

#### Issue No. 999, 20 April 2012

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Tehran Times - Iran

## Salehi Optimistic about Iran-5+1 Talks in Baghdad

By the Political Desk April 18, 2012

TEHRAN – Iranian Foreign Minister Ali Akbar Salehi has said that he is optimistic about the next round of talks between Iran and the 5+1 group (the five permanent members of the UN Security Council and Germany), which is scheduled to be held in Baghdad on May 23.

"Before (the Istanbul talks on April 14), I said that we had been hopeful about the negotiations between Iran and the 5+1. Now, I am also hopeful about the next talks between Iran and the group, which will be held in Baghdad," Salehi told reporters after a cabinet meeting on Wednesday.

"It is the Westerners who are creating stumbling blocks," he said, adding, "The Islamic Republic of Iran has stated its demands clearly during all meetings and negotiations. We are hopeful that issues will be stated more clearly during the next meeting with the 5+1."

The West has adopted a "political" rather than a "technical" approach toward Iran's nuclear issue, Salehi stated.

He added, "We have announced on many occasions that we are not seeking nuclear weapons. In addition, the Supreme Leader has repeatedly mentioned this point."

"If they (the Westerners) intend to build confidence, they should now prepare the ground for building confidence," the Iranian foreign minister commented.

#### Tehran welcomes Riyadh's decision to suspend death sentences of some Iranians

Elsewhere in his remarks, Salehi welcomed Saudi Arabian officials' decision to suspend death sentences handed down to a number of Iranian nationals.

He also said, "A number of Iranians have been imprisoned in Saudi Arabia on charges of smuggling drugs. I held a telephone conversation with Saudi Arabian Foreign Minister (Saud Al Faisal) and discussed the matter with him in addition to bilateral issues."

http://tehrantimes.com/politics/97060-salehi-optimistic-about-iran-51-talks-in-baghdad-

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Press TV - Iran

## P5+1 Has Good Opportunity in Talks with Iran: Larijani

Wednesday, April 18, 2012

Iran's Majlis Speaker Ali Larijani says the return of the five permanent members of the UN Security Council plus Germany (P5+1) to the negotiating table with the Islamic Republic is a suitable opportunity for them.

"They have realized that they will face effective interaction by the Islamic Republic of Iran if they substitute the bullying language with prudence and the dual attitudes with a legal system," said Larijani on Tuesday.

He added that no full assessment of the Saturday talks between Iran and the P5+1 - Russia, China, France, Britain, the US and Germany - can currently be made "but we take notice of the change in the West's attitude."

The top Iranian parliamentarian further said that the change in the paradigm dominating the Istanbul talks from an adventurist outlook to a rational logic on the basis of the nuclear Non-Proliferation Treaty (NPT) is considered as a logical step.



Larijani voiced the Majlis support for the Iranian negotiating delegation at the talks, adding that the Iranian lawmakers will watchfully monitor the negotiations in the future.

Iran and the P5+1 wrapped up their latest negotiations in the Turkish city of Istanbul on April 14 and agreed to hold the next round of the talks in Iraqi capital of Baghdad on May 23, 2012. Both sides hailed the talks as constructive.

It was the second time that Istanbul hosted the comprehensive talks between Iran and the six major world powers.

Tehran and the P5+1 had previously held two rounds of talks, one in Geneva in December 2010 and another in Istanbul in January 2011.

http://www.presstv.ir/detail/236797.html

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China Daily - China

#### Iran Denounces U.S. Missile Shield Plan in Persian Gulf

April 19, 2012 (Xinhua)

TEHRAN, April 19 (Xinhua) -- The commander of Iran's army ground forces denounced a U.S. proposed plan to establish a missile shield in the Persian Gulf, local satellite Press TV reported on Thursday.

Commander Ahmad-Reza Pourdastan said the plan, aimed at countering alleged threats from Iran, will provide Washington with a pretext to maintain its "unlawful" presence in the region, according to the report.

On March 31, U.S. Secretary of State Hillary Clinton held talks in Saudi Arabia about setting up the shield system.

Addressing a Gulf-U.S. security forum in Saudi capital Riyadh, Clinton said that Washington is committed to the security of the six-member Gulf Cooperation Council (GCC) that it deems as its allies in the region.

Washington's unilateral policies and its "blatant and hidden" interference in different parts of the world have provoked a crisis, Pourdastan was quoted as saying.

The U.S. attempts to spread Iranophobia in the region aim to support its large arms sales and military presence in the region, said the Iranian commander.

Iran plays a constructive role in establishing security in the region and the regional countries are fully capable of safeguarding their interests without resorting to foreign assistance, he added.

Earlier this month, Iranian Defense Minister Brigadier General Ahmad Vahidi warned its southern neighbors against the missile shield plan.

Also, Turkey's decision to deploy U.S. radar in its soil as part of a Europe-wide missile defense system has angered Iran, prompting some Iranian officials to threaten Turkey with attacks.

http://www.chinadaily.com.cn/xinhua/2012-04-19/content 5723992.html

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**Washington Times** 

# Test Chamber May Hold Iran's Nuclear Secret

By Shaun Waterman, *The Washington Times* Thursday, April 19, 2012



When international talks about Iran's nuclear program reconvene next month, a key test of progress will be whether U.N. inspectors get access to a bus-sized metal chamber, where specialists suspect Iranians might have tested a trigger for an atomic bomb.

The chamber likely was used to test a device called an "implosion system," which helps set off a nuclear weapon, according to Paul Brannan of the Institute for Science and International Security, a nonprofit nuclear-proliferation watchdog.

He said U.N. inspectors have requested access to the site at the Iranian military complex at Parchin, a few miles southeast of Tehran.

Allowing them in would be a "straightforward" way for Iran to demonstrate good faith and to allay international concerns about a possible military element to their nuclear program, he said.

"It has substantive value, and it could happen very quickly," Mr. Brannan said.

Earlier this month, Iranian officials said that there was no nuclear activity at Parchin, and that inspectors from the U.N.'s International Atomic Energy Agency already had been there.

After last weekend's talks between Iran and the five permanent members of the U.N. Security Council and Germany, the next opportunity to gauge progress will be when officials reconvene May 23 in Baghdad.

U.S. intelligence agencies believe that Iran is developing the capability to make a weapon, but that its supreme leader, Ayatollah Ali Khamenei, has yet to make a decision on building a nuclear bomb.

Iran insists its nuclear program is purely for civilian use.

Any evidence of a nuclear trigger test found at the Parchin chamber would show Iran lied because there are no civilian applications for such devices.

From the Iranian point of view, allowing an inspection is fraught with risk, said Michael Elleman of the International Institute for Strategic Studies.

"If the inspectors find anything, the burden of proof will totally shift to the Iranians. They will have to prove a negative," he said.

Iranian officials may also see Parchin as the thin end of the wedge.

"Once that door is opened, the Iranians will be asking themselves, 'Will [the inspectors] want to see more?'" he noted.

Western intelligence officials believe the testing of the implosion trigger probably occurred about 10 years ago, the German newspaper Sueddeutsche Zeitung reported over the weekend.

But Mr. Brannan said the fact that the testing happened so long ago is immaterial.

"They've never admitted to having any kind of a military nuclear program," he said.

"If they can't even acknowledge that they had one in the past, it will be hard to get a level of confidence among the international community that they are being transparent about their current activities."

However, Mr. Elleman said, if the Iranians acknowledge past weapons development activities, "there will always be people who won't be satisfied" with any explanation or declaration they make.

"As long as there's another facility to visit, they'll never get a clean bill of health," he said.

Nonetheless, he added, it still would be in Iran's interest to come clean.

"Transparency is key," he said. "Without hard data [about Iran's nuclear program], speculation about worst-case scenarios tends to rush in to fill the vacuum."



http://www.washingtontimes.com/news/2012/apr/19/test-chamber-may-hold-secret-iran-nuclear-plans/?page=all#pagebreak

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Chicago Tribune

## Angry North Korea Threatens Retaliation, Nuclear Test Expected

By Ju-min Park, Reuters April 18, 2012

SEOUL (Reuters) - A bristling North Korea said on Wednesday it was ready to retaliate in the face of international condemnation over its failed rocket launch, increasing the likelihood the hermit state will push ahead with a third nuclear test.

The North also ditched an agreement to allow back inspectors from the International Atomic Energy Agency. That followed a U.S. decision, in response to a rocket launch the United States says was a disguised long-range missile test, to break off a deal earlier this year to provide the impoverished state with food aid.

Pyongyang called the U.S. move a hostile act and said it was no longer bound to stick to its side of the February 29 agreement, dashing any hopes that new leader Kim Jong-un would soften a foreign policy that has for years been based on the threat of an atomic arsenal to leverage concessions out of regional powers.

"We have thus become able to take necessary retaliatory measures, free from the agreement," the official KCNA news agency said, without specifying what actions it might take.

Many analysts expect that with its third test, North Korea will for the first time try a nuclear device using highly enriched uranium, something it was long suspected of developing but which it only publicly admitted to about two years ago.

"If it conducts a nuclear test, it will be uranium rather than plutonium because North Korea would want to use the test as a big global advertisement for its newer, bigger nuclear capabilities," said Baek Seung-joo of the Seoul-based Korea Institute for Defence Analysis.

Defence experts say that by successfully enriching uranium, to make bombs of the type dropped on Hiroshima nearly 70 years ago, the North would be able to significantly build it up stocks of weapons-grade nuclear material.

It would also allow it more easily to manufacture a nuclear warhead to mount on a long-range missile.

The latest international outcry against Pyongyang followed last week's rocket launch, which the United States and others said was in reality the test of a long range missile with the potential to reach the U.S. mainland.

China, the North's main economic and diplomatic backer, called for "dialogue and communication" and continued engagement with the International Atomic Energy Agency inspectors.

North Korea has insisted that the rocket launch, which in a rare public admission it said failed, was meant to put a satellite into orbit as part of celebrations to mark the 100th birthday of former president Kim Il-sung, whose family has ruled the autocratic state since it was founded after World War Two. Kim died in 1994.

The peninsula has been divided ever since with the two Koreas yet to sign a formal peace treaty to end the 1950-53 Korean War.

#### SATELLITE IMAGES

Recent satellite images have showed that the North has pushed ahead with work at a facility where it conducted previous nuclear tests.



While the nuclear tests have successfully alarmed its neighbors, including China, they also showcase the North's technological skills which helps impress a hardline military at home and buyers of North Korean weapons, one of its few viable exports.

The North has long argued that in the face of a hostile United States, which has military bases in South Korea and Japan, it needs a nuclear arsenal to defend itself.

"The new young leadership of North Korea has a very stark choice; they need to take a hard look at their polices, stop the provocative action," U.S. Secretary of State Hillary Clinton said at a news conference in Brazil's capital.

The Swiss-educated Kim Jong-un, who is in his late 20s, rose to power after the death of his father, Kim Jong-il, last December. The country's propaganda machine has since made much of his physical likeness to his revered grandfather, the first leader and now North Korea's "eternal president".

But hopes that the young Kim could prove to be a reformer have faded fast. In his first public speech on Sunday, the chubby leader made clear that he would stick to the pro-military policies of his father that helped push the country into a devastating famine in the 1990s.

Kim is surrounded by the same coterie of generals that advised his father and he oversaw Sunday's mass military parade.

He urged his people and 1.2 million strong armed forces to "move forward to final victory" as he lauded his grandfather's and father's achievements in building the country's military.

Siegfried Hecker, a U.S. nuclear expert who in 2010 saw a uranium enrichment facility in North Korea, believes the state has 24-42 kg (53 to 95 pounds) of plutonium, enough for four to eight bombs.

Production of plutonium at its Yongbyon reprocessing plant has been halted since 2009 and producing highly enriched uranium would simultaneously allow Pyongyang to push ahead with its nuclear power program and augment its small plutonium stocks that could be used for weapons, Hecker says.

"I believe North Korean scientists and engineers have been working to design miniaturized warheads for years, but they will need to test to demonstrate that the design works: no nuclear test, no confidence," Hecker said in a paper last week.

"Unlike the claim that Pyongyang can make that its space launch is purely for civilian purposes, there is no such civilian cover for a nuclear test. It is purely for military reasons."

Additional reporting by Choonsik Yoo and Jack Kim; Editing by Jonathan Thatcher and Nick Macfie

http://www.chicagotribune.com/news/sns-rt-us-korea-north-usbre83h07t-20120417,0,2398348.story (Return to Articles and Documents List)

Yonhap News – South Korea April 19, 2012

# More Missile Launches Expected Rather than Nuke Test: Expert

By Lee Chi-dong

WASHINGTON, April 18 (Yonhap) -- North Korea is more likely to fire off missiles or trigger national clashes near the border with South Korea than conduct another nuclear test in the near future, a U.S. security expert said Wednesday.

"I think there will be more provocations, probably missile launches. I am still skeptical that there is going to be a nuclear test in the short term," Frederick Fleitz, formerly a CIA official, told Yonhap News Agency after attending a congressional hearing.



"I think missile launches are very likely. Maybe there will be naval confrontations in the Yellow Sea," he added, asked about what the North will do next as its long-range rocket launch failed last week.

He dismissed reports of South Korean intelligence, based on satellite images, on digging activities at the North's nuclear test sites.

Such activities have been frequent there over the past few years, according to Fleitz, who served as chief of staff to Undersecretary of State John Bolton from 2001 to 2005. He now works as managing editor at the Langley Intelligence Group Network in Washington.

He said Pyongyang will test its nuclear weapons again someday but it seems not to be imminent.

Although the North chose nuclear experiments after their two last long-range missile launches, he stressed, the two incidents would not necessarily constitute a trend.

He pointed out that the North's new regime took significant steps to make its latest rocket launch less provocative, such as an unprecedented level of oneness with the press.

"Second, North Korea has only a limited amount of fissile material," he said. "I believe it will eventually test another nuclear weapon when it is technically ready and prepared to endure an enormous and debilitating amount of diplomatic isolation."

In the hearing at the House Committee on Foreign Affairs, meanwhile, lawmakers and witnesses took issue with Washington's Feb. 29 deal with Pyongyang, which has effectively become null and void.

The U.S. agreed to provide a massive food aid in return for the North's suspension of some of missile and nuclear activities.

"A particularly unfortunate result of the Leap Day agreement was the combining of discussions of nuclear disarmament and food assistance at the same negotiating table," said Rep. Ileana Ros-Lehtinen (R-FL), chairwoman of the committee.

She expressed regret that the U.S. officials who negotiated the deal refused to attend the hearing.

Scott Snyder, senior researcher at the Council on Foreign Relations, also said the food issue should have been discussed separately.

"It was a mistake to allow food aid to be brought directly into the negotiations as a quid pro quo for North Korean actions," he said.

He added it was hasty for Washington to announce the deal while the North's new leader, Kim Jong-un, was still trying to consolidate power.

Rep. Howard Berman, the top Democrat in the committee, recalled comments by former President Ronald Reagan on the Soviet Union that the U.S. should "trust but verify."

"With regard to North Korea, he might have said 'never trust and never cease to verify," he said.

Berman accused China of doing little to stop the North's provocations despite its diplomatic leverage as a main supplier of food and energy for the communist ally.

"By enabling North Korean regime's reckless and aggressive behavior, which threatens regional stability, China ends up undermining its own security calculus," he said.

http://english.yonhapnews.co.kr/national/2012/04/19/39/0301000000AEN20120419000300315F.HTML (Return to Articles and Documents List)



Korea Times – South Korea April 19, 2012

## Korea Deploys New Missile Capable of Hitting Anywhere in NK

South Korea has deployed a new long-range cruise missile that puts nuclear and missile sites in the entire North Korean territory within striking distance, defense ministry officials said Thursday, amid growing security jitters sparked by the North's botched rocket launch.

The new, home-grown cruise missile has a range of "more than 1,000 kilometers and can immediately strike anywhere in North Korea," said Maj. Gen. Shin Won-sik, the senior official in charge of policy planning at the ministry.

"While maintaining unwavering readiness with this longer-range weaponry, our military will firmly and thoroughly retaliate if North Korea conducts a reckless provocation."

Shin did not give the name of the new cruise missile, apparently for an intelligence matter, but South Korea has started manufacturing the surface-to-surface Hyunmu-3C with a range of up to 1,500 km since 2010.

The previous versions of Hyunmu-3A and Hyunmu-3B, with a range of 500 km and 1,000 km each, were put into service.

Together with the new cruise missile, the military has also deployed a new tactical ballistic missile with a range of 300 km, which is "more powerful than" the MGM-140 Army Tactical Missile System (ATACMS) developed by the United States, Shin said.

The defense ministry decided to publicly announce the deployment of the two missiles in a display of willingness that the military is keeping a watertight defense posture against North Korea's recent missile threat, Shin said.

The rare announcement of new missile deployment comes as officials and analysts have warned that North Korea may stage more provocative actions, including a potential nuclear test, despite the failed launch of a long-range rocket last week.

North Korea claimed the launch was designed to put a satellite into orbit, but South Korea, the United States and others blasted it as a cover for testing improved ballistic missile technology.

The North's failed launch drew swift international condemnation. In New York on Monday, the United Nations Security Council "strongly condemned" the North's launch, saying it will impose new sanctions if Pyongyang carries out another launch of a long-range rocket or a nuclear test.

Tensions on the Korean Peninsula remain high after North Korea torpedoed a South Korean warship and shelled a southern border island in 2010 that resulted in 50 people, including two civilians, being killed. South Korea has vowed a tougher retaliation if it is provoked by the North again.

Under a pact with the U.S., which stations some 28,500 troops in South Korea, the range of South Korean ballistic missiles is limited to 300 km and their payload weight to 500 kilograms. The pact only applies to high-velocity, free-flight ballistic missiles and not the slow, surface-skimming cruise weapons.

Making a visit to Seoul this week, Adm. Samuel Locklear, the commander of the U.S. Pacific Command, told reporters that South Korea and the United States are looking at "all options" to prevent any further provocations from North Korea. (Yonhap)

http://www.koreatimes.co.kr/www/news/nation/2012/04/205 109274.html

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Omaha World-Herald - Omaha, NE



Thursday April 19, 2012

## **Experts: NKorea Missile Carrier Likely From China**

By PETER ENAV, Associated Press (AP)

TAIPEI, Taiwan (AP) - The enormous, 16-wheel truck that North Korea used to carry a missile during a recent parade likely came from China in a possible violation of UN sanctions meant to rein in Pyongyang's missile program, experts say.

The carrier, also believed capable of launching missiles, caught the eye of experts during last Sunday's military show in Pyongyang because it was the biggest carrier yet displayed by North Korea and gives the country - truculently at odds with the U.S., Japan and South Korea - the ability to transport long-range missiles around its territory, making them harder to locate and destroy.

The large size of the vehicle "represents a quantum leap forward" for the North Koreans, said Wendell Minnick, a reporter on Asian military developments for Defense News, a Washington-based publication.

Unlikely to have been made by North Korea because of its technical sophistication, experts said the design of the vehicle shows that China is the probable source. Pinning a sanctions-busting charge on Beijing would be difficult, however, because it would be hard to prove that Beijing provided the technology for military purposes or even that it sold the vehicle directly to North Korea, the experts said.

The vehicle also can be used in other fields, like oil exploration. At the same time North Korea might have gotten it from another country in a re-export deal.

"It's very possible there was no intended violation of sanctions by China on this piece of equipment," said arms transfer expert Pieter Wezeman of the Stockholm International Peace Research Institute.

On Thursday, China denied any wrongdoing in connection with the vehicle's appearance at the North Korean parade. Foreign Ministry spokesman Liu Weimin told a regular news conference that China is against the spread of weapons of mass destruction and carriers for such weapons. He said China follows international laws and has strict rules against the spread of such weapons.

Analyst Ted Parsons of IHS Jane's Defence Weekly first raised the possibility that the missile-carrying vehicle came from China, citing similarities to Chinese design patterns in the windscreen, the windscreen wiper configuration, the door and handle, the grill, the front bumper lighting configurations, and the cabin steps.

"The 16-wheel TEL is apparently based on a design from the 9th Academy of the China Aerospace Science and Industry Corporation," he said.

China military analyst Richard Fisher of the International Assessment and Strategy Center in suburban Washington agreed, citing technological challenges as a major reason to believe that Pyongyang could not have developed the vehicle on its own.

"This is definitely a CASIC vehicle that was probably produced specifically for export to North Korea," Fisher said. "The North Koreans don't have the ability to make something like this themselves."

Fisher said that keeping the 16 wheels in alignment would present a particular challenge to North Korea, because of the requirement to develop a sophisticated on board computer system.

This kind of system, he said, was "almost certainly beyond them."

CASIC designs vehicles of up to 21-meter-long (68 feet) trucks with maximum loading capacity of 122 tons for production at its Hubei Sanjiang Space Wanshan Special Vehicles Co., Ltd. in central China.

CASIC's press office did not respond to request for comment. A company statement from October 2010 cited the export of the first 16-wheel vehicle without specifying the purchasing country. The sales department of Hubei Sanjiang



confirmed that a vehicle or vehicles of the 16-wheel type had been sold abroad, but refused to disclose the buyer, saying it was "a secret."

While agreeing that the vehicle in Sunday's parade probably came from China, Wezeman cautioned that it would be difficult to prove that Beijing had violated United Nations Security Council Resolution 1718 of October 14, 2006 in providing it to North Korea. That measure bans countries from supplying Pyongyang with items related to ballistic missiles.

"The vehicle could have been re-exported to North Korea from a third country, such as Pakistan, which is known to have used Chinese chassis for its medium range ballistic and other missiles, or North Korea could have used a front company to obscure that it was the buyer" Wezeman said. "Also it is possible that it was supplied to North Korea for civilian purposes such as construction."

CASIC descriptions of its 16-wheel vehicle make specific reference to its possible use in civilian activities including oil exploration.

While acknowledging the possibility that the vehicle seen in Sunday's parade was re-exported from Pakistan, Fisher was adamant that it had almost certainly been built in China for North Korean customers.

"I think that CASIC has put together as many as six or seven of these vehicles and that maybe half of them have been sold to Pyongyang," he said.

On Thursday Jane's Defence Weekly reported that following the Pyongyang parade, a UN Security Council investigation into the possibility of a sanctions breach was under way.

China, North Korea's main political and economic ally, supported the passage of the Security Council resolution banning the provision of missile related items to North Korea. But it is also determined to ensure that Pyongyang's current rulers remain in power, and to that end provides the regime military and other assistance.

http://www.omaha.com/article/20120419/AP15/304199946

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Korea Times – South Korea April 20, 2012

## NK Says It Will Continue to Launch Satellites under Space Program

North Korea said it will continue to launch satellites for its economic development, a week after its long-range rocket exploded soon after lift-off.

North Korean "satellites for peaceful purposes will be put into space one after another," the North's Korean Committee for Space Technology said in an English-language statement carried by the official Korean Central News Agency late Thursday.

The statement did not give any specific time frame for the next rocket launch.

The defiant move came days after the U.N. Security Council condemned the botched launch and called on member states to find ways to tighten sanctions on the communist country.

The North has claimed the failed rocket launch was intended to put an earth observation satellite into orbit. However, South Korea, the United States and other regional powers said it was a cover for testing the North's ballistic missile technology, which is banned under a U.N. resolution.

The committee said the North's scientists and technicians found the cause of the rocket failure last Friday, noting scientific and technological data gained in the failure will help advance the country's space program. It did not, however, elaborate on the cause of the failure.



The committee also accused the U.S. of seeking to strip North Korea of its right to space development with food aid, saying the move is "nothing but a foolish dream."

"Our army and people have lived without any U.S. 'support,'" the committee said. "We have all substantial foundations for enabling our people to fully enjoy wealth and prosperity under socialism, without tightening their belts any longer."

The failed rocket launch has unraveled a February deal between North Korea and the U.S. that called for a moratorium on missile and nuclear tests by Pyongyang in exchange for 240,000 tons of food aid from Washington.

In Washington, U.S. Defense Secretary Leon Panetta expressed concern that North Korea might have mastered a mobile ability for long-range missiles.

"There is growing concern about, you know, the mobile capabilities that were on display on the parade activity in North Korea," he said Thursday at a congressional hearing.

The North showed off what is believed to be an intercontinental ballistic missile on a transporter-erector-launcher during a military parade on Sunday. (Yonhap)

http://www.koreatimes.co.kr/www/news/nation/2012/04/120 109351.html

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**International Business Times** 

## China Assisting North Korea Missile Program: US DOD's Panetta

By Reuters Staff Writer April 20, 2012

(Reuters) - China has provided some assistance to North Korea's missile program, U.S. Defense Secretary Leon Panetta said on Thursday, a week after the hermit state's failed rocket launch triggered international condemnation.

Under United Nations Security Council resolutions from 2006 and 2009, states, including China, are banned from helping North Korea with its ballistic missile program, its nuclear activities as well as supplying heavy weapons.

Beijing has denied it has broken any rules, although a modern missile transporter seen in Sunday's military parade to celebrate the founder of North Korea was said by some western military experts to be of Chinese design and possibly origin.

"I'm sure there's been some help coming from China. I don't know, you know, the exact extent of that," Panetta told members of the House Armed Services Committee when asked whether China had been supporting North Korea's missile program through "trade and technology exchanges".

North Korea's powerful Asian neighbor is Pyongyang's only major ally, with military and economic ties that date back to the communist origins of the two nations.

Pyongyang has said it was ready to retaliate in the face of widespread condemnation of the failed launch, increasing the likelihood the isolated state will go ahead with a third nuclear test. Late on Thursday it said it had "never recognized the UNSC (U.N. Security Council) resolution".

After last week's launch, which the United States said was a disguised long-range missile test but which Pyongyang insists was meant to put a satellite into orbit, the Obama administration said it had suspended a food aid deal.

Pyongyang retorted the food aid was "worth a petty amount of money".

#### BEIJING CALLS FOR DIALOGUE

China has called for "dialogue and communication" as tensions with North Korea mount and reiterated its long-standing call for a return to regional denuclearization talks that have been stalled for years.



On Thursday, South Korea said it had added a cruise missile to its arsenal that could hit anywhere in the North, raising the risk that any attack on the South, like the shelling of an island in 2010, would prompt an immediate response.

In Thursday's hearing, Republican Rep. Michael Turner pressed Panetta about a transporter launcher system - essentially a large truck on top of which a missile is mounted - that North Korea showcased during a military parade on Sunday, which he said appeared to be made in China.

Panetta declined to give additional details about any Chinese support for North Korea's missile capabilities in a public setting due to "the sensitivity of that information".

"But clearly there's been assistance along those lines," the Defense Secretary said.

Panetta said there was "no question" North Korea's efforts to develop long-range missile and nuclear weapon capability were a threat to the United States. "For that reason we take North Korea and their provocative actions very seriously," he said.

"And China ought to be urging them to engage in those kinds of ... diplomatic negotiations. We thought we were making some progress and suddenly we're back at provocation," he added.

While the United States was ready to up the pressure on Beijing, officials in South Korea remained wary of upsetting China, which is the largest single export destination for Asia's fourth largest economy.

"If it is confirmed (that it is sold by the Chinese), it would be a problem," said a foreign ministry official in Seoul, who did not wish to be named due to the sensitivity of the issue but added that South Korea was not pushing China for an explanation.

http://www.ibtimes.com/articles/331092/20120420/north-korea-missile-china-nuclear-panetta-pentagon.htm (Return to Articles and Documents List)

Business Today - India

# India Storms into Elite Club with Agni-V Missile

Indo-Asian News Service (IANS) April 19, 2012

Bhubaneswar/New Delhi -- India has stormed into an elite club of nations with the capability to hit targets 5,000 km away, with the successful test of the much-anticipated Agni-V long-range nuclear-capable ballistic missile, described as "China killer".

With its launch from Wheeler Island off the Odisha coast at 8.07 am on Thursday, India also emerged as a major missile powerhouse of the world, having developed Agni-V almost entirely indigenously over the last four years.

Only the US, Russia, China, France and the United Kingdom have missiles in their arsenal that can hit targets 5,000 km and beyond.

"The three-stage Agni-V missile's entire performance has been successfully demonstrated. All mission objectives and operational targets have been met," India's Defence Research and Development Organisation (DRDO) chief V.K. Saraswat told reporters at the test site.

"India is today a nation with proven capability to design, develop and produce a long-range ballistic missile. India is a missile power now," a jubilant Saraswat said.

"It was a fantastic launch. It hit the target with high accuracy," S.P. Dash, the director of the test range, told IANS.

During the test, the 17.5-metre long Agni-V reached an altitude of 600 km and attained a velocity of 7,000 metres per second, which enabled the missile to achieve its intended target range.



Prime Minister Manmohan Singh hailed the successful Agni-V long-range nuclear-capable ballistic missile test as "another milestone" in the country's "quest for security, preparedness and to explore the frontiers of science".

"I congratulate all the scientific and technical personnel of the DRDO (Defence Research and Development Organisation) and other organisations who have worked tirelessly in our endeavour to strengthen the defence and security of our country," Manmohan Singh said in his message to Saraswat.

"Today's (Thursday's) successful Agni-V test launch represents another milestone in our quest to add to the credibility of our security and preparedness and to continuously explore the frontiers of science. The nation stands together in honouring the scientific community," Singh said.

But the Agni-V test received an adverse reaction from China, where state-run Global Times said in an article on its oped section that India may have missiles that can reach most Chinese territory, but it stands "no chance in an overall arms race".

It added that New Delhi would gain nothing by stirring "further hostility".

The article, 'India being swept up by missile delusion', said India apparently is hoping to enter the global intercontinental missile club, despite intercontinental missiles normally having a range of over 8,000 km.

Soon after DRDO announced the success of Agni-V, India's Defence Minister A.K. Antony spoke to Saraswat and Agni-V Project Director Avinash Chander and congratulated them for "this immaculate success", defence ministry spokesperson Sitanshu Kar said.

Antony described the development as a major milestone in the country's missile programme and said "the nation is indeed proud" of its defence scientists. He also recalled "the untiring contributions" of former DRDO chief M. Natarajan.

At best, Thursday's test of Agni-V is only a demonstration of India's capability to launch an inter-continental ballistic missile (ICBM).

Agni-V's range is 500-km short of an ICBM. According to the website of American Federation of American Scientists and Britannica.com, the range of an ICBM is 5,500 km and above.

In fact, Saraswat himself has clarified in November 2011 that India was "not developing" an ICBM and that Agni-V is an intermediate-range ballistic missile (IRBM).

"We are not developing any ICBM. Our threat perception today is not requiring development of any ICBM," he said then.

"Agni-V will take us to a level of 5,000-km plus class of missile systems which meets all our threat requirements," he said then, noting that the technology for IRBM and ICBM is the same.

China's Deng Fong-31A Inter-Continental Ballistic Missile (ICBM) has a range of 11,500 km and can easily hit the entire Asia and reach targets in Russia and most part of eastern Europe.

Following Thursday's test, Agni-V will go through more tests before it is inducted into the armed forces by the end of 2014 or early 2015.

But this missile provides India the capability to hit targets deep inside China and the entire Pakistan territory.

India maintains a 'no-first-strike' nuclear weapons policy and Agni-V and the 3,500-km-range Agni-IV missile, which was successfully tested in November 2011, are deterrents against a nuclear attack from its enemies.

http://businesstoday.intoday.in/story/agni-v-missile-india-elite-club-icbm/1/24159.html (Return to Articles and Documents List)



IBNLive – India April 19, 2012

## Next Step Is to Have Agni-V on Submarine: Ex-Navy Chief

By CNN-IBN

New Delhi: Terming the successful launch of Agni-V as a proud moment for the country, former navy chief Admiral Arun Prakash on Thursday said that the next step should be to put an indigenous inter-continental ballistic missile on an indigenous nuclear submarine, which will make India's nuclear deterrent invulnerable and omnipotent.

"The next step is to put the same capability on a nuclear submarine which can disappear into the deep blue ocean and that will make out nuclear deterrent invulnerable. This should be our eventual aim. Then we can says we have actually achieved strategic autonomy," the Admiral told CNN-IBN.

He said that the launch actually makes India's nuclear deterrent credible and all the potential adversaries would take note of Agni-V's test launch.

On the possible response of the international community after the test-firing, he said, "We are no first use country and nobody needs to be worried unless they have some bad intentions towards India," he said.

The former naval chief also cautioned the scientists that the weapon has to be as accurate as it can be. "Agni-V is a logical step in a progression of acquiring nuclear deterrent capabilities but the next step is to put these capabilities under water," he said, adding that the task is not going to be easy.

On the need for launching missiles of more range than Agni-V, he said, "I don't think we need missiles of very longer ranges, 5000-6000 kms is more than enough."

In the past, he said the DRDO was rightly criticised for missing targets, overstating their capabilities and exaggerating claims. "But propellant technologies don't come easily. Our scientists have done a tremendous job."

http://ibnlive.in.com/news/next-step-is-to-have-agniv-on-submarine-exnavy-chief/250166-3.html

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Hindustan Times - India

# India No Match to Us, China Daily Lashes Out after Agni-V Missile Success

Indo-Asian News Service (IANS) Beijing, April 19, 2012

India may have missiles that can reach most parts of China but stands "no chance in an overall arms race" with the country, a Chinese daily said on Thursday, when India test-fired its 5,000 km range nuclear capable missile, and added that New Delhi would gain nothing by stirring "further hostility".

The article, India being swept up by missile delusion, that appeared in the op-ed section of the state-run Global Times said India apparently is hoping to enter the global intercontinental missile club, despite intercontinental missiles normally having a range of over 8,000 km.

India on Thursday test-fired the Agni-V missile that can accurately hit targets more than 5,000 km away. With this launch, India entered an exclusive club of nations that have this capability.

The daily noted that India has moved rapidly in developing missile technology.

"It successfully launched the Agni IV with a range of 3,500 km last year. Indian public opinion has long seen China as its reference point for military development," it said.



Criticising India, it said the country "is still poor and lags behind in infrastructure construction, but its society is highly supportive of developing nuclear power and the West chooses to overlook India's disregard of nuclear and missile control treaties".

"The West remains silent on the fact that India's military spending increased by 17% in 2012 and the country has again become the largest weapons importer in the world," it said.

It stressed that India "should not overestimate its strength".

"Even if it has missiles that could reach most parts of China, that does not mean it will gain anything from being arrogant during disputes with China. India should be clear that China's nuclear power is stronger and more reliable. For the foreseeable future, India would stand no chance in an overall arms race with China," it warned.

It went on to say that "India should also not overstate the value of its Western allies and the profits it could gain from participating in a containment of China. If it equates long range strategic missiles with deterrence of China, and stirs up further hostility, it could be sorely mistaken".

The daily advised that China and India should develop as friendly a relationship as possible. "Even if this cannot be achieved, the two should at least tolerate each other and learn to coexist."

It quickly added that it would be "unwise for China and India to seek a balance of power by developing missiles".

"The geopolitics of Asia will become more dependent on the nature of Sino-Indian relations. The peace and stability of the region are crucial to both countries. China and India should both take responsibility for maintaining this peace and stability and be wary of external intervention," the article said.

"China understands the Indian desire to catch up with China. China, as the most appropriate strategic target for India, is willing to take India as a peaceful competitor."

The daily said China and India are sensitive toward each other, "but objectively speaking, China does not spend much time guarding against India, while India focuses a lot of attention on China".

"China hopes India will remain calm, as this would be beneficial to both giants."

http://www.hindustantimes.com/world-news/China/India-no-match-to-us-China-daily-lashes-out-after-Agni-V-missile-success/Article1-842847.aspx

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Deccan Herald - India

## Agni-V Has Many More Milestones to Reach

Missile might: It is capable of delivering nuclear warhead anywhere in China April 19, 2012

Deccan Herald News Staff (DHNS)

New Delhi: The platform was successfully tested in a textbook flight. But the killer warhead — called multiple independently targetable reentry vehicle — to be fitted finally atop the 17 metre Agni-V missile is still under development and will take more time before it comes for trial.

"Defence Research and Development Organisation is working on the MIRV. I cannot tell you when we are going to test it but it is in an advanced stage of development," Agni project director Tessy Thomas told Deccan Herald over telephone from Wheeler's Island.

A MIRV is a collection of nuclear weapons fitted on a platform known as post-boost (or bus) stage, which dispenses individual warheads against multiple targets over a broad area, thereby rendering the enemy's missile defence system useless. The number of weapons attached to the bus can vary.



"MIRV is an extraordinary jump in technology and capability as one missile can carry 5-8 independent warheads for separate targets. The DRDO programme on MIRV is in an advanced stage of design and development and will be tested in a few years," Bharat Karnad, professor at Centre for Policy Research said.

Open source literature suggests that an US MIRV can carry 3-12 nuclear warheads whereas Russian MIRV houses 3-10 such warheads. Not many countries are known to possess MIRV technology.

"MIRV is the right way to go," said Rajaram Nagappa, professor of strategic and security studies at National Institute of Advanced Studies, Bangalore. "Its a brilliant technology," said S K Tyagi, former chief of Indian Air Force. Developed first in the USA in the 1970s — MIRV — provides greater target damage.

"MIRV technology is similar to Indian Space Research Organiation's multiple satellite injection technology. The defence scientists have to militarise it and install better guidance system to ensure that warheads hit the targets," said Karnad, admitting it was a challenging task for scientists.

Scientists in Agni project encountered several other challenges in realising Agni-V that can fly a distance of 5000 km. "Guiding the missile all through its trajectory and navigating it was a key challenge. As it was a three stage rocket, we had to install new (the third one) motor and still had to manage the overall mass," said Thomas.

#### **Fuel efficiency**

Reduction of structural mass and maximise fuel efficiency would be another important problem which defence scientists had solved, said Nagappa, who specialised in aerospace propulsion and worked extensively in design and development of solid propellant rockets at Indian Space Research Organisation's Vikram Sarabhai Space Centre at Thiruvananthapuram.

Otherwise managing a two stage rocket – like Agni-II, Agni-III and Agni-IV – would not be more complicated than a three stage rocket, Nagappa said, adding Agni-V was as good as any other contemporary vehicle.

In India's neighbourhood, China has its Dong Feng-31 and DF-31A, both three stage rockets, reportedly with a range of 10000 km and 7000 km respectively. The DF 31A is suspected to have been carrying a MIRV. Pakistan on the other hand does not have any three stage rocket so far.

 $\underline{\text{http://www.deccanherald.com/content/243163/agni-v-has-many-more.html}}$ 

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Times of India – India

# Canister Storage Gives N-Capable Agni-V Missile Flexibility

Rajat Pandit, Tamil News Network (TNN) April 20, 2012

NEW DELHI: After the mischief played by weather gods a day earlier, the god of fire or "Agni" came into his own on Thursday morning to hurl a potent fireball more than halfway across the expanse of the Indian Ocean at over 20 times the speed of sound.

India heralded a new era in its "credible" strategic deterrence capability by testing its most ambitious nuclear missile - the over 5,000-km range Agni-V - that brings all of China and much more within its strike envelope.

With the launch of the 50-tonne missile from the Wheeler Island off Odisha coast at 8.07 am, and its 20-minute flight to an "impact point towards western Australia", India also yanked open the door to the super-exclusive ICBM (intercontinental ballistic missile) club that counts only the US, Russia, China, France and the UK as its members.

India can, however, can sit at this high table only when the 17.5-metre tall Agni-V, which just about meets the 5,500-km ICBM benchmark, becomes fully operational after "four to five repeatable tests" and user-trials. It will be around



2015 that the three-stage, solid-fuelled missile will be ready for deployment by the tri-Service Strategic Forces Command.

That didn't dampen the celebrations though. "It's a game-changer...a super hit. India is a major missile power now. I don't think it will take more than two years for Agni-V to be ready for induction," an elated DRDO chief, V K Saraswat, told TOI soon after the test.

Chief controller (missiles and strategic systems) Avinash Chander said, "We have met all the mission objectives...All the three stages of propulsion, with indigenously developed composite rocket motors, worked perfectly."

The maiden test of Agni-V, designed to carry a 1.5-tonne nuclear warhead, expectedly generated waves around the globe. The missile, after all can deliver multiple warheads and cover the whole of Asia, 70% of Europe, eastern Africa and other regions, leaving only continental America beyond its deadly reach.

Even as PM Manmohan Singh, defence minister A K Antony congratulated the scientists for "doing the country proud", the US took note of India's "solid non-proliferation record".

China, however, made its displeasure clear despite its own huge nuclear and missile arsenals that completely dwarf the Indian capacity. Beijing, for instance, has well over four times the nuclear warheads that New Delhi possesses.

Moreover, the People's Liberation Army has missiles like the 11,200-km Dong Feng-31A that can hit any Indian city, and even unnerves the US. It also has nuclear missile bases in Qinghai province, which house the DF-21 missiles that unmistakably target India.

India, with a declared "no first-use" nuclear doctrine, could have gone in for a much higher range ICBM, say top officials. But Agni-V, with its "very short reaction time as well as very high mobility for requisite operational flexibility", takes care of India's "current threat perceptions and primary area of concern".

The test itself was a huge technological and logistical challenge. After lifting-off from the mobile launcher at the test range, the missile being propelled by the first stage that burnt out and separated in 90 seconds tore into the sky.

After heading into space during its parabolic trajectory, reaching an altitude of 600-km, the missile then re-entered the atmosphere powered by the third stage.

The missile reached hypersonic velocities of around 7,000-metre per second in the terminal stage before splashing down in the southern Indian Ocean, all along being monitored by shore and warship-based tracking systems.

"All three stages went off extremely well. The re-entry parameters were superb...all terminal events related to detonation of the warhead (it was a dummy payload for the test) happened in textbook style. As missile scientists, we could not have expected anything better," Saraswat told TOI.

The armed forces have already inducted Agni-I (700-km) and Agni-II (2,500-km), which are both basically meant to account for a threat from Pakistan. The 3,000-km Agni-III (under induction), 3,500-km Agni-IV (tested for the first time last November) and Agni-V have been designed with China in their scheme of things.

Unlike the earlier largely rail-mobile missiles, Agni-V can be easily stored in hermitically sealed canisters and swiftly transported atop launcher trucks by road. This will give the armed forces the required operational flexibility to pick and choose from where to launch the missiles.

Agni-V has a "highly accurate" inertial navigation system and will get an even more potent punch with MIRV (multiple independently targetable re-entry vehicles) warheads. An MIRV payload carries several nuclear warheads on a single missile that can be programmed to hit different targets.

A flurry of MIRV missiles can hence completely overwhelm an adversary's ballistic missile defences. DRDO has also worked to reduce the radar and other "signatures" of missiles like Agni-IV and Agni-V to make them "much more immune to counter-measures".



"Indigenous content" in India's strategic missiles has "gone up to such a level", with ring-laser gyros, composite rocket motors, micro-navigation systems and the like, that "no technology control regime" can derail them any longer, added the DRDO chief.

http://timesofindia.indiatimes.com/india/Canister-storage-gives-N-capable-Agni-V-missile-flexibility/articleshow/12739130.cms

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China Daily – China

#### Russia to Put Two Nuclear Submarines in Service this Summer

April 19, 2012 (Xinhua)

MOSCOW, April 19 (Xinhua) -- The Russian Navy plans to put two Project 955 Borei class nuclear submarines in service this summer, defense officials said Thursday.

"The Yuri Dolgoruky must be put into navy service no later than on June 15, and the Alexander Nevsky (will be put into service) in August," First Deputy Defense Minister Alexander Sukhorukov told reporters.

Initially, the two submarines were expected to join the Russian fleet last year. Sukhorukov attributed the delay to testing delays at the Sevmash shipyard where the subs were built.

"This year the tests should be completed," Sukhorukov said.

The defense official said numerous malfunctions were found in the Yuri Dolgoruku during test cruises last year The tests will be re-run in May and June, he said.

The forth-generation Yuri Dolgoruky and Alexander Nevsky will be equipped with the new sea-based Bulava intercontinental ballistic missiles. Each of the 170-meter long submarines can carry 16 Bulava missiles.

http://www.chinadaily.com.cn/xinhua/2012-04-19/content 5724176.html

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RIA Novosti - Russian Information Agency

# **Russian Military Orders Missile Early Warning Satellites**

19 April 2012

The Russian Defense Ministry has signed contracts on the development and construction of satellites capable of detecting launches of ballistic missiles, First Deputy Defense Minister Alexander Sukhorukov said on Thursday.

The new missile early warning satellites will be part of a unified aerospace defense network being formed in Russia.

"Several military satellites will be launched this year," Sukhorukov said.

Russia, which reportedly operates a constellation of 60 to 70 military satellites, is planning to launch at least 100 new military satellites in the next 10 years to boost its reconnaissance and missile detection capabilities.

The expansion of the military satellite cluster will also boost global positioning and mapping capabilities of the Russian military, which is necessary to guide advanced high-precision weapons being developed in Russia.

MOSCOW, April 19 (RIA Novosti)

http://en.rian.ru/news/20120419/172918299.html

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**Global Security Newswire** 

## Russia Not to Deploy Bulava Missiles Before July

April 19, 2012

Russia is not expected to begin deploying submarine-launched Bulava missiles before July, ITAR-Tass reported on Thursday (see *GSN*, March 22).

"It will take six to seven months to document everything" following the end of the missile testing period last December, First Deputy Defense Minister Alexander Sukhorukov said to journalists. "The work, which is envisaged for the production of the missile system, continues."

Last month, Defense Minister Anatoly Serdyukov said the Bulava would not enter into service before October and that additional test flights could be ordered for this summer.

The Bulava has had a mixed success record in testing to date. The missile was developed to carry as many as 10 nuclear warheads and to travel as far as 5,000 miles. It would be carried on the new Borei-class submarines (ITAR-Tass, April 19).

A military purchasing order for the Borei vessels could be postponed due to the high price tag, the *Kommersant* newspaper reported on Saturday.

"The Defense Ministry is again dissatisfied with the price substantiation, so the signing of the contract is ruled out in the near future," a naval manufacturing insider said in an interview with the newspaper.

The Russian United Shipbuilding Corp. estimated it would need \$4.4 billion to build the desired ballistic missile submarines, RIA Novosti summarized from the article.

"The manufacturers still want to sell it at an unjustifiably high price," an unidentified Defense Ministry insider said. The ship construction sector, however, contends the price sought by Moscow would only allow for a very small profit margin.

Under the most recently updated Russian military procurement program, the navy is to take receipt of no fewer than 10 Borei vessels over the next eight years (RIA Novosti, April 14).

http://www.nti.org/gsn/article/russia-not-deploy-bulava-slbms-july/

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Star Tribune - Minneapolis, MN

# Chief of US Missile Defense Sees Little Progress in North Korean Spaceflight Program

By DONNA CASSATA, Associated Press April 18, 2012

WASHINGTON - North Korea's recent failed rocket launch shows that the communist country has made little progress in its spaceflight program, the head of the U.S. missile defense program said Wednesday.

The assessment by Lt. Gen. Patrick J. O'Reilly raises questions about the immediate threat to the United States from a North Korean long-range missile and the billions that the U.S. spends to counter it.

O'Reilly testified before a Senate panel in defense of the missile defense program and the Obama administration's \$7.75 billion budget request for next year. He was pressed about the failure last Friday of North Korea's Unha-3 rocket that broke apart. The North Korean government said the rocket carried an Earth observation satellite, though other countries said it was a cover for testing long-range missile technology.



North Korea's Unha rocket shots in 1998, 2006 and 2009 are believed to have ended in failure.

"Our experience has been you need a lot of testing and flight testing in order to validate and have reliance in the capability," O'Reilly told the Senate Appropriations defense subcommittee. "They do not, and it's been evident every time they test. And their progress has not been made apparent in this latest flight test."

North Korea's failed launch has proved to be fodder for both sides in the national security debate. Some lawmakers and arms control advocates have pressed for fewer dollars for missile defense in light of the North's troubles, while others have argued for more money to protect the United States from an unpredictable regime.

President Barack Obama had appealed to the North Korean leadership to abandon the rocket launch, but was rebuffed.

"The attempted North Korean rocket launch servers as a stark reminder of potential threats to our homeland and of the operational demands the nation places on you," said the committee chairman, Sen. Daniel Inouye, D-Hawaii.

O'Reilly told Congress that the missile defense agency last year completed the construction of the ground-based Midcourse Defense infrastructure, which includes 30 land-based interceptors, the latest at Fort Greely, Alaska. It is designed to protect the United States from a limited raid from intercontinental-ballistic missiles.

At a hearing of the House Foreign Affairs Committee, U.S. lawmakers voiced suspicion that technology from China is being used in North Korea's missile program and demanded Beijing cut its "economic lifeline" to Pyongyang.

Rep. Ileana Ros-Lehtinen, R-Fla., the committee chairwoman, and top Democrat Howard Berman of California both called attention to reports that a missile-carrying truck displayed during a military parade in Pyongyang this past weekend appeared to be of Chinese origin. They said export of such equipment would violate a U.N. Security Council resolution.

Berman noted that China had joined in the Security Council's statement Monday which deplored last week's rocket launch, but it nevertheless still helped North Korea with food and fuel.

"China's willingness to support such a wicked regime casts a dark shadow on Beijing's own international reputation," Berman said.

North Korea showed off a new missile during a parade marking the centennial of the communist nation's founder. Many experts took note of the 16-wheel truck that was carrying the missile, the biggest yet displayed by the North. Such vehicles can transport missiles for launch in different sites, giving them an element of mobility that makes them harder to find and destroy.

Michael Green, who served as senior director for Asian affairs in the National Security Council under President George W. Bush, told the hearing that the chassis of this "mobile launcher" was probably a Chinese-made system.

He said that North Korean trading companies that are on the current U.N. sanctions list are openly operating in China, and the council's sanction committee has not done anything about it since the latest restrictions were imposed in 2009.

Associated Press writer Matthew Pennington contributed to this report.

http://www.startribune.com/nation/147947815.html

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National Journal

# U.S. Chemical Weapons Disposal Slippage "No Surprise," Expert Says

By Chris Schneidmiller April 18, 2012



WASHINGTON -- A veteran observer of the U.S. program to eliminate its stockpile of chemical warfare materials on Tuesday expressed "no surprise" at the latest announcement of a further delay in completing the decades-long effort (see *GSN*, April 17).

The U.S. Army's Assembled Chemical Weapons Alternatives program on Tuesday said it could need an additional two years, to 2023, to finish off the remaining 10 percent of the national arsenal. The total budget for the life of the ACWA program has also been increased by more than \$2 billion, to \$10.6 billion.

The United States once held nearly 30,000 tons of materials such as mustard blister agent and the nerve agents VX and sarin, along with hundreds of thousands of munitions that could have delivered the lethal substances in war. The country is obligated to destroy all the agents and weapons by April 29 of this year as a member nation to the Chemical Weapons Convention, ensuring the materials can never be used in warfare or obtained by terrorists.

Disposal operations began in 1990, and another Army branch in January completed its assignment to eliminate 90 percent of the U.S. stockpile, which was stored at seven installations on the U.S. mainland and the Johnston Atoll in the Pacific Ocean.

The ACWA program is charged with building and then overseeing neutralization facilities at the Pueblo Chemical Depot in Colorado and the Blue Grass Army Depot in Kentucky. Elimination of roughly 2,600 tons of mustard agent at Pueblo is now estimated to be delayed from 2017 to 2019, with anticipated disposal of 523 tons of blister and nerve agents at Blue Grass pushed back from 2021 to 2023.

"The extended schedule for chemical weapons destruction announced today by the Assembled Chemical Weapons Alternatives (ACWA) program comes as no surprise," according to Paul Walker, security and sustainability chief for the environmental organization Global Green USA. "The whole program since 1990 when the first destruction facility began operating on Johnston Atoll has been beset by constant schedule slippage and cost growth, indicative of the unpredictable nature of safely eliminating these dangerous weapons of mass destruction."

Challenges have included a major reduction in ACWA funding for several years during the Bush administration, which extended the schedule for drawing down the chemical arsenal, he said. The overall U.S. demilitarization program has also faced legal battles, malfunctioning technology and other complications.

"The worst thing would be to rush these dangerous stockpile destruction programs to meet a deadline, and wind up injuring or killing workers or local residents and/or badly endangering the environment," Walker told *Global Security Newswire* by e-mail. "So most of us are in favor of doing the job right, as required under the international legal regime, and placing deadlines as a secondary goal."

Walker and others said the Defense Department could still complete work ahead of the latest schedule projections. He noted that then-Defense Secretary Donald Rumsfeld in 2006 estimated that roughly 40 percent of the U.S. arsenal would remain by 2012; instead, all but 10 percent has been eliminated.

The new cost estimate covers all aspects of the ACWA program, from design of the disposal facilities, to demilitarization operations and finally closure and disassembly of the plants. In a press release, the Army branch said the new cost and schedule estimates "represent a conservative planning approach based on experience with earlier chemical destruction facilities and include the time necessary to resolve problems as an element of prudent management."

The updated projections account for "uncertainty" in activities such as recruiting workers, testing the disposal technology and procuring necessary "supplies and materials," ACWA chief Conrad Whyne said in the release. The agency as of deadline Wednesday had not responded to a request to speak with Whyne regarding further specifics of the challenges that might face the program.

"Depending on a number of variables we could see the schedule, and thus the costs, reduced significantly," Craig Williams, head of the Kentucky-based nongovernmental watchdog Chemical Weapons Working Group, said in a



prepared statement. "The new projection is extremely conservative and is what we would call the 'outer boundary' of probable execution scenarios."

The disposal plant at Pueblo is close to completion, after which it would undergo testing for a period of years, the Associated Press quoted ACWA spokeswoman Katherine DeWeese as saying. Roughly 50 percent of the Kentucky demilitarization plant has been built.

Total spending for the ACWA program would be in addition to the estimated \$28 billion expected to be spent for all operations by the Army Chemical Materials Agency, the service branch that finished disposal activities earlier this year.

Walker indicated the new U.S. schedule would not cause troubles for Washington at the Organization for the Prohibition of Chemical Weapons, the international entity that monitors states' compliance with the convention. The new timeline is to be submitted to the 41-state OPCW Executive Council in May, he said.

Russia at that point might also deliver a revised schedule for eliminating its one-time 40,000-metric-ton stockpile of chemical agents, Walker said. Work there is now officially due to be finished in 2015, but the expert said "it might drag out to 2017-18."

Member nations to the Hague-based organization late last year voted overwhelmingly against penalizing Libya, Russia and the United States for missing the April deadline. Instead, they imposed a program of heightened reporting and transparency on demilitarization programs in the three nations.

"It will be interesting to see what the [Executive Council] response will be" to the U.S. announcement, "but I expect it will be very positive," Walker stated. "The EC knows well that the U.S. is fully committed to completion of its CW stockpile destruction."

An OPCW spokesman on Wednesday declined to comment on the new U.S. chemical weapons destruction estimates, but noted that Moscow, Tripoli and Washington are all required by April 29 to submit detailed disposal plans that include anticipated completion dates.

Libya is likely to receive a "stern rebuke" for the former Qadhafi government's failure to fully declare its chemical arms holdings upon joining the convention in 2004. A limited amount of material has been identified in the wake of fall of the regime and Qadhafi's death last year (see *GSN*, April 13).

http://www.nationaljournal.com/nationalsecurity/u-s-chemical-weapons-disposal-slippage-no-surprise-expert-says-20120418

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Foreign Policy
OPINION/The Cable

## Congressman Alleges China Helping North Korea with ICBMs

By Josh Rogin Tuesday, April 17, 2012

China may be helping North Korea develop long range ballistic missiles that could reach the United States, and one Republican congressman wants the Obama administration to do something about it.

"As you have likely seen, the press is reporting that North Korea unveiled a new mobile missile at a military parade in Pyongyang in honor of the founder of that dictatorship, Kim II Sung," Rep. Mike Turner (R-OH), wrote in an April 17 letter to Secretary of State Hillary Clinton and Director of National Intelligence James Clapper, obtained by *The Cable*. Turner is the Chairman of the House Armed Services Strategic Forces subcommittee.

"Whether this missile is the new road mobile intercontinental missile (ICBM) the administration has been warning about is, as yet, unclear based on these public reports," Turner wrote. "Of deeper concern, however, are allegations



that the missile, unveiled at the recent military parade in Pyongyang, is based on Chinese technology, in violation of international obligations and a threat to the national security interest of the United States."

Turner wrote that the photographs of the missile "suggest cooperation and support" by the Chinese government and he quotes missile-technology expert Richard Fisher as saying that the 16-wheel transporter-erector-launcher (TEL) was "very likely" a Chinese design and that there was a "possibility" it was actually manufactured in China for North Korea's use.

Turner asked Clinton and Clapper to report back to Congress if the U.S. government has any evidence that China or Chinese companies are helping North Korea acquires mobile launchers for ICBMs. He also wants to know whether the administration has done anything to confront China on the issue, whether the administration believes China is helping North Korea with ballistic missiles at all, and whether the administration will sanction Chinese entities for aiding the North Korean missile program.

"Indeed, the possibility of such cooperation undermines the administration's entire policy of investing China with the responsibility of getting tough on North Korea," Turner wrote.

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/2012/04/17/congressman alleges china helping north korea with icbms (Return to Articles and Documents List)

Business Insider OPINION/Analysis

# Here's Why There Were Iranian Engineers at North Korea's Rocket Launch

By Donald Kirk, Christian Science Monitor April 18, 2012

A dozen representatives of the company that manufactures Iran's missiles and satellites had ringside seats at North Korea's failed rocket launch last week, according to South Korean media. Analysts see their presence as the latest evidence of the relationship between Iran and North Korea's cooperation on missile and nuclear programs.

"North Korea and Iran are in close cooperation about long-range missiles," says Baek Seung-joo, senior researcher at the Korea Institute for Defense Analyses. "There is the high possibility they sell nuclear technology to each other. At least their people exchange information."

The relationship between officials and scientists in Tehran and Pyongyang – opposite poles of what then-President George W. Bush labeled an "axis of evil" – dates back to the 1990s, when both countries were getting deeply involved in developing nuclear technology along with the missiles capable of carrying warheads to distant targets.

#### The differences in programs

The programs between the two countries diverge but share common goals that are essentially hostile toward the United States and its most important regional allies, Israel, South Korea, and Japan.

The differences, say analysts here and in Washington may not be significant. North Korea already has nuclear warheads while Iran denies it plans to make them. Iran has launched satellites while North Korea claims to have done so but has not. North Korea has developed long-range missiles, including the one that failed last week, while Iran has focused on advanced versions of middle-range missiles capable of reaching Israel.



"Iran in most respects is a larger, more sophisticated country," observes Greg Thielmann, formerly with the State Department and now senior fellow at the Arms Control Association in Washington. "They have a lot more resources. The Iranians have conducted a lot of missile tests. North Korean testing is much less frequent."

#### What the North contributes to Iran

Although generally behind Iran technically and scientifically, and suffering from far more severe economic problems, North Korea contributed to Iran's program by exporting its mid-range Nodong missiles, originally based on Soviet technology, more than 10 years ago.

"This was always a commercial relationship on the part of North Korea," says Mr. Thielmann, former director of strategic, proliferation, and military affairs in the State Department's Bureau of Intelligence and Research.

"Iran wanted to adapt these missiles and make them their own," adds Thielmann.

In fact, Iranian scientists and engineers did just that, producing Shahab missiles capable of delivering warheads to targets in Israel.

It was its interest in North Korean missiles that prompted Iran to send a large team to witness the launch of Unha-3, the long-range North Korean missile that failed last week. The word Unha means "galaxy" and the number 3 indicates it's the third launch of the same missile. Earlier versions were test-fired in August 1998 and April 2009.

"The SHIG team" – that is, the representatives of the Shadid Hemmat Industrial Group that manufactures the North's missiles – "would want data to see how it was going," says David Albright, president of the Institute for Science and International Security in Washington. "SHIG is responsible for ballistic missiles," he says. "North Korea probably still sells things to Iran – components and technology."

As an example, Mr. Albright notes that Iran has problems in the guidance systems of its missiles" – one area the SHIG team may have wanted to study closely on the North Korean rocket.

#### Results?

For the Iranians, though, the results may well have been disappointing.

Aside from the fact that the rocket failed, analysts doubt if it was very sophisticated. The first stage of the rocket consisted of four Nodong missiles that had to be fired in precise unison, dropping off while the second stage and third stages were to go on before launching a satellite.

"In a missile program you have a lot of failures," says Albright. The reason the first stage of the rocket consisted of four Nodongs was evidently to compensate for the inability of North Korean engineers to develop a large enough rocket motor to power the first stage with just one or two missiles.

Iranian engineers, while in North Korea, are believed to have wanted to join the team of scientists and technicians that North Korea said was studying "the causes of the failure" in the first stage.

#### What about nuclear programs?

Cooperation between Iran and North Korea reportedly extends beyond missiles to their nuclear programs – though analysts concede they don't have proof. "There's a reason for them to cooperate on gas centrifuges," the key to enriching the uranium needed to produce electrical power or, at its highest stage of enrichment, to cause a nuclear blast.

"There are worries there could be a transfer of knowledge," says Albright. "It could be either way." For example, he says, "The Iranians have done better on carbon," critical to producing the 3,000 centrifuges needed for a uranium bomb, while "the North Koreans have done better on design using very strong steel."

Albright believes strong sanctions, imposed by the United Nations Security Council after North Korea's second underground nuclear test in May 2009, and then strengthened by the UNSC on Monday, help to keep both North



Korea and Iran from getting everything they need for nuclear weapons. He believes, however that North Korea gets around them by shipping components through China.

"I don't think the Chinese are cooperating," he says, but he doubts if the Chinese are blocking aircraft with components from flying over China, possibly stopping on the way for refueling at Chinese airports.

Donald Kirk is a veteran correspondent and noted author on conflict and crisis from Southeast Asia to the Middle East to Northeast Asia.

http://www.businessinsider.com/heres-why-there-were-iranian-engineers-at-north-koreas-rocket-launch-2012-4 (Return to Articles and Documents List)

Foreign Policy OPNION/Blog

## Time to Get U.S. Nukes Out of Europe

Posted By Stephen M. Walt Wednesday, April 18, 2012

One of the more pernicious obstacles to rational policy-making is the "ratchet effect": the tendency for policies, once adopted, to acquire a life of their own and to become resistant to change, even when they have ceased to be useful. For example, you can be confident that we will all be wasting time in airport security lines decades from now, long after Osama bin Laden's death. Existing security measures may not pass a simple cost-benefit test, but what political leader would dare relax them?

I thought of this problem as I read a new article by Tom Sauer and Bob van der Zwaan, on the curious persistence of the U.S. tactical nuclear arsenal in Europe. (The title of the article is "U.S. Tactical Nuclear Weapons in Europe after NATO's Lisbon Summit: Why Their Withdrawal is Desirable and Feasible," and it's in the latest issue of the academic journal *International Relations*.) Sauer and van der Zwaan examine the various arguments for and against keeping U.S. tactical nuclear weapons in Europe. They conclude -- convincingly, in my view -- that there is no good reason to keep them there and plenty of good reasons to remove them.

I have to confess that I hadn't realized the United States still had *any* tactical nuclear weapons left in Europe. (Sorry about that; I can't keep track of everything). But it turns out we still have a couple of hundred or so weapons stationed there (down from about 500 a decade ago). These are mostly gravity bombs deployed under "dual-key" arrangements: The U.S. has custody of the weapons in peacetime, but custody could in theory be transferred to the various host nations (Belgium, Germany, Italy, the Netherlands, Turkey) in the event of war.

But isn't this a rather ludicrous situation, two decades after the Cold War ended? There is no threat of a conventional invasion of Western Europe, and thus no need to "link" the U.S. strategic deterrent to Europe's defense via tactical weapons physically deployed on the continent. (The theories that justified these deployments during the Cold War never made much sense to me either, but that's another story.) It's hard to imagine that these weapons are helping Dutch, German, or Turkish elites sleep soundly at night, or helping reassure their respective populations. If anything, local populations should worry about having these devices on their soil, which is why governments tend not to talk about them. Democracy in action!

In short, these weapons serve no legitimate strategic purpose (which is why the numbers have been declining), but bureaucratic inertia and/or political timidity explain why the United States and NATO haven't bitten the bullet and removed them completely.

As Sauer and van der Zwaan make clear, the benefits of doing so would be considerable. It would reinforce the basic logic of nuclear disarmament, and further "de-legitimize" nuclear weapons as status symbols, thereby contributing to broader nuclear security objectives. It would be consistent with the pledges that the United States made when it signed the Non-Proliferation Treaty. It would reduce the threat of nuclear theft and/or nuclear terrorism, a danger



intensified by the fact that U.S. nuclear-storage sites in Europe apparently do not meet our own security standards. If it were linked to further reductions of the Russian tactical nuclear arsenal, it would increase overall nuclear security even more. It would also save money, which is supposedly a priority these days. And if this step had any impact on the credibility of the U.S. commitment to NATO (which is highly doubtful) it might encourage the Europeans to do more for their own defense, instead of continuing to rely on Uncle Sucker.

In short, there's an overwhelming case for removing these archaic and unnecessary weapons from the European continent. Ideally, we would do this as part of a bilateral deal with Russia, but we ought to do it even if Russia isn't interested. It's an election year, which normally encourages a certain degree of chest-thumping on national security matters, so you shouldn't expect any progress until 2013. But getting rid of these useless devices would be a very smart thing to do, no matter who the next president turns out to be.

And then we should rethink airport security....

Stephen M. Walt is the Robert and Renée Belfer professor of international relations at Harvard University.

http://walt.foreignpolicy.com/posts/2012/04/18/a tactical nuclear mistake

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U.S. News & World Report OPINION/DOTMIL Blog

#### Nuclear Weapon Test in North Korea Seen as Inevitable

April 18, 2012

A North Korean nuclear bomb detonation is inevitable as the defiant Asian regime seeks further leverage against Washington and its allies in the region.

Experts told worried lawmakers Wednesday that President Barack Obama repeated mistakes and miscalculations made by Presidents Bill Clinton and George W. Bush. Unless the Obama administration ditches Washington's decades-old sanctions-based approach, the analysts told a House panel that Pyongyang will gain crucial leverage over the West.

"I think we will see a nuclear test" in the coming months, Michael Green of the International Assessment and Strategy Center said. Green sees several pieces of evidence that are the foundation of his warning: Recent images showing digging near a known nuclear facility, North Korean leaders' defiant rhetoric and the 100th birthday on the nation's founder, Kim Il-Sung.

"If I were I betting, I would say they will do it," Green said, adding that a successful nuclear explosion will give North Korea new ammunition in any future talks with U.S. and regional officials—Tokyo, Seoul and even Beijing—about its nuclear arms program.

North Korea already gained some leverage last week when it fired a rocket in defiance of Washington—but more importantly, it gained time and space to keep up its atomic arms and long-range missile work.

Frederick Fleitz, a former CIA officer and senior State Department official, puts the odds of a North Korean nuclear test at "50-50" in the next few months. But over a longer span, he said, "eventually there will be a test of that kind."

Fleitz also warned about future North Korean rocket and missile launches, saying regional tensions could further escalate if such a platform—potentially weaponized—landed in Japan, South Korea or even Hawaii.

Comments made by North Korean spokesmen and officials after Friday's failed rocket launch do give Fleitz hope "there's a line they aren't prepared to cross."

In the wake of the failed missile test, U.S. officials already are crafting a new sanctions package designed to punish Pyongyang. But experts say sanctions alone won't be enough to push North Korea to give up its nuclear work.



The U.S. and its allies "must move beyond sanctions," Patrick Cronin of the Center for a New American Security told the House panel. "We're losing leverage over North Korea," he added.

Cronin urged U.S. officials to pursue tactics like targeting the Chinese banks that do business with senior North Korean civilian and military leaders.

"We must access the true inner circle of North Korea," Cronin said.

DOTMIL is brought to you by veteran national security correspondent John Bennett and the U.S. News & World Report staff.

http://www.usnews.com/news/blogs/dotmil/2012/04/18/nuclear-weapon-test-in-north-korea-seen-as-inevitable?s cid=rss:dotmil:nuclear-weapon-test-in-north-korea-seen-as-inevitable

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Japan Times – Japan OPINION Thursday, April 19, 2012

#### The North Korean Wild Card

By MICHAEL RICHARDSON

SINGAPORE — In a quantum leap over North Korea's controversial though unsuccessful long-range rocket launch on April 13, India plans to test not just one but three ballistic missiles in quick succession over the next week, including the first firing of its Agni 5 missile with a range of 5,000 kilometers.

All three of the different range Indian missiles can be armed with nuclear warheads. But a successful launch of the Agni 5 would bring India close to membership of the elite club of nuclear-armed nations that have intercontinental ballistic missiles (ICBMs) with ranges of more than 5,500 km. Even with a strike distance slightly below this threshold, the Agni 5 can cover the whole of China — India's strategic rival — which has ICBMs that can travel over 11,000 km. The Agni 5 is designed to carry multiple warheads that could hit widely dispersed targets.

While China and its ally Pakistan may object to India's missile tests through April 25, many other countries that joined the condemnation of North Korea's failed attempt to launch of what it said was a peaceful satellite into space will raise no strong objections to India's actions, despite its refusal to join the treaty preventing the spread of nuclear weapons.

Those countries, including Japan, are confident that they will not be targeted by India's atomic arsenal even as its strike range increases. They also believe that India will keep a tight guard on its nuclear and missile technology.

North Korea is different. For years, it has exported missiles and their components, as well as sensitive nuclear know-how, to help pay for its own program to become fully nuclear capable. It has exploded two nuclear devices underground and is expected to carry out another test soon.

Japan, South Korea, the United States and other governments that condemned the launch argued that it was a disguised missile test banned by United Nations Security Council resolutions, even though the rocket carried a small satellite, not a warhead or dummy warhead.

The mid-air explosion of North Korea's three-stage Taepodong-2 rocket barely three minutes after lift-off was a spectacular failure, the fourth in a row of so-called space launches since 1998. Yet despite the setbacks, there is little doubt about the determination of the military-backed Kim regime in North Korea to develop nuclear-tipped missiles as the ultimate guarantor of the regime's survival.

The U.S. director of national intelligence reported to Congress recently that North Korea was "among the world's leading suppliers of ballistic missiles and related technologies" and "remains committed" to selling them to foreign customers.



"Over the years, it has exported ballistic missile-related equipment, components, materials, technical expertise, and/or full missile systems to countries in the Middle East, South Asia and North Africa." These countries include Iran, Syria and Pakistan.

The U.S. intelligence summary said that North Korea's relationships with Iran and Syria remained strong, and Pyongyang "continues to seek new customers and reengage with previous customers."

North Korea's Syria connection is important because it evidently involved the covert supply of material and technology for making nuclear arms, as well as missiles. The nuclear reactor being built in Syria appeared to be modeled on one North Korea used to create its stockpile of plutonium for nuclear weapons.

The facility was destroyed by Israel in 2007. An investigation by the International Atomic Energy Agency concluded last June that it was "very likely" the destroyed building was a nuclear reactor that should have been declared by Syria.

The recent U.S. intelligence report to Congress also said that "entities" in China continued to sell technologies and components in the Middle East and South Asia that could support weapons of mass destruction and missile programs.

However, it drew a distinction between North Korea's officially-sanctioned exports and those of China, which it said primarily involved private companies and individuals supplying missile-related items to multiple customers, among them Iran and Pakistan.

In 2010, an international panel of experts from China and Russia as well as Britain, the U.S., France, Japan and South Korea also concluded in a report to the U.N. Security Council that the North Korean state "continues to market and export its nuclear and ballistic (missile) technology to certain other states."

The panel found that North Korea had established a "highly sophisticated international network" to acquire, market and sell arms and military equipment, and that arms exports had become one of the North's main sources of foreign currency.

The panel said that several North Korean government agencies played key roles in arms and related exports, and that the most active were agencies linked to North Korea's armed forces, its National Defense Commission and the ruling Workers' Party.

North Korea's readiness to sell both missile and nuclear-weapons technology is undermining international arms control treaties and arrangements. It may lead to sales to terrorists, as well as countries with nuclear weapons ambitions.

India and Pakistan developed nuclear missiles in the 1990s. Despite long-standing enmity, they are working out a mutual assurance arrangement. India and China are developing a similar understanding.

North Korea is much less predictable. It probably has at least six crude plutonium bombs and may be able to make more from highly enriched uranium.

Some Western officials and analysts believe North Korea will have nuclear-armed missiles within five years. This would be profoundly destabilizing for Asia. Among other things, it could prompt Japan and South Korea to seriously consider developing long-range strike weapons or even nuclear arms to counter North Korea.

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

http://www.japantimes.co.jp/text/eo20120419mr.html

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Christian Science Monitor
OPINION/The Monitor's View

# **Containing Syria's Chemical Weapons**



Little-noticed amid the fighting and attempted cease-fire in Syria are the stockpiles of chemical weapons. The US and others are trying to check their use or theft. Russia also needs to pressure Assad into ensuring they are safely stored. By the Monitor's Editorial Board April 19, 2012

Of all the tensions over the fighting in Syria, none is as worrisome as the future of the chemical weapons stockpiled in sites around the country.

Will they be stolen, moved, or even used if the Assad regime starts to collapse?

No one really knows.

Unlike Iran's mere potential to build a nuclear weapon or North Korea's underground testing of nuclear devices, Syria's chemical weapons are ready for action – and right in the middle of a uncertain civil war.

"The country is a chemical powder keg ready to explode," states a March report by the James Martin Center for Nonproliferation Studies at the Monterey Institute of International Studies.

Frightening as that may be, the United States, Israel, Jordan, Turkey, and other states have come up with contingency plans to prevent the weapons from being used (by quietly warning Bashar al-Assad) or to keep them from falling in the hands of terrorists (by monitoring the sites remotely and guarding Syria's borders carefully).

One US official told CNN that 75,000 troops would be needed if foreign forces had to secure all the stockpiles, of which there may be as many as 50. Jordan, which has absorbed thousands of Syrian refugees in the past year, would likely be the best choice to conduct such a task.

The chemicals produced by Syria over the past few decades are presumed to be mustard gas, sarin, and possibly the VX nerve agent. For a regime run by Syria's small minority of Alawites, the weapons may be seen as a last-ditch defense against a fall from power.

The US has already told Saudi Arabia, Iraq, Lebanon, and Jordan that it would assist those those countries if chemical weapons were found crossing their borders.

Russia, Syria's strongest ally and a longtime arms supplier, knows well that the weapons are a big problem, one that may blow back on Russia itself if they go missing. Their use by Assad forces would constitute a war crime, and would likely push the international community to approve a quick invasion of Syria.

On Thursday, Secretary of State Hillary Rodham Clinton called for an arms embargo on Syria. She should have also asked for Russia to assure the world that Syria's weapons of mass destruction will not be used and will not be stolen or moved. Vladimir Putin has the clout to do that.

Syria is one of a few countries that never signed the Chemical Weapons Convention. Even if it had, the possibility of a sudden fall of the Assad regime would leave the country with no clear ruler.

In recent testimony to Congress, Director of National Intelligence James Clapper explained: "There is no identifiable group that would succeed him, and so there would be kind of a vacuum that would lend itself to extremists operating in Syria, which is particularly troublesome in light of the large network of chemical ... weapon storage facilities."

Other issues need to be addressed. Israel is rightly concerned that the weapons might end up with Hezbollah guerrillas in Lebanon. And if outside forces try to secure the chemical-weapon sites, what are the legal ramifications if any weapons end up on the loose?

The ruthlessness of the Assad regime – beginning with that of Assad's late father, the previous president – in demolishing domestic opponents raises the level of concern about the possible use of the weapons. That may be one reason why the West and the Arab League have been reluctant to escalate the fighting.



The shaky cease-fire that began a week ago could easily collapse, leaving even greater warfare as the only option for the anti-Assad rebels.

The world needs to be alert to this threat and seek all options to contain it.

http://www.csmonitor.com/Commentary/the-monitors-view/2012/0419/Containing-Syria-s-chemical-weapons (Return to Articles and Documents List)

British Broadcasting Corporation OPINION/Analysis 20 April 20, 2012

## Will India's Missile Test Trigger Arms Race with China?

By Jonathan Marcus, BBC Defence Correspondent

India's test firing of an Agni-V ballistic missile this week is a potent signal of the country's growing nuclear capabilities.

The weapon - with a range of more than 5,000km (3,100 miles) is capable of delivering a nuclear warhead to the Chinese capital Beijing. The Agni-V is the latest in a series of Indian-developed missiles of varying ranges and capabilities.

It will become operational within about two years, adding significantly to India's nuclear punch.

So should China be worried? Probably not, according to US nuclear expert Taylor Fravel, an associate professor at the Massachusetts Institute of Technology.

"The missile has been under development for some time," he told me, "and is already factored into Chinese planning.

"The development of this missile does not undermine China's own deterrent capability," he says, "even though it may strengthen India's. China retains the ability to survive a first strike by India, however unlikely that may be."

Indeed, western experts have been quick to play down the significance of the Indian missile test, noting that the nuclear dynamics of the region are complicated and involve other countries, not just India and China.

Jeffrey Lewis, who heads the East Asia Non-proliferation Programme at the Center for Non-proliferation Studies in Monterey, California, puts it this way: "Beijing tends to focus much more on the United States, rather than India. Indian officials talk about China much more than their Chinese counterparts talk about them."

Indeed, he suspects that "New Delhi's emphasis on China is more about slighting Pakistan than competing with China."

China is already modernising its own nuclear-armed medium- and intermediate-range missile systems that could be used to target India. But as Taylor Fravel notes, "India and China have similar nuclear doctrines, as both emphasize no first use and achieving deterrence through development of a secure second-strike."

#### **Expanding deterrents**

It should be remembered that compared to Russia and the United States, China and India have relatively small nuclear arsenals. China is believed to have a stockpile of around 240 warheads, with perhaps 175 of them active.

In recent years it has been deploying more modern solid-fuelled missiles like the two-stage DF-5A with a true intercontinental range capable of threatening the United States. It deploys a number of shorter-range systems like the DF-21 - a potential threat to India.

China's modernisation of its nuclear deterrent includes the development of a small number of submarines capable of carrying ballistic missiles, but it is not yet judged to have an operational sea-going submarine-launched capability.

India, in contrast, is believed to have around 100 nuclear warheads, some capable of being dropped from aircraft. But the bulk of its nuclear punch rests upon short-range Prithvi missiles and medium-range variants of the Agni missile.



India, too, is seeking to take its nuclear deterrent to sea. It is building a new class of nuclear-powered submarines intended to carry ballistic missiles. The first of these Arihant-class boats has already been launched and is expected to enter service next year. Five more are planned.

However, Jeffrey Lewis suggests that it is wrong to see in the dynamics between Beijing and Delhi echoes of the Cold War arms race between the US and the Soviet Union.

"I doubt very much", he says, "that China and India will engage in an arms race, scaled-down or otherwise.

"Both countries," he argues, "tend to pursue the same specific capabilities, but neither produces large numbers of nuclear weapons or nuclear-capable missiles."

He suggests that both China and India seem to be pursuing what he calls a "possession" oriented approach to nuclear modernisation: "They are developing in turn small numbers of ever more advanced capabilities held by other powers.

"Neither country, however, has produced anywhere near the number of nuclear weapons or nuclear-capable missiles that each is capable of producing."

#### A growing threat - for whom?

According to Taylor Fravel, "the main strategic dynamic behind China's nuclear modernisation is the need to maintain a secure second-strike capability". In other words, the ability to launch a counter-attack if China is attacked with nuclear weapons.

"From China's perspective," he says, "the main threat to this capability comes from United States, which has been developing both ballistic missile defences that could prevent China from launching a counter-attack and long-range precision strike capabilities that could be used to attack China's nuclear forces (or command and control systems) with conventional and not nuclear weapons."

Indeed, it is in the United States that some of the most active debate is underway on the significance or otherwise of China's nuclear modernisation.

This comes against a backdrop of discussion about eventually reducing the US military arsenal further - below the 1,550 deployed warheads set by the most recent arms reduction agreement with Moscow. It should be noted that the US arsenal in 2010 stood at some 2,468 operational warheads according to the respected journal, The Bulletin of the Atomic Scientists.

Some in the US see China's modernisation plans - especially its move to develop a sea-going component for its nuclear deterrent - as indicative of a growing threat to the continental United States.

Critics of China point to a huge network of underground tunnels which some believe could be hiding a significant part of its nuclear arsenal.

Other analysts take a less dramatic view, arguing that everything we know about the Chinese deterrent suggests a more purposeful and slower pace of modernisation. These differences were on display when the House Armed Services Committee took evidence from various experts in October of last year.

What everyone could agree on was that a lack of transparency on the part of Beijing remains a serious problem in making any accurate assessment of China's nuclear trajectory.

http://www.bbc.co.uk/news/world-asia-17770586

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World Politics Review OPINION/ Analysis

# **Ballistic Missile Defense an Essential Element of India's Strategic Calculus**



By Yogesh Joshi 20 April 2012

Since 2006, India has embarked on a robust ballistic missile defense (BMD) program aimed at a two-tier defense. In that time, the Defense Research and Development Organization (DRDO) has conducted a number of successful missile-interception tests, with the latest coming in February. India's plan for missile defense, however, dates back to the early 1980s, when it started its Integrated Missile Development Program (IGDMP).

IGDMP envisaged an array of offensive missile platforms, such as the Prithvi and Agni ballistic missiles, as well as the development of defensive missile platforms, such as the Akash surface-to-air missile system. As currently conceived, the Indian missile shield revolves around the Prithvi and Akash missiles, with the Prithvi designed to intercept incoming missiles at 30-50 miles (exo-atmospheric interception) and the Akash designed to operate at a range of 10-20 miles (endo-atmospheric interception).

Though much of India's missile defense program has been an indigenous effort, foreign partners have also played a significant role, with Israel in particular a major collaborator. Israel has been especially helpful in providing state-of-the-art radar technologies for early detection of hostile projectiles. To bolster its missile-tracking capabilities, India has imported two Green Pine radars, which Israel uses in its Arrow missile defense system. Moreover, India has also developed the Swordfish tracking and fire control radar in collaboration with Israel and France. India had previously acquired Phalcon AWACS from Israel at a cost of \$2 billion, providing it with a low-level detection capability for hostile missile platforms and considerably enhancing the response time for missile interception.

As for the U.S., its position on selling BMD technology to India has evolved over the years. Initially reluctant to share technological know-how, the U.S. is now actively urging India to buy the most advanced American BMD platform -- the Patriot Advanced Capability 3 (PAC-3) -- and is even open to joint development.

Partners aside, the bigger question is what purpose BMD serves in India's strategic calculus. Many strategic analysts contend that instead of bolstering India's security, New Delhi's pursuit of BMD might jeopardize its defense. This is primarily because India's pursuit of strategic technologies, including BMD capabilities, has created extreme paranoia in the Pakistani defense and security establishment. Pakistan has already drastically increased its nuclear arsenal in recent years in response to India's BMD efforts. According to the Bulletin of the Atomic Scientists, Pakistan will soon have the world's fifth-largest inventory of nuclear weapons, and a recent report by Reaching Critical Will contends that Pakistan is spending more than \$2.5 billion on nuclear weapons annually.

Moreover, Pakistan is also trying to develop low-yield nuclear weapons and has shown an increasing interest in plutonium-based warheads, which are smaller in size and easier to camouflage. Islamabad is also developing nuclear cruise missiles that can evade missile defense and is currently equipping its existing missiles with multiple independently targetable re-entry vehicles and other decoys.

Pakistan's nuclear cooperation with China has also seen a resurgence. China has promised to build two additional reactors at Pakistan's Chasma nuclear site without taking into consideration the Nuclear Supplier Group's new guidelines on technology transfers, a worrisome development for New Delhi given China and Pakistan's history of clandestine nuclear transfers.

India, on the other hand, sees BMD as an essential element of its national security and foreign policy, with one clear motivation to pursue it being the threat of unintended use of nuclear weapons in the subcontinent. This is most relevant with regard to Pakistan, whose nuclear doctrine delegates substantial autonomy in the use of nuclear weapons to its military commanders. There is also a constant threat of Pakistani terrorists or radical elements overpowering Pakistan's strategic military assets.

Another factor driving Indian BMD efforts is the fact that Pakistan's nuclear capability has neutralized India's superior conventional forces. In every Indo-Pakistani conflict since 1998, whether the Kargil War of 1999 or the Mumbai terrorist attacks in 2008, India deemed any conventional response too risky due to Pakistan's nuclear capability and New Delhi's uncertainty regarding Islamabad's first-use policy. Indeed, Indian strategists have found it very difficult to



escape the logic of nuclear use by Pakistan in the event that India initiates conventional military operations. With BMD in place, India could eventually bring to bear the advantage of its conventional superiority and retaliate against Pakistan for acts of terrorism on Indian soil.

Finally, though BMD does not play a direct strategic role in the nuclear dynamics between India and China, it does fulfill a significant political role. Unlike Pakistan, China has a "no first use" policy in place. Moreover, state control of nuclear weapons in China is absolute -- there is no danger of rogue elements seizing China's nuclear arsenal. Therefore, in terms of real threats, India does not need missile defense against China.

However, geopolitically, the development of missile defense and related technology has served India's purpose of forming loose alliances to balance China's rise. Missile defense, as Ashley Tellis has rightly argued, has become an important agenda item in India-U.S. bilateral cooperation. In fact, the two states started collaborating on missile defense before the U.S.-India civil nuclear agreement was signed in 2008. And whereas the U.S. is reluctant to see technology shared with China -- as illustrated by Washington's veto of the China-Israel deal on AWACS platforms in 2000 -- the U.S. has been more forthcoming with technological transfers to India.

Globally, BMD is driving America's old strategic partnerships with new vigor, as is evident in U.S. BMD cooperation with Japan, South Korea and Australia. If nuclear weapons and extended deterrence drove alliance-formation during the Cold War era, missile defense appears to be the focus for 21st-century alliances.

Given the critical strategic objectives that BMD serves for India, it is hard to see how reactions from Pakistan or China would cause New Delhi to restrain its intentions. India, in all likelihood, will ignore its neighbors' reservations and for the foreseeable future maintain a strong interest in BMD.

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http://www.worldpoliticsreview.com/articles/11868/ballistic-missile-defense-an-essential-element-of-indias-strategic-calculus

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San Diego Union-Tribune – San Diego, CA OPINION/Op-Ed

# **New Evidence for the Nuclear Test-Ban Treaty**

By Hazel O'Leary Friday, April 20, 2012

More than 50 world leaders met recently in South Korea to address the challenges posed by the buildup and spread of nuclear weapons. As President Barack Obama noted, success depends on a multilayered strategy, including implementation of a global, verifiable treaty banning nuclear weapons testing.

By banning the bang, a treaty would constrain the ability of other states to develop new and more deadly nuclear warheads and establish a global monitoring system to detect and deter possible testing.

The United States halted test explosions in 1992 and led the way for the negotiation of the Comprehensive Nuclear Test-Ban Treaty. The United States was able to confidently sign the treaty in 1996 because it has the most sophisticated and thoroughly tested nuclear arsenal – 1,030 nuclear tests. That's more than all other nations combined.

Unfortunately, the Senate did not approve the treaty when it briefly considered it in 1999. Many senators who voted "no" expressed concerns about the ability of the United States to maintain its arsenal in the absence of testing and to verify compliance with the treaty.



That was then and this is now. A new and authoritative study by a panel of senior technical and military experts assembled by the National Academy of Sciences documents significant advances that resolve earlier concerns about the treaty.

The panel concludes that the U.S. nuclear weapons stockpile stewardship program – launched under my watch in the mid-1990s – "has been more successful than was anticipated." The study finds that if sufficient resources are dedicated to the task, our weapons labs have the ability to maintain a reliable stockpile of nuclear weapons "into the foreseeable future."

Today, weapons labs have more resources and better scientific tools than ever. Since 2009, funding for the National Nuclear Security Administration stockpile stewardship program has increased by 13 percent. The Obama administration's \$7.6 billion budget request for fiscal year 2013 would boost funding by 5 percent – even as other federal programs are being cut.

We must be vigilant in maintaining the nation's nuclear stockpile, but doing so does not depend on resuming nuclear test explosions.

No country contemplating secret testing can be confident that it would not be detected. According to the panel of experts, "the status of U.S. national monitoring and the International Monitoring System has improved to levels better than predicted in 1999" for all technologies to detect nuclear test explosions – seismic, hydroacoustic, infrasound, radionuclide and satellite monitoring.

The international system of 337 monitoring stations, which did not exist in 1999, is more than 80 percent complete and will only improve over time. This international system augments U.S. capabilities and provides a baseline for confronting possible violations.

The report concludes that "states intent on acquiring and deploying modern, two-stage thermonuclear weapons would not be able to have confidence in their performance without multi-kiloton testing. Such tests would likely be detectable even with evasion measures."

In other words, the global test ban would make it harder for China, India and Pakistan to perfect the more compact warhead designs that would allow them to field missiles armed with multiple warheads. Without nuclear test explosions, Iran could not perfect sophisticated two-stage thermonuclear warheads that can be delivered on long-range ballistic missiles.

But the full benefits of the test ban can only be achieved with U.S. ratification, which would prompt the remaining holdout states to follow suit.

Obama has expressed his commitment to secure Senate approval for the test ban treaty, but he and his team must provide stronger leadership to ensure that the Senate's questions are addressed and to build bipartisan support for a successful vote.

Senators must also weigh the merits of the Comprehensive Nuclear Test-Ban Treaty in light of the new scientific findings and not rush to judgment on the basis of old information.

The test-ban treaty is key to a successful U.S. strategy to reduce nuclear dangers. The longer we delay its entry into force, the tougher the nuclear weapons challenge becomes. It's time for the Senate to take another look.

O'Leary is the president of Fisk University in Nashville, Tenn. She served as U.S. secretary of energy from 1993 to 1997 and is a member of the board of directors of the independent Arms Control Association.

http://www.utsandiego.com/news/2012/apr/20/tp-new-evidence-for-the-nuclear-test-ban-treaty/
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