to remove this irritant with Americans. And our work here yesterday was part of the common effort. A very big job is done along the lines of the Foreign Ministry, and we are putting all these results in one basket," Antonov said.

Asked about the declaration made last year by Dmitry Medvedev that Russia may take military-technical reply measures, if a certain red line is crossed Antonov said that nobody has removed this condition.

"It is simply that today nobody is speaking of implementing this set of measures immediately, instantly," Antonov said.

http://rbth.ru/news/2013/05/01/postponement\_of\_4th\_stage\_of\_us\_missile\_defense\_increases\_chances\_of\_agr\_25 663.html

(Return to Articles and Documents List)

Global Security Newswire

# Building New Ballistic Missile Subs Could Demand Smaller Fleet, Navy Says

April 30, 2013 By Rachel Oswald, *Global Security Newswire* 

WASHINGTON -- A U.S. admiral on Tuesday warned that moving ahead with plans for a replacement fleet of ballistic missile submarines in today's budget environment would mean significant reductions to the rest of the Navy fleet.

"The recapitalization of our SSBN force will impact our ability to fund investment in other future force structure," Vice. Adm. William Burke, deputy chief of naval operations for Warfare Systems, said at a Capitol Hill breakfast.

"Navy has the resources to procure these national assets but doing so will pressurize our procurement accounts," he said of plans to design and build 12 new ballistic missile submarines that are to replace aging Ohio-class vessels due to begin exiting naval service in 2027.

The Defense Department announced in 2012 it would delay by two years development of the successor generation of strategic submarines, which means the first vessel from the line will not be ready until 2031.

The Navy projects it will cost roughly \$5.6 billion each to purchase the second through 12th Ohio replacement vessels. The service is focusing on lowering that figure to about \$4.9 billion for each submarine, according to a March Congressional Research Service report.

The Obama administration in its fiscal 2014 budget request to Congress is seeking \$1.2 billion in research, development, test, and evaluation funding for the new SSBN fleet, *Aviation Week* reported.

The Navy is looking to expand its total fleet size to 300 vessels up from about 280 ships sailing today.

"If we buy the SSBN with existing funds, we will not reach the 300 ships, in fact we will find ourselves closer to 250," Burke said. "At these numbers, our global presence will be reduced such that we will only be able to visit some areas of the world episodically." He did not provide details on what Navy ship deployments and global positioning would look like under such a scenario.

Potential budget cuts under federal sequestration that could extend over a decade "will only make this worse, causing us to both reduce procurement as well as retire existing ships, leaving us with a Navy in the vicinity of 200 ships at which point we may not be considered a global navy," the admiral further warned.



Some arms control advocates have called for the Navy to scale back its SSBN fleet renewal plans in order to save money. Building only eight new ballistic missile submarines instead of the current planned 12 and further postponing initial acquisition until 2023, would save \$15 billion, according to the Washington-based Arms Control Association.

However, there is no alternative to building the Ohio replacement, Burke said, highlighting the importance of maintaining the most survivable leg of the nuclear triad to ensure the deterrent threat of U.S. retaliatory nuclear attacks.

http://www.nti.org/gsn/article/vice-admiral-warns-renewing-ohio-fleet-will-impact-other-navy-procurement-projects/
(Return to Articles and Documents List)

The Washington Times

## Inside the Ring: Russia Builds Up, U.S. Down

By Bill Gertz, *The Washington Times* Wednesday, May 1, 2013

As the Obama administration prepares to launch a new round of strategic nuclear missile cuts, Russia's strategic nuclear forces are undergoing a major modernization, according to U.S. officials.

Russia's military announced last month that as part of the nuclear buildup, Moscow later this year will deploy the first of its new intercontinental ballistic missiles called the Yars-M.

Details of the missile are being kept secret, but it has been described as a fifth-generation strategic nuclear system that Russian officials say will be able to penetrate U.S. missile defenses using a new type of fuel that requires a shorter burn time for booster engines.

The solid-fueled, road-mobile ICBM was tested a year ago, and it is said to have an increased payload capacity for a warhead weighing up to 1.5 tons. The range is 6,835 miles. Like earlier mobile missiles known as SS-29s and SS-27s, the new ICBM is expected to have up to 10 multiple, independently targetable warheads.

Retired Russian strategic forces commander Col. Gen. Viktor Yesin has said the Yars-M "is one of the military technological measures that the Russian military-political leadership has devised in response to the development of a global missile-defense system by the Americans."

Last year, a Russian official explained the new missile's fuel and anti-missile defense capabilities in an interview with Moskovski Komsomolets. The strategic nuclear weapons specialist said the high-tech fuel "allows for the reduction of the working time of the engines during the boost phase of flight, when it [the missile] is most vulnerable to detection by defensive means."

"As a result, we achieve the most complex part of the rocket boost so fast that the enemy does not have time to calculate its trajectory and, therefore, cannot destroy it," the official said. "That is, we can say that our ability to overcome missile defense will be significantly increased."

Russia also announced last month that it has launched a new research-and-development program for a modernized rail-mobile ICBM. Russia's Deputy Defense Minister **Yuri Borisov** told RIA Novosti April 23 that work on this rail-based missile is in the early stages and could be deployed by 2020.

Russia, during the Soviet era, was the first to deploy a rail-mobile nuclear missile system known as the SS-24.

The rail-based missile is being developed by Russia's Moscow Institute of Thermal, which also is building the new Bulava submarine-launched ballistic missiles, as well as existing land-based Topol ICBMs.

The rail-mobile ICBMs were prohibited under earlier versions of the U.S.-Russia START treaties. However, the 2010 New START treaty did not prohibit rail-mobile basing of missiles, and Moscow is taking advantage of the omission.



In addition to the new strategic missiles, Russia is building a new strategic bomber that is expected to be deployed by 2020.

By comparison, President Obama is expected to announced soon that he will seek a new round of talks with Russia aimed at cutting U.S. nuclear forces even further than the 1,550 deployed warheads under the 2020 New START treaty.

The cuts are expected to be justified under a Pentagon strategic review that was completed months ago but withheld from release. That report is expected to suggest that U.S. warhead levels could be cut to as few as 1,000, causing critics to say the administration is undermining U.S. deterrence and the ability to extend the nuclear umbrella to European and Asian allies.

Rep. Mike Rogers, Alabama Republican and chairman of the House Armed Services subcommittee on strategic forces, said in a recent speech that the administration is short between \$1 billion and \$1.6 billion that was promised in 2010 for nuclear modernization.

Among nuclear programs in trouble are a new strategic submarine, life extension programs for B-61, W-76 and W-88 nuclear warheads and a long-range standoff nuclear cruise missile. A needed plutonium facility in New Mexico was also canceled, Mr. Rogers said.

The Pentagon also postponed a test launch of a Minuteman III ICBM last month over concerns that it might be misconstrued as an attack on North Korea, which threatened nuclear missile attacks on the United States.

"I find this deeply concerning, given the sorry state of the nuclear modernization commitments made during the last round," Mr. Rogers said of plans for additional nuclear cuts.

The Pentagon also has signaled a further lack of resolve toward its nuclear modernization program by ordering an environmental impact study of shutting down an entire land-based nuclear-missile wing.

"New START doesn't require shutting down a missile wing, and I have heard no explanation for this requested study," Mr. Rogers said.

http://www.washingtontimes.com/news/2013/may/1/inside-the-ring-russia-builds-up-us-down/?utm\_source=RSS\_Feed&utm\_medium=RSS\_

(Return to Articles and Documents List)

Defense News.com

## Canada Evaluates Participating in US Missile Shield

May 2, 2013 By DAVID PUGLIESE

VICTORIA, BRITISH COLUMBIA — Canada's potential participation in the US military's continental missile defense system is once again under consideration, sparking a debate in Canada on whether it makes sense to take part in the ground-based interceptor shield.

Canadian defense sources say work is underway to see what the country could contribute to the US missile defense system. The most likely contribution would be land for the installation of early warning radars, a proposal that will be presented to US officials in the near future.

In 2004, then-Liberal Party Defence Minister David Pratt said the Canadian government was considering making sites available to the US in Canada's Arctic for use as missile defense radar sites. But a year later, in a major about-face, then-Prime Minister Paul Martin announced that Canada had decided not to join the US missile shield after all.

But with a Conservative Party government in power, the discussions on what the country can contribute are back on.



Canada's interest is centered on the Ground-based Midcourse Defense system, which is composed of ground-based interceptor missiles, and support and fire control systems. The interceptors are located at Fort Greely, Alaska, and Vandenberg Air Force Base, Calif.

On April 21, Canadian Public Safety Minister Vic Toews said on television that discussions about Canada's role in the US missile defense system are needed. "I think we need a broader discussion about that, and I'm not prepared to venture an opinion at this time," he said when asked about news reports Canada is prepared to join the system.

Defence Minister Peter MacKay dodged questions in the House of Commons on April 22 and April 23 about the government's interest in missile defense, but he did not issue a denial. "We have, in the past, consistently reviewed our security policies with a mind to ensuring that Canadians were protected at home and abroad," he said.

US Defense Department spokeswoman Jennifer Elzea said on April 23 that US military officers regularly consult with their Canadian counterparts about ballistic missile threats. But she noted there have been no "recent discussions with the Canadians about a ballistic missile defense shield."

During the 2006 election, Conservative Party Prime Minister Stephen Harper opened the door for future participation, adding that he would have Parliament vote on any proposed agreement.

Liberal Party defense critic John McKay said the coordinated leak of information to the news media about Canadian government interest in missile defense indicates to him that the planning is at an advanced stage.

"I suspect that these conversations are fairly advanced, and when a debate in public actually occurs, it will be a done deal or as close to a done deal as you can expect," McKay said.

Canada's Defence Department has laid the groundwork for participation with a series of reports it produced in 2001 and 2002.

One of the reports noted that the US missile defense system could benefit from the use of Canadian territory. That could involve placing tracking and target control sensors on Canada's east coast, according to a 2001 report, "Potential Canadian Involvement in Ballistic Missile Defence." The report was declassified under the Access to Information law.

"To properly address the Middle Eastern threat, an east coast system would have to be deployed," stated the report, prepared by the Defence Department's space directorate. "Canada's value-added role would be to provide a place to deploy such a system.

"Canadian locations could provide TTC (track and target control) of the target missile 2-3 minutes faster than mainland US locations," it added.

Steven Staples, president of the Rideau Institute in Ottawa, said the Conservative government is using concern about recent developments in North Korea's missile program and Iran's nuclear weapons research to try to revitalize Canadian participation in the US system.

"The campaign to join is heating up," said Staples, whose organization helped lead public opposition in 2004 and 2005 to participation in the US missile system. "It's amazing how quickly people forget the debate of eight years ago, and what a waste of money this would be."

When Martin announced Canada would not take part in a missile defense system, he added that it would focus its contribution on helping defend North America by making improvements in intelligence-gathering, coastal surveillance and continued participation in the joint US-Canadian North American Aerospace Defense Command.

 $\underline{http://www.defensenews.com/article/20130502/DEFREG02/305030007/Canada-Evaluates-Participating-US-Missile-Shield}$ 

(Return to Articles and Documents List)



Wall Street Journal May 3, 2013

## Pentagon Bulks Up 'Bunker Buster' Bomb to Combat Iran

U.S. Upgrades Weapon to Penetrate Key Nuclear Site; Push to Persuade Israelis By Adam Entous and Julian E. Barnes Page – A1

WASHINGTON—The Pentagon has redesigned its biggest "bunker buster" bomb with more advanced features intended to enable it to destroy Iran's most heavily fortified and defended nuclear site.

U.S. officials see development of the weapon as critical to convincing Israel that the U.S. has the ability to prevent Iran from getting a nuclear bomb if diplomacy fails, and also that Israel's military can't do that on its own.

Several times in recent weeks, American officials, seeking to demonstrate U.S. capabilities, showed Israeli military and civilian leaders secret Air Force video of an earlier version of the bomb hitting its target in high-altitude testing, and explained what had been done to improve it, according to diplomats who were present.

In the video, the weapon can be seen penetrating the ground within inches of its target, followed by a large underground detonation, according to people who have seen the footage.

The newest version of what is the Pentagon's largest conventional bomb, the 30,000-pound Massive Ordnance Penetrator, or MOP, has adjusted fuses to maximize its burrowing power, upgraded guidance systems to improve its precision and high-tech equipment intended to allow it to evade Iranian air defenses in order to reach and destroy the Fordow nuclear enrichment complex, which is buried under a mountain near the Iranian city of Qom. The upgraded MOP designed for Fordow hasn't been dropped from a plane yet.

The improvements are meant to address U.S. and Israeli concerns that Fordow couldn't be destroyed from the air. Overcoming that obstacle could also give the West more leverage in diplomatic efforts to convince Iran to curtail its nuclear program.

"Hopefully we never have to use it," said a senior U.S. official familiar with the development of the new version. "But if we had to, it would work."

Fordow has long been thought to be a target that would be difficult if not impossible for the U.S. to destroy with conventional weapons. In January 2012, U.S. officials disclosed they didn't think their largest bomb could penetrate to the centrifuges within the complex, where Iran refines fuel it maintains is intended for civilian use but the U.S. and its allies believe is destined for a nuclear-weapons program.

At the time, the Pentagon had spent about \$330 million to develop about 20 of the bombs, and sought additional funding to make them more effective. That money came through; so far, the Defense Department has now spent more than \$400 million on the bombs, which are built by Boeing Co., according to government officials.

U.S. intelligence agencies have concluded that Iran's nuclear sites are so well fortified that Israel's military alone can't deliver what a U.S. official called "a knockout blow." Even if Israel were able to obtain its own MOP—and U.S. officials said they haven't offered it to its ally—U.S. officials said Israel doesn't have stealth aircraft capable of carrying the bomb to its target deep inside Iran.

U.S. officials said they believe the enhanced U.S. bunker-busting capability decreases the chances that Israel will launch a unilateral bombing campaign against Iran this year and possibly next year, buying more time for the Obama administration to pursue diplomacy after Iran holds elections in June. Israeli officials declined to comment. Israeli officials maintain they reserve the right to attack Iran.

Defense Secretary Chuck Hagel and other senior American officials have told their Israeli counterparts in recent weeks that the Obama administration will look more closely at military options to deal with Iran's nuclear program after assessing the impact of those elections on Tehran's intentions.



The White House wants to find a diplomatic solution but hasn't ruled out military action. In part to increase pressure on Tehran, both President Barack Obama and Mr. Hagel have used recent visits to Israel to stress Israel's right to decide for itself whether to strike Iran.

Pentagon press secretary George Little declined to comment on the changes made to the MOP or the contents of Mr. Hagel's meetings with Israeli officials.

The changes made to the MOP reflect a close U.S. analysis of what it would take to destroy Fordow. On the bomb itself, the detonator fuse has been adjusted specifically to withstand impact with layers of granite and steel that encase the nuclear facility, officials said.

The newest version is also designed to operate in "contested environments." It is equipped with capabilities designed to counter Iran's air defenses and keep the bomb on target if the Iranians try to knock it off course. Iran has invested heavily in recent years in air defenses and electronic warfare.

Officials said they believe the enhanced bomb would be even more effective against North Korea's nuclear bunkers, which the U.S. thinks aren't as heavily fortified as Iran's.

The new version of the weapon also includes changes to the guidance system to improve precision. U.S. officials say precision is important because, if the U.S. decides to strike Iran, the Air Force may need to drop more than one MOP on the exact same spot to thoroughly destroy Fordow.

The idea is to create a crater with the first strike and then send other bombs through the same hole to reach greater depths.

Israeli officials remain skeptical that the Obama administration is prepared to strike Fordow and other nuclear sites, according to current and former U.S. and Israeli officials. That skepticism, officials say, has fueled calls within Israel's government for a unilateral strike on Iran, even if Israel is capable of only setting back the nuclear program by a couple of years.

Israel still thinks its Air Force can do substantial damage to Fordow, according to Israeli and U.S. officials. U.S. intelligence agencies concur with that assessment. Mr. Hagel, during a visit to Israel last week, announced steps to supplement Israel's military capabilities, though it is unclear how soon the new weapons systems and aircraft will arrive.

U.S. officials see Iran's June vote as a critical test of whether the current Obama administration approach—using economic sanctions to try to shape Iranian public sentiment and bring the country's hard-liners to the negotiating table—is having the desired effect.

U.S. officials said the U.S. and Israel have reached an understanding that they will assess the intentions of Iran's leaders after the election, and then, barring progress on the diplomatic track, shift to a detailed discussion of military options.

U.S. officials said the elections won't trigger an automatic shift from the diplomatic to the military track but would be a critical juncture in American and Israeli deliberations.

"The election is a milestone to determine whether or not Iranian intentions will shift," a senior U.S. official said. The official said the review would take "some time" but declined to say how many months the U.S. and Israel have agreed to wait.

White House National Security Council spokesperson Caitlin Hayden declined to discuss private U.S.-Israeli deliberations but said "the United States and Israel coordinate very closely on the issue of Iran."

"We are committed to trying to resolve concerns about Iran's nuclear program diplomatically. But, as President Obama has made clear: the U.S. will not allow Iran to acquire a nuclear weapon. The onus is on Iran and it knows that time is not unlimited," she said.



U.S. and Israeli officials say they believe that Iran has stayed below an enrichment threshold set by Israeli Prime Minister Benjamin Netanyahu, in a bid to avoid a conflict with the West going into the elections.

http://online.wsj.com/article/SB10001424127887324582004578459170138890756.html

(Return to Articles and Documents List)

Russia Beyond the Headlines (RBTH) – Russia OPINION/Commentary

#### Russia Responds to U.S. with Air Base in Belarus

Moscow has announced its intention to establish a military air base on the territory of neighboring Belarus. This could very well be a response to U.S. plans to deploy a missile defense shield in Europe.

April 26, 2013

By Viktor Litovkin, special to RBTH

Russian Defense Minister Gen. Sergei Shoigu's recent visit to Belarus for talks with his counterpart Lt. Gen. Yuri Zhadobin and Belarusian President Alexander Lukashenko unearthed a sensation. During Shoigu's visit, it was revealed that Russia intends to establish an air base in Belarus – a country it considers to be its friend and ally.

The establishment of the base had already been agreed upon by Presidents Vladimir Putin and Alexander Lukashenko, but the decision was only announced during Shoigu's trip to Minsk.

According to the Russian minister of defense, the first facility to be built in Belarus will be an aircraft commandant's office (there is no official information regarding which aerodrome), which will be followed by an echelon of Russian fighter planes on combat duty (at least three aircraft) and the deployment of a full air regiment by 2015.

"Thereafter," stated Shoigu, "we expect to address the need to strengthen the defense capability of our Belarusian colleagues and brothers." For that purpose, four divisions of S-300 anti-aircraft missile systems will be delivered to Minsk in 2014.

Why is a Russian air base being set up in Belarus? There are some valid reasons.

First, Moscow and Minsk are both members of the Collective Security Treaty Organization (CSTO) and strategic allies on a bilateral footing. For several years now, Belarus and Russia have operated a combined force, which includes some units of Russia's Western Military District (before its formation, units of the Moscow Military District).

There is also a Joint Air Defense Command, which forms part of the CSTO air defense system.

Second, Moscow's ally already hosts two Russian military bases – the "Volga" early-warning radar system in the settlement of Gantsevichy near Baranovichy, and the "Antei" high-frequency radio station, located at Vileika, for communication with ships anywhere in the world at sea. There is also an underground precision-time facility.

Do they need to be supplemented by an air base? That is a question for the presidents and military chiefs. The answer is likely to be found in the actions of NATO, which has placed its own air base in Siauliai, Lithuania.

Located there in a state of permanent combat readiness are four F-16 fighter bombers, which are capable of delivering U.S. B-61 nuclear gravity bombs (currently housed at air bases in the five NATO member-states of Belgium, Germany, Italy, the Netherlands, Turkey) to their designated targets.

For Russia, these bombs (tactical nuclear weapons deployed on fighter bombers) are of strategic relevance, since the flight time from Siauliai to Minsk, Smolensk, or Moscow is about 15 minutes. Is it necessary to protect an ally against such a contingency? Absolutely.

To boot, the U.S. also harbors plans to locate missile defense facilities in Poland, which could neutralize Russia's strategic deterrence. Washington claims it is prepared to meet Moscow halfway and modify its plans, but the Kremlin says that the proposed changes "do not allay our concerns."



In the meantime, the air base in Belarus is likely to act as a kind of shield against any potential unpleasantness that could arise over the ABM system in Poland.

How can NATO's recurrent wars on foreign soil (Yugoslavia, Iraq, Afghanistan, Libya) over the past 20 years be forgotten? Even now, the alliance is helping the Syrian opposition wage war against the country's legitimate government, with the involvement of al-Qaeda militants.

Throughout all of this, Russia has had to spring to the defense of its peacekeepers and citizens only once – to counter the aggression of the Georgian army in South Ossetia in August 2008. Russia was not the initiator of the conflict either, which was later recognized by the European Commission.

This logic of events is the root cause of the present mutual distrust. Therefore, it is my opinion that Russia will take retaliatory measures.

President Lukashenko stated that September's joint Russian-Belarusian "West-2013" drills would not be directed against "the Poles, the Balts, or NATO in general." Although the Belarusian president's statement came with a proviso: "But they have to understand that if they try to give us the evil eye, we will respond."

Viktor Litovkin is Executive Editor, Independent Military Review.

http://rbth.ru/opinion/2013/04/26/russia\_responds\_to\_us\_with\_air\_base\_in\_belarus\_25507.html (Return to Articles and Documents List)

Arms Control Wonk OPINION/Blog

### Reconverting Iran's U3O8 to UF6

By Mark Hibbs 27 April 2013

What do we really know about Iran's capability to reconvert triuranium octoxide (U3O8) enriched to 20% U-235 back into UF6 feedstock that can be further enriched to produce weapon-grade uranium? Can Iran do it? And if so, how fast?

The answer matters considerably, as Iran, Israel, and the P5+1 will make decisions this year, based in part on their assessment of risk, about the fate of current efforts to negotiate a comprehensive crisis settlement.

In the policy world, there are two opposing views being expressed, whether they are informed by the facts on the ground in Iran—or not.

Advocates of stepped-up diplomacy with Iran argue that Iran, by not accumulating 20%-enriched EUP from the Fordo enrichment plant as UF6 but instead converting some of it to U308, is signaling to the powers its willingness to compromise and de-escalate the crisis. In U308 form, they argue, the material would be less directly usable should Iran want to dash to a bomb, because Iran would have difficulty reconverting the oxide to UF6, especially if the oxide had been fabricated into finished research-reactor fuel.

Iran's determined adversaries assert to the contrary that there is no nonproliferation benefit in Iran converting its 20%-enriched Fordo output to U3O8 because Iran could reconvert the material back to UF6 easily and in a hurry.

Iran has described its converting of the UF6 into U308 as a confidence-building measure.

#### U3O8 and Israel's 'Red Line'

This week, a former Israeli intelligence official claimed that Iran could within a few days reconvert its U3O8 back to UF6, implying that Iran has already crossed a "red line" set by Israeli Prime Minister Benjamin Netanyahu—the production of enough 20%-enriched uranium which could be enriched to weapon-grade and fashioned into a nuclear



weapon. Three days later, in a Reuters interview alerting the outside world it is prepared to continue talking with the P5+1, an Iranian negotiator made known that Iran intends to continue converting the Fordo product to U3O8 for use as fuel for five research reactors. These reactors presumably would include the existing Tehran Research Reactor (TRR) plus four more reactors that, according to Iranian press reports in 2012, Iran's President Mahmoud Ahmedinejad had ordered to be built. Whether or not Iran ever builds those four reactors, they provide Iran a rationale to continue enriching uranium to 20% and converting the EUP to U3O8. There is also the research reactor at Arak, but it will not require 20%-enriched uranium to operate when it is finished.

As of late February, the last time when the IAEA reported to the Board of Governors on safeguards implementation in Iran, the status of Iran's inventory of 20%-enriched uranium produced at Fordo was this, as I described in a post earlier this month:

"After commencing with the enrichment of uranium to 20% U-235 in early 2010, Iran accumulated about 150 kilograms of EUP at this enrichment by the end of 2011, and it crossed the 200 kg threshold sometime in the middle of 2012. The latest report from the IAEA in February says that Iran had produced 280 kg of UF6 enriched to 20% U-235, of which 167 kg was still in the form of UF6. Virtually all of the rest has been introduced into the reconversion plant to produce U308 for fuel fabrication. When the IAEA accounted for Iran's declared activities in February, the plant had produced U308 containing 50 kg of uranium, leaving about 60 kg of uranium in the process inventory. According to the IAEA data, the current rate of production of feedstock at this enrichment level in its centrifuges is about 15 kg per month."

By late February, then, Iran had processed about 110 kg of its accumulated UF6 inventory enriched to 20% into U3O8 and other intermediary chemical states. At current rates of production at the Fordo enrichment plant and chemical processing facilities at Esfahan, by the end of this year Iran might accumulate a U3O8 inventory containing approximately 175 kg U enriched to 20% U-235—but only if it is assumed that all the uranium fed into the conversion line would be converted to U3O8. Data from the February IAEA report suggest that the real conversion factor from UF6 to U3O8 is far less.

According to Susan Voss based on data in IAEA reports on Iran's safeguards implementation Iran has lost 61% of its uranium in feed material during the conversion of UF6 to U308 for the TRR.

Olli Heinonen however believes Iran's present conversion factor is higher.

"The IAEA reports provide the amount of UF6 moved (and "released", which means the cutting of the IAEA seals from the UF6 cylinders) to [Iran's Fuel Plate Fabrication Plant] but it does not give a full breakdown for material in each step of the process. The reports give the amount of U3O8 produced at certain point of time, which is just one part of the material balance equation. There are all the reasons to believe that the Iranian engineers, with two decades of experience on uranium conversion, can achieve a better yield than 39 %. In addition, 20 % enriched uranium is valuable material. Like the other fuel producers, [Iran has] a small process, at least on the drawing board, to recover uranium from the wastes (albeit only a few per cent of material should end up in wastes)."

In a statement before the Institute for National Security Studies in Tel Aviv on April 22, Amos Yadlin, former head of Israel's Military Intelligence Directorate, asserted that Iran in "less than a week" could convert its 20%-enriched U3O8 into bomb-grade "nuclear material" for a weapon.

In separate comments made to Israeli radio, Yadlin appeared to suggest that right now 80 kg had been processed into U3O8 and was therefore available to be reconverted to UF6.

#### **Iran's Capabilities and Options**

We may assume that Yadlin's remarks in some quarters will be interpreted to drive a stake into the heart of any forthcoming compromise deal with Iran, challenging those who argue that Iran has demonstrated self-restraint in not



stockpiling 20%-enriched UF6. Iran's capabilities for reconverting the 20%-enriched U3O8 back into UF6 feedstock for nuclear weapons fuel therefore need to be understood and the following questions need to be answered:

Does Iran now have the means to reconvert its U308 to UF6?

Yes. Do not be confused by the terms conversion and reconversion. I have heard it said: "Iran can convert the Fordo enriched uranium from UF6 to oxide but it cannot reconvert the oxide back to UF6." Not true. The chemical processes corresponding to "conversion" and "reconversion" are more or less identical. Iran has lots of experience converting its uranium ore concentrates to UF6, and Iran can likewise convert U3O8 obtained from UF6 back into UF6. In both cases, the feedstock for conversion is U3O8. In the first instance, it is milled from natural uranium ore. In the second, the feedstock is oxide that has been converted back from UF6 which was previously enriched.

How would Iran process its U308 into UF6?

Iran would have a number of options, but there are two basic ones. They principally differ in how to convert U3O8 to the intermediate product UO2. To convert the UO2 to UF6, the process would be the same for both options.

One option would be to reconvert U3O8 into UO2 using a process similar or identical to that used at Iran's Uranium Conversion Facility (UCF) at Esfahan, which Iran has operated to produce its UF6 feedstock for centrifuge plants at Natanz and Fordo. The U3O8 would be dissolved in nitric acid, producing an aqueous solution of uranyl nitrate hexahydrate [UO2(NO3)2 . 6H2O]. In some versions, this would then be mixed with tributyl phosphate to remove the uranium in the form of uranyl nitrate. The nitrate can be converted to UO3 either by evaporation or treatment with ammonia. The UO3 is in turn converted to UO2 in fluidized reactors by reduction with ammonia gas at high temperatures.

A second option would be a dry process to expose the U3O8 to very high temperatures in the presence of hydrogen gas. The endothermic reaction of U3O8 with H2 would result in UO2 and water. It is likely that Iran has studied and may have mastered this kind of process at laboratory scale. If Iran has mastered it, less time may be required to reconvert the U3O8 than by using a wet process, because fewer steps would be needed. Iran might favor a dry process route because its enriched U3O8 contains few or no impurities, obviating the need to do solvent extraction. The impurities, such as oxidizing metals, would have been already removed at UCF prior to enrichment of the NATU at Fordo.

For both wet and dry options, after the material is converted to UO2, it would be reacted with anhydrous hydrogen fluoride (AHF) to produce UF4, and the UF4 would in turn be fluorinated to result in UF6.

Iran has investigated several process chemical options for doing this since the 1980s. Most of the processes have been applied elsewhere in the world, and in all the nuclear weapon states, beginning in the 1940s, and they are well-known. In addition to experience gained at UCF since the mid-2000s, Iran a decade before operated a small chemical conversion lab to produce UF6, and Iranian scientists have also worked on uranium conversion chemistry in its so-called "Green Salt Project."

Where would Iran do the U308-UF6 reconversion?

In theory, Iran could use its existing and declared conversion infrastructure at Esfahan to convert the U3O8 beginning with nitric acid dissolution and ending with production of UF6 gas. In practice, because any re-conversion in a safeguarded facility of a discrete inventory of previously enriched U3O8 would, if detected or declared, prompt IAEA inspectors' concerns (the UCF is routinely monitored), reconversion would more likely take place in an undeclared facility dedicated to process enriched U3O8.

Should Iran choose to reconvert the U3O8, it would have other motivations to do it in a dedicated, small installation. The geometries of such a facility could be designed to minimize the risk of a criticality accident, which could occur during the processing of 20%-enriched feedstock. At a bulk-handling facility such as UCF, designed to process NATU, criticality management would be more challenging, and the risk of an accident, especially if enriched uranium were converted under duress, would be greater. The kind of issues Iran would face are illustrated here.



A small facility would be best to permit batch processing, allowing personnel to most effectively control off-gas and ventilation systems needed to cope with volatile hydrogen and fluorine gases involved in the conversion of UO2 to UF6. Iran might use a fairly simple process, similar to that used at the JCO fuel processing plant in Japan, which in 1999 suffered a criticality accident when buckets filled with uranium solutions were carelessly handled by personnel.

How much time would Iran require to reconvert the enriched U3O8 to UF6?

Yadlin, cited as having told the Institute for National Security Studies that in Iran the reconversion of U3O8 to produce bomb fuel could be "completed in less than a week," walked back this estimate in a subsequent radio interview to "between one and two weeks." That's more realistic. Experience from the uranium conversion industry and R&D sector outside Iran would suggest that Iran might be able to convert about 100 kg of U3O8 to UF6 in about two weeks—provided, however, that the work was carried out in a small facility using a dry process without purification, whereby perhaps three batches would be consecutively processed. Use of other processes and a larger installation might lengthen the time required to reconvert the material. Regardless of whether Iran would select a wet or dry process, the most time-critical process step would likely be the production of UF4 from UO2 because of the comparatively slow reaction time for AHF and UO2.

The IAEA Safeguards Glossary includes a table for estimated material conversion times to produce finished nuclear weapon metal fuel components using various fissile material feedstocks. Conversion time is defined as:

"the time required to convert different forms of nuclear material to the metallic components of a nuclear explosive device. Conversion time does not include the time required to transport diverted material to the conversion facility or to assemble the device, or any subsequent period. The diversion activity is assumed to be part of a planned sequence of actions chosen to give a high probability of success in manufacturing one or more nuclear explosive devices with minimal risk of discovery until at least one such device is manufactured."

For "U-233 oxide and other pure U compounds," the conversion time is given by the IAEA as "order of weeks (1-3)." A footnote specifies that for pure compounds it would be closer to one week and for "mixtures and scrap" material it would be closer to 3 weeks. This implies that to avoid detection a determined proliferator should take no more than three weeks to process pure uranium oxide into finished metal components.

If Iran processes its 20%-enriched U3O8 into fuel for the TRR—which Iran says it is doing and IAEA reports have verified—wouldn't that serve as an effective proliferation barrier?

If Iran uses 20%-enriched U3O8 to make fuel for the TRR, converting that fuel material back to UF6 might require just a few more days than is needed to reconvert U3O8 powder.

The fuel for TRR consists of aluminum plates containing U3O8-Al fuel in a matrix. Iran would probably make this fuel using hot presses to bind the fuel material and the aluminum. To get at the U3O8 after fuel is fabricated but not yet irradiated, Iran could dissolve the fuel in a stainless steel vessel containing a caustic solution like sodium hydroxide, filter the mixture, and then dry and recover the oxide. Iran would have to be careful in handling the large amount of hydrogen gas that would be generated by dissolving the fuel.

Were the U3O8 to be fabricated instead into ceramic fuel using a sintering process for other reactor types, that fuel would be more difficult to break down and dissolve and it would potentially take longer to react with fluorine. Were Iran at some point in the future to make a deal with foreign governments and fuel suppliers including the supply TRR-type fuel, the proliferation barrier against diversion of enriched fresh fuel would be strengthened if silicide fuel were required instead of U3O8-Al fuel, because the silicide would be more difficult to dissolve.

#### **The Bottom Line**

Iran could process its entire inventory of 20%-enriched U3O8 to produce UF6 in a matter of a few weeks, the fruit of Iran's cumulative nuclear chemistry R&D and industrial-scale experience over three decades. There are uncertainties about how great Iran's production losses would be should it decide to reconvert the material.



An inventory of 20%-enriched uranium in Iran consisting of U308 reconverted from output from the safefguarded Fordo enrichment plant would be under IAEA safeguards. If it were associated with the UCF, it would be subject to physical inventory verification (PIV); if collected in small containers, it would likely be put under seal. The conversion of a portion of Iran's U308 inventory into UF6 and subsequent re-enrichment could in theory be built into any of a number of break-out scenarios. How Iran would in fact behave can only be a matter of conjecture. Were Iran to inform the IAEA it intended to remove seals or reconvert the material into UF6, that step would immediately precipitate a crisis. If Iran were ever to decide to divert safeguarded enriched uranium to make a nuclear explosive device, in addition to the risks of detection which would pertain to that action, it would have to consider whether there would be any advantage in reconverting any of the U308 to UF6.

Mark Hibbs is a senior associate in the Nuclear Policy Program at the Carnegie Endowment for International Peace.

http://hibbs.armscontrolwonk.com/archive/1748/reconverting-irans-u3o8-to-uf6

(Return to Articles and Documents List)

The Japan Times
OPINION/Commentary

#### **Nuclear Arms Card for Japan**

SENTAKU MAGAZINE April 29, 2013

The United States is still haunted by a nightmare of 2006, says an insider of the Defense Ministry. But the "nightmare" he refers to is not the first nuclear test by North Korea in October that year, but rather an internal report compiled by the Japanese government a month earlier on "the possibility of domestically producing nuclear weapons." North Korea carried out its third nuclear test on Feb. 12, 2013.

The U.S. is nervous about Japan, according to the insider. It is not publicly known that the Foreign Ministry has been conducting studies clandestinely on potential development of nuclear arms.

Two days after the latest nuclear test by the North, U.S. President Barack Obama told Prime Minister Shinzo Abe in a telephone meeting that there would be no change whatsoever in America's commitment to defend Japan, including nuclear deterrence through its nuclear umbrella over Japan.

Obama's comment was meant not only to reconfirm the U.S.'s commitment to the Japan-U.S. Security Treaty but also to discourage Japan from following the path toward becoming a nuclear power.

According to Japanese and American diplomatic sources, Obama's message to Abe came at the strong urging of the U.S. State Department following close consultation between diplomacy and defense officials of both countries.

In South Korea, possessing nuclear weapons has been openly debated in the parliament. But Japanese politicians and bureaucrats have traditionally avoided making any suggestion that Japan should arm itself with nuclear weapons.

A high-ranking Foreign Ministry official said that the crisis surrounding this country has "moved to a different stage" in the wake of North Korea's latest long-range rocket firing and nuclear test.

The possibility of North Korea, a de facto nuclear power, acquiring capability to launch a nuclear attack on the U.S. mainland is growing. In this situation, Japanese diplomats are starting to be concerned: Will the U.S., whose people are exposed to a direct crisis, provide a nuclear umbrella to Japan and South Korea in case of a nuclear attack from North Korea on these countries?

In addition to ultra-hawkish politicians like former Tokyo Gov. Shintaro Ishihara and the late former Finance Minister Shoichi Nakagawa, who openly argued that Japan should have nuclear weapons, opinions favoring nuclear armament have also been expressed, officially and unofficially, by some of the politicians who served as prime minister, including



Nobusuke Kishi (prime minister from 1957 to 1960), Hayato Ikeda (1960-64), Eisaku Sato (1964-72), Yasuo Fukuda (2007-08) and Taro Aso (2008-09).

A newspaper reporter assigned to the Foreign Ministry has attributed this attitude of these political leaders to "education" they have received from bureaucrats of the central government.

Another reporter of a major national newspaper recalled a meeting last September between then Prime Minister Yoshihiko Noda and U.S. Secretary of State Hillary Rodham Clinton, in which she urged him to rethink his plan to give a Cabinet endorsement to the policy of totally eliminating Japan's nuclear power generation during the 2030s.

This reporter quoted a conservative Diet member of the Democratic Party of Japan as saying that a high-ranking Foreign Ministry official admitted not only that Clinton's move apparently stemmed from the fear of losing benefits emanating from the bilateral Cooperation Agreement on Nuclear Energy but also that Japan should avoid a situation at any cost in which Japan will lose an option to possess nuclear weapons.

The aforementioned newspaper reporter assigned to the Foreign Ministry said that the ministry regards arming Japan with nuclear weapons as an important diplomatic card.

Obviously Japan cannot expect to arm itself with nuclear weapons overnight. Too much impurity is contained in plutonium 239 — an essential ingredient for a nuclear bomb that is formed as a result of the operation of commercial reactors in Japan — while the country's uranium enrichment capability is not enough to make a nuclear bomb. The 2006 report says that it would take three to five years and ¥200 billion to ¥300 billion for Japan to possess nuclear weapons.

The report can be interpreted to mean that Japan has the potential capability to produce and possess nuclear weapons of its own. And it is the Foreign Ministry that wants to retain this potential, and its U.S. counterpart, the State Department, is worried about it. This means that the Foreign Ministry has something ulterior in view while dealing with the U.S., which is staunchly opposed to Japan's developing or possessing nuclear arms and to its doing away with nuclear power generation.

The U.S. government is said to have informed the Japanese Defense Ministry in detail of a plan to strengthen its nuclear deterrence system in the wake of the February nuclear test by North Korea. Although no content of the plan has been known, Washington is believed to be reviewing the deployment of nuclear weapons in the Far East.

On the very day — Feb. 12 — of the North Korean nuclear test, two Russian strategic bombers flew near Guam, causing U.S. F-15 Eagle fighters to scramble. It is thought that this represents a move by Moscow, which has become keenly aware of the U.S.'s nuclear strategy.

In March, Thomas E. Donilon, national security adviser to President Obama, said that the U.S. will neither recognize North Korea as a nuclear power nor tolerate development of nuclear weapons by Pyongyang.

This determination by Washington absolutely not to accept an increase in the number of nuclear-armed countries is also directed at Japan.

This is an abridged translation of an article from the April issue of Sentaku, a monthly magazine covering Japanese political, social and economic scenes.

http://www.japantimes.co.jp/opinion/2013/04/29/commentary/nuclear-arms-card-for-japan/#.UYGvHpQo5Dx (Return to Articles and Documents List)

Foreign Policy
OPINION/The Cable

# State Department: Syria must Answer Questions about Secret Nuclear Program



Posted By Josh Rogin Tuesday, April 30, 2013

While the world grapples with Syria's apparent use of chemical weapons, there are still lingering unanswered questions about the Syrian regime's secret nuclear program, a top State Department official said Monday.

Israel attacked a partially constructed nuclear reactor inside Syria in September, 2007, destroying it before it became operational. The reactor was based on a model used by North Korea to produce its stockpile of nuclear fuel. In 2011, the International Atomic Energy Agency (IAEA) confirmed that the site struck by Israeli planes was a nuclear reactor in construction that was never declared to the IAEA, which constitutes a violation of Syria's obligations under the Non-Proliferation Treaty (NPT). The matter was referred to the U.N. Security Council, but no further action was taken.

On Monday Tom Countryman, the assistant secretary of state for international security and non-proliferation, told the NPT conference in Geneva that Syria has still not addressed international concerns about its nuclear program and must do so immediately.

"With regard to Syria, it has been nearly two years since IAEA Director General Amano reported that the facility destroyed in 2007 at Deir Ez-Zour was 'very likely a nuclear reactor that should have been declared to the agency pursuant to Syria's safeguards agreement," Countryman said. "To date, Syria has not taken any concrete steps to address the outstanding serious questions about its clandestine nuclear activities."

Countryman has been intimately involved with the Syrian WMD issue since the crisis broke out in 2011. He has helped lead the effort to organize Syria's neighbors to respond to the potential use of WMD inside Syria and to help secure Syrian weapons sites if and when the Assad regime falls.

But the ongoing civil war in Syria does not prevent Syria from telling the international community about the status of its secret nuclear program, he said.

"The Assad regime's brutal campaign of violence against the Syrian people and the resulting unrest cannot be an excuse for not cooperating with the IAEA. Syria remains obligated to remedy its noncompliance immediately and demonstrate a constructive approach in its relations with the IAEA and the international community," Countryman said. "Noncompliance should be a matter of serious concern to NPT parties. As agreed in the 2010 Action Plan, it is vitally important that all NPT parties support the resolution of all cases of noncompliance with IAEA safeguards and other nonproliferation requirements. The Treaty and the regime can only be as strong as the parties' will to uphold the Treaty's integrity."

Countryman also called for a new effort to create a WMD-free zone in the Middle East. That idea, which was supposed to result in a conference in Helsinki in 2012, has been stalled over several issues, including whether Israel, which has a suspected nuclear weapons stockpile of over 100 weapons, would be included. Countryman called on the states in the region to come up with a way to move the issue forward.

"We missed an important deadline -- but we have not yet missed the opportunity to transform the security environment of the region. In fact, unprecedented diplomatic efforts continue to be directed at making the conference a reality," he said. "We remain prepared to assist in any way requested, but leadership must also come from the states of the region. They will be responsible for the big idea -- creating the political and security conditions that would make a WMD-free zone an achievable concept. And they need to start now by showing creative thinking on a scale that is smaller, but big enough to get us to the first step, to Helsinki."

Josh Rogin reports on national security and foreign policy from the Pentagon to Foggy Bottom, the White House to Embassy Row, for The Cable.

http://thecable.foreignpolicy.com/posts/2013/04/30/state department syria must answer questions about secret nuclear program?wp login redirect=0

(Return to Articles and Documents List)



Washington Post OPINION/Fine Print

### Budget Cuts Could Reshape the Country's Ship Supply, Official Says.

By Walter Pincus May 1, 2013

Does the United States need a 300-ship Navy or will it over the next 70 years need seven strategic nuclear submarines on patrol in the Pacific and Atlantic oceans? Each would have 24 intercontinental ballistic missiles, all of which could carry up to five nuclear warheads.

That was the choice Vice Adm. William Burke, deputy chief of Naval Operations Warfare Systems, described Tuesday at the Congressional Breakfast Seminar Series.

Burke, who is set to retire in the next few weeks, spoke frankly about the undersea portion of the U.S. strategic nuclear triad "and its intersection with our shipbuilding plan."

His conclusion: "If we buy the SSBN [the planned 12 replacement strategic submarines for the current 14 Ohio class now in service] within existing funds, we will not reach 300 ships. In fact, we'll find ourselves closer to 250. At these numbers, our global presence will be reduced such that we'll only be able to visit some areas of the world episodically."

Sequestration will only make the situation worse. Burke said it would cause the Navy "to both reduce procurement as well as retire existing ships, leaving us with a Navy in the vicinity of 200 ships, at which point we may not be considered a global navy."

#### Here is the current situation:

Every hour of every day, four Ohio class subs are on patrol in the Pacific, three in the Atlantic. Among them, they have 840 accurate nuclear warheads that can be independently aimed at different targets. Each warhead has explosive power of at least three times the bomb that destroyed Hiroshima.

Back in Kings Bay, Ga., on the East Coast, are three more "boomers," as they are called, and on the West Coast, four more are home ported at Bangor, Wash.

The United States has been doing these patrols for more than 50 years, although at the height of the Cold War when the country had more than 40 strategic submarines, the number deployed was far larger. Of course, the perceived threat was much greater from the Soviet Union, with its thousands of warheads on intercontinental ballistic missiles (ICBMs).

But the Cold War is over. Still, the United States and Russia maintain their nuclear triads — strategic bombers plus land- and sub-launched ICBMs, although at lower numbers and with ongoing talks for more reductions.

Yet, as Burke put it Tuesday, "the Ohio replacements will conduct strategic deterrent patrols into the 2080s." A good Navy man, Burke defended the strategic submarine program, saying, "As the most survivable leg of the triad, the SSBN is also our nation's most necessary ship, and we must build it.

"Our fleet of SSBNs was, and continues to be, relied upon as the survival leg of the nuclear triad, discouraging a surprise first strike. . . . The SSBN is the ultimate insurance policy of deterrence with sufficient lethality to make our adversary pause."

Why 12 new subs and not fewer? Burke explains it's the need for a "survivable" nuclear payload that can "assure leaders that they have a second-strike capability . . . [which] requires we have a certain number of ships with a certain number of missiles underway at all times."



It's not the survivable warhead number that's key in the Burke formulation, it's the number of submarines that survive. By basing the subs on the East and West coasts, "it makes it harder for somebody to figure out how to find them."

First strike is the imagined Cold War threat that drove the United States to build thousands of nuclear warheads. Still, it has not been put to rest, although with Russia's decline no other country could carry it out on the United States.

Still, the Navy is prepared to devote a major portion of its shipbuilding budget to replacing the Ohio class submarine fleet over the next 20 years, having already extended the life of those in service to 40 years.

The number needed dropped from 14 with the creation of a reactor core of the nuclear propulsion system that lasts for the life of the ship. With that and some engineering changes that shortened maintenance periods, the Navy saved \$20 billion, Burke noted.

At first, the new sub was priced at \$5.6 billion but, he said, "so far we've eliminated about \$1.1 billion from the price of each hull."

The first sub scheduled to begin production in 2021 "will pressurize our [shipbuilding] procurement account," Burke said. To maintain a path to a 300-ship force, shipbuilding requests during the 2020s must average about \$19.3 billion annually, which would be \$4 billion more than today and \$7 billion above such funding over the past 10 years. The Congressional Budget Office thinks future shipbuilding costs will be larger.

"If accurate, the picture only gets direr," Burke said. "If we don't buy the SSBN replacement, we will become a dyad without a survival leg, leaving us with questionable deterrence capability."

Of course, one answer, as it is with all parts of the nuclear triad, is to cut the number of future nuclear delivery systems and warheads below that which current Navy and Air Force planners think is required. However, they are not the problem.

They are waiting for President Obama to release his nuclear weapons policy guidance, which was concluded last fall but has not been sent to the Pentagon. That paper could solve the Navy's dilemma by reducing the number of strategic subs the country needs.

http://www.washingtonpost.com/world/national-security/financing-a-global-navy/2013/05/01/d3fda038-b1b0-11e2-baf7-5bc2a9dc6f44 story.html

(Return to Articles and Documents List)

Calgary Herald– Calgary, Canada OPINION/Editorial

## **Editorial: Due Diligence on Missile Defence**

Canada should hear the United States out on North American ballistic missile defence system Calgary Herald editorial May 2, 2013

There are all sorts of reasons why Canada should be leery of a reported invitation by the United States to participate in an anti-ballistic missile shield that would protect North America.

Such an initiative, for instance, is bound to be costly and could whip up concerns of nuclear arms escalation as some nations complained of our defensive advantage.

But that's no reason for Canada to sit on its hands and decline to learn more about the initiative. For starters, such a shield wouldn't be robust enough to repel an all-out nuclear conflict between America and, say, Russia. Such a reality should assuage any fears about America and Canada adopting a casual attitude to the obvious and grave concerns of a nuclear war.



What the shield would do, however, is provide a measure of protection against increasingly aggressive rogue states, such as North Korea and Iran.

North Korea continues to hone its nuclear weapons capabilities, engaging in its third such test in February. There are reports from the Chinese that North Korea will conduct another test soon, and the South Koreans have warned Kim Jong-un's regime is ready to test fire a medium-range missile capable of reaching Guam, a U.S. territory in the western Pacific Ocean.

As serious a threat as North Korea presents to global peace, Iran is even worse, says Thomas Countryman, America's assistant secretary for international security and non-proliferation, noting that Iran has a "long history" of deceiving the International Atomic Energy Agency and that its nuclear enrichment program far exceeds what's needed for domestic use.

"The actions of Iran and North Korea should concern every member of this conference," Countryman said in Geneva in April during a review of progress in implementing the nuclear non-proliferation treaty.

The Pentagon announced its intention in March to place 14 new ground-based missile interceptors in Alaska by 2017, The Canadian Press reports.

There's no doubt the shield is sure to be controversial, but that's no reason to avoid having a meaningful conversation with the Americans — a point Public Safety Minister Vic Toews agrees with.

"What I can say is co-operation with our allies, especially in relation to a terrorism-related threat, is essential to keeping Canadians safe," Toews told CTV's Question Period.

As previous governments have done, the Harper Tories must keep Canada's interests at the forefront.

Experience with successful initiatives such as Norad — which provides seamless aerospace warning and defence — has proved that Canada can preserve its sovereignty while enjoying strategic military partnerships with the United States.

It's evident that while Canadians and Americans share many common values, they share something arguably even more important: their geography.

While a defensive missile shield is no substitute for diplomacy and sanctions, it is essential that the federal government does all it can to ensure the safety of Canadians in an ever-changing world.

http://www.calgaryherald.com/news/Editorial+diligence+missile+defence/8330152/story.html (Return to Articles and Documents List)