USAF COUNTERPROLIFERATION CENTER
CPC OUTREACH JOURNAL
MAXWELL AFB, ALABAMA

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Articles & Other Documents:

Featured Article: Hagel Supports Nuclear Arms Cuts, Then Elimination

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Al Arabiya – U.A.E.

Conflicting Reports Surround Explosion at Iran's Fordo Nuclear Plant

Monday, 28 January 2013
By Al Arabiya

An explosion has rocked Iran's Fordo Nuclear plant, according to Israeli and Western media reports, but Tehran's Fars news agency quoted the deputy chief of staff of the Iranian armed forces denying the reports as propaganda.

Israel's Ynet news has quoted the British Times newspaper as saying that Israeli officials have confirmed the explosion.

The Times added that the Israeli defense officials cannot verify whether it was a result of sabotage or an accident.

One unconfirmed report said as many as 200 people were feared trapped inside the facility.

Other Western media such as the Irish Times have reported that the underground uranium enrichment facility near the Central city of Qom was rocked by a massive explosion two days ago.

The BBC listed conflicting allegations on the subject. Tehran has categorically denied these recent media reports.

The deputy head of Atomic Energy Organization of Iran (AEOI) called the reports "Western propaganda" designed to influence forthcoming nuclear talks.

"The false news of an explosion at Fordo is Western propaganda ahead of nuclear negotiations to influence their process and outcome," Saeed Shamseddin Bar Broudi, deputy of the AEOI, was quoted as saying by the Iran's state news agency, Irna.

Fordo is Iran's second largest nuclear facility and is considered impregnable to airstrikes and most bunker-buster bombs.

Late in August, a senior Iranian legislator said Iran's nuclear scientists and experts have managed to thwart enemies' plots to infiltrate and blow up the country's newly constructed Fordo uranium enrichment facility.

"The enemies intended to repeat a Chernobyl-like disaster through selling (booby-trapped) equipment and blowing up the centrifuges at the Fordo site, but their plot was discovered and foiled by the Iranian scientists' wisdom and tact," member of the parliament's National Security and Foreign Policy Commission Abbas Ali Mansouri told FNA at the time.

Fordo is designed to contain 16 cascades of centrifuges producing 20 percent-enriched uranium, which experts say could be enriched to about 90 percent, or weapons-grade, in a relatively short time. The IAEA said half of the cascades could be fully operational within months.

Tehran insists its nuclear activities are for solely peaceful purposes, but Western powers fear Iran is seeking to develop nuclear weapons.

http://english.alarabiya.net/articles/2013/01/28/263109.html

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Philadelphia Inquirer

Israel Warns of Attack on Chemical Weapons

Aides want to stop Syria from passing them to Hezbollah or al-Qaeda groups.
By Ian Deitch, Associated Press
Monday, January 28, 2013

JERUSALEM - Israel could launch a pre-emptive strike to stop Syria's chemical weapons from reaching Lebanon's Hezbollah or al-Qaeda inspired groups, officials said Sunday.

The warning came as the military moved a rocket defense system to a main northern city, and Israel's premier warned of dangers from both Syria and Iran.

Israel has long expressed concerns that Syrian President Bashar al Assad, clinging to power during a 22-month civil war, could lose control over his chemical weapons.

Vice Prime Minister Silvan Shalom said Sunday that Israel's top security officials held a special meeting last week to discuss Syria's chemical weapons arsenal. The fact of the meeting, held the morning after a national election, had not been made public before.

Shalom told the Army Radio station that the transfer of weapons to violent groups, particularly the Iranian-backed Lebanese Hezbollah, would be a game changer.

"It would be crossing a line that would demand a different approach, including even action," he said. Asked whether this might mean a pre-emptive attack, he said: "We will have to make the decisions."

Israel has kept out of the civil war that has engulfed Syria and killed more than 60,000 people, but it is concerned that violence could spill over from its northern border into Israel.

Israel deployed its Iron Dome rocket defense system in the northern city of Haifa on Sunday. The city was battered by Hezbollah rocket fire during a war in the summer of 2006. The military called the deployment "routine."

Iron Dome, an Israel-developed system that shoots down incoming short-range rockets, was used to defend Israeli cities during a round of hostilities with Hamas militants in the Gaza Strip, on Israel's southern flank, last November.

Yisrael Hasson, a lawmaker and former deputy head of Israel's Shin Bet intelligence agency, said Israel was closely following developments in Syria to make sure chemical weapons don't "fall into the wrong hands."

"Syria has a massive amount of chemical weapons, and if they fall into hands even more extreme than Syria like Hezbollah or global jihad groups it would completely transform the map of threats," Hasson told Army Radio.

"Global jihad" is the term Israel uses for forces influenced by al-Qaeda. Syria's rebels include al-Qaeda-allied groups.

http://www.philly.com/philly/news/nation_world/20130128_Israel_warns_of_attack_on_chemical_weapons.html

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Charlotte Observer – Charlotte, NC

Israel: Iran Slowing Nuclear Program, Won't Have Bomb Before 2015

By Sheera Frenkel, McClatchy Newspapers
Monday, January 28, 2013

TEL AVIV, Israel Israeli intelligence officials now estimate that Iran won't be able to build a nuclear weapon before 2015 or 2016, pushing back by several years previous assessments of Iran's nuclear ambitions.

Intelligence briefings given to McClatchy over the last two months have confirmed that various officials across Israel's military and political echelons now think it's unrealistic that Iran could develop a nuclear weapons arsenal before 2015. Others pushed the date back even further, to the winter of 2016.

"Previous assessments were built on a set of data that has since shifted," said one Israeli intelligence officer, who spoke to McClatchy only on the condition that he not be identified. He said that in addition to a series of "mishaps" that interrupted work at Iran's nuclear facilities, Iranian officials appeared to have slowed the program on their own.

"We can't attribute the delays in Iran's nuclear program to accidents and sabotage alone," he said. "There has not been the run towards a nuclear bomb that some people feared. There is a deliberate slowing on their end."

Reports that Iran's nuclear facility at Fordow had been damaged in a nuclear explosion were still being investigated Monday, Israeli officials said. Satellite imagery shared with McClatchy showed that new fortifications had been built around the perimeter of the facility.

"This is already Iran's most heavily fortified facility," said another intelligence officer, based in Israel's central command. "The new construction we are seeing here is meant to prevent access to the facility through land routes."

He speculated that Iran had taken special care to protect its facilities in Fordow because it was a "highly attractive target for an attack."

"Despite repeated efforts by Iran to reinforce and protect their nuclear facilities, there have been accidents that some call sabotage that may have been carried out by a number of interested parties," he said, listing Iranian dissident groups that he said would try to attack Iranian military and nuclear facilities. "One way or another, Iran has been forced to slow down."

Writing in Israel's Hebrew-language daily newspaper Yediot Ahronot, military correspondent Alex Fishman said, "Officials responsible for assessing the state of the Iranian nuclear program, both in the West and in the International Atomic Energy Agency, believe that while the Iranians have continued to pursue their nuclear program, they have been doing so cautiously and slowly, making sure not to cross the point of no return."

Fishman wrote that Israel's allies in the West, including Europe and the United States, had been notified of the new calculations that Iran couldn't possess nuclear weapons before 2015.

That assessment, he said, has been unpopular in Israel's highest political echelons. Prime Minister Benjamin Netanyahu repeatedly has called 2013 a "decisive year" for Iran's nuclear program. During his speech at the United Nations General Assembly in September, Netanyahu displayed a rudimentary bomb diagram to illustrate Iran's progress toward a nuclear weapon.

"By next spring, at most next summer, at current enrichment rates, they will have finished the medium enrichment and moved on to the final stage," Netanyahu said, laying out a timeline for the summer of 2013. "From there it's only a few months, possibly a few weeks, before they get enough enriched uranium for the first bomb."

Netanyahu, who's forming his country's next government despite disappointing results in national elections, has continued to emphasize a sense of urgency on Iran's nuclear program, citing it first among his new government's priorities in his election victory speech.

Israeli officials, however, have said there's a widening gulf between Netanyahu's remarks and the intelligence reports he receives.

"There is a question we have to ask ourselves, of 'Did we cry wolf too early?' " the intelligence officer said.

An official in Israel's Foreign Ministry who spoke with McClatchy on the condition of anonymity said that international pressure and sanctions on Iran had made a tremendous difference.

"Iran is progressing carefully, and we think that is because of international pressure led by the U.S.," the official said. He added that Israel was very pleased with the tightening of sanctions, especially the recent move to block money that Iran receives for exporting oil to Asian markets.

Last week, President Barack Obama signed the latest round of restrictions into law, imposing sanctions against international companies that do business with Iranian firms while blocking Iran from obtaining key materials necessary for its automobile industries.

Meanwhile, negotiations between Iran and the so-called P5+1 group of nations – China, France, Russia, Great Britain, the United States and Germany – are expected to resume this week. Conflicting reports over the stalled talks have suggested that there was disagreement over the location of the talks and their date.

http://www.charlotteobserver.com/2013/01/28/3818827/israel-iran-slowing-nuclear-program.html

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Space Daily

Iran Monkey in Space 'Masks Missile Plan'

by Staff Writers
Dubai, United Arab Emirates, United Press International (UPI)
January 29, 2013

Iran's claim to have lofted a monkey into space atop a Kavoshgar rocket as a step toward a manned space program is making headlines but Western experts worry it's really part of Tehran's quest for more powerful ballistic missiles.

The Iranians are reported by some analysts to have made "robust strides in developing ballistic missiles" of late, but is likely to be "many years away" from developing an intermediate-range solid-propellant missile with a range of 2,500-3,200 miles.

To a large extent, putting a monkey briefly into space was seen as a propaganda operation with few, if any, military applications, possibly to demonstrate Iranian defiance as Western sanctions to force it to abandon its nuclear program bite ever deeper.

Iran's state television said the flight to an altitude of 75 miles by a Pishgam, or Pioneer, space capsule aft atop a Kavoshgar-3 rocket launched by the Aerospace Industries Organization was a prelude to putting an Iranian astronaut in space by 2020, a target Tehran announced several years ago.

But the program to develop a powerful booster rocket to achieve that objective involves technology that is vital for developing a multi-stage, long-range ballistic missile.

Iran's missile program has suffered several serious setbacks in the last three or four years, some attributable to the international sanctions first imposed in mid-2010.

In November 2011, Gen. Hassan Tehrani Moghaddam of the Revolutionary Guards Corps, who was considered to be the mastermind behind the missile program, was killed in series of explosions at a Guards Corps missile base 30 miles west of Tehran.

The Iranians said the blast was accidental and destroyed several ballistic missiles but there has been persistent speculation that the explosions were the work of saboteurs working for either U.S. or Israeli intelligence.

In July 2012, the International Institute for Strategic Studies in London reported that development of Iran's most advanced ballistic missile, the two-stage Sejjil-2, had been stalled because of the sanctions.

Indeed, the think tank said the sanctions, which have made it difficult for Tehran to obtain components and high-tech equipment for the program, "could yet deal a knockout blow to the country's development of long-range missiles."

The 21.5-ton, solid-fuel Sejjil-2, developed by the Air and Space Department of the Ministry of Defense, has an estimated range of 1,375 miles, enough to reach Israel. Unveiled in 2008, it will eventually replace the older, liquid-fuel Shehab-3b missiles that make up Iran's strategic missile command.

Western missile specialists say Iran has as many as 400 of these ballistic weapons deployed.

Uzi Rubin, former director of Israel's Ballistic Missile Defense Organization, said the Sejjil-2 "demonstrates a significant leap in Iran's missile capabilities" that places the Islamic Republic "in the realm of multiple-stage missiles which means they're on their way to having intercontinental ballistic missiles."

The IISS cited "mounting evidence" that if sanctions continue "Iranian attempts to develop and field long-range ballistic missiles could be significantly impeded, if not halted altogether."

Sporadic talks between Iran and the U.S.-led Western powers have failed to make any progress toward a diplomatic settlement that could end the sanctions. The last negotiations took place in June. Western powers had suggested talks in February but Tehran's rejected that. So there's no indication of any early lifting of the sanctions.

In February 2009, Iran made a major technological breakthrough in its drive to build ICBMs with the launch of Omid-1, a scientific research satellite developed by the Iranian Space Agency, atop a Safir-2 booster rocket, a version of the Shehab.

Unlike putting a monkey in space, that launch into orbit from the Semnan Space Research center 180 miles southeast of Tehran was, as Jane's Defense Weekly put it at the time, "a quantum leap in Iran's ballistic missile capability."

As with the Soviet Union's launch of Sputnik, the world's first satellite, in 1957, Rubin stressed: "the world should not be alarmed by the satellite, but by the missile carrying it.

"The Iranians, long students of North Korean missile technology, have now surpassed their tutors: the Safir-2 is the basis for a future Iranian intercontinental ballistic missile."

U.S. missile expert Peter J. Browne explains that "many of the technological building blocks involved in the satellite launch vehicles are the same as those required to develop long-range ballistic missiles."

http://www.spacedaily.com/reports/Iran_monkey_in_space_masks_missile_plan_999.html

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Press TV – Iran

No Date, Venue Set for Fresh Iran-P5+1 Talk: FM Salehi

Wednesday, January 30, 2013

Iran Foreign Minister Ali Akbar Salehi says no new date or venue has been set for the next round of talks between Iran and the P5+1 group -- Britain, China, France, Russia, and the US plus Germany.

“No agreement has been reached on the exact date or venue [for talks] as of yet. Of course, consultations are going on and we hope to reach an agreement on this as soon as possible,” Salehi said in a joint press conference with his Omani counterpart Yousef bin Alawi on Wednesday.

The Iranian foreign minister also rejected Western media reports about talks being held in Kazakhstan in late February.

In response to a question regarding Western accusations that Iran is stalling the talks, Salehi stated that the time and venue for the talks are usually set after negotiations between representatives of both sides and it’s natural for the two parties to have different suggestions.

Salehi noted that Iran has never wanted talks to be halted and has always insisted on their continuation.

> *“Unfortunately, using their media power, they (West) are trying to make [the world] believe that Iran is the one running from negotiations, which is in fact not true,” he added.*

Iran and the P5+1 have held several rounds of talks, the last of which was held in Moscow in June, 2012.

The United States, Israel and some of their allies accuse Iran of pursuing non-civilian objectives in its nuclear energy program.

Iran has rejected the allegation, arguing that as a committed signatory to the Non-Proliferation Treaty and a member of the International Atomic Energy Agency, it is entitled to develop and acquire nuclear technology for peaceful purposes.

http://www.presstv.ir/detail/2013/01/30/286383/iran-no-date-venue-set-for-p51-talk/

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Sydney Morning Herald – Australia

IAEA Says No Indications of Blast at Iran Nuclear Site

January 31, 2013
By Agence France-Presse (AFP)

The UN atomic agency said on Wednesday that it had no indications that an explosion took place at an Iranian nuclear facility, as reported by Israeli and US media.

"We understand that Iran has denied that there has been an incident at Fordo. This is consistent with our observations," said Gill Tudor, spokeswoman for the International Atomic Energy Agency.

The reports cited the conservative American news website WND, which said an explosion at the Fordo facility on January 21 had caused major damage and trapped workers.

Iran denied any such blast took place, with a senior lawmaker calling the rumours "Western propaganda" aimed at influencing upcoming talks with world powers on Iran's nuclear programme.

Fordo, dug into a mountain near the holy city of Qom, some 150 kilometres (90 miles) south of Tehran, is at the heart of international concerns over Iran's nuclear drive.

The site, whose existence was revealed in 2009, began in late 2011 to enrich uranium to purities of 20 percent, close to the 90-percent level needed for a nuclear weapon.

Iran says it is enriching to this level to provide fuel for the Tehran Research Reactor, which produces medical isotopes, and denies seeking or ever having sought nuclear weapons.

Iran has accused the United States and Israel of being behind the assassinations of nuclear scientists and sabotage attempts, including the Stuxnet computer virus.

Closing Fordo was a key demand by six world powers, permanent UN Security Council members Britain, China, France, Russia and the United States plus Germany, in a series of meetings last year. A new meeting is expected soon but no date or venue has been set yet.

http://www.smh.com.au/world/iaea-says-no-indications-of-blast-at-iran-nuclear-site-20130130-2dle8.html

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Bloomberg News

Iran Tells UN Monitors Uranium Enrichment Work Upgraded

By Jonathan Tirone
January 31, 2013

Iran told United Nations monitors it's installing new centrifuges at its Natanz facility that can enrich more uranium in less time, according to a restricted IAEA document circulated to members yesterday.

The International Atomic Energy Agency asked Iran in a Jan. 29 letter how the new IR-2m machines will be used. The Persian Gulf nation was previously testing the centrifuges, according to the one-page document that was obtained by Bloomberg News. The Vienna-based IAEA declined to comment.

"If the machine works, and Iran now is rolling it out, it could mean a dramatic increase in capacity," Andreas Persbo, executive director of the London-based Verification Research, Training and Information Center, a non-governmental observer to the IAEA, said in an e-mailed reply to questions. Iran could "quite possibly" double its production capacity.

Enriched uranium is the heavy metal used to fuel nuclear reactors and form the core of atomic bombs. Iran, under IAEA investigation for a decade over alleged nuclear-weapons research, says it only wants atomic technology for

peaceful purposes. UN monitors are negotiating with the Islamic Republic to broaden access to suspected nuclear installations, including sites where the country produces its centrifuges.

'Cause for Concern'

The IAEA said last February that Iran had been "intermittently feeding" material into next-generation centrifuges at its research and development facility, which is also in Natanz. Iran uses first-generation IR-1 machines at the plant, located about 150 miles (240 kilometers) south of Tehran.

"This is a cause for concern," the U.K.'s Foreign Office said in an e-mailed statement today. "Installation of advanced centrifuges would be a further breach of UN Security Council and IAEA board resolutions."

Russian Foreign Minister Sergei Lavrov reiterated demands that Iran freeze uranium enrichment in line with Security Council orders. Iran is under dozens of international sanctions because it's repeatedly violated council resolutions compelling a suspension of the work.

The sanctions include trade prohibitions on high-quality steel and fiber products from carbon and glass. The possibility that Iran has become self-sufficient in producing carbon fiber, which is used to make centrifuges, "would be very worrying," according to Persbo, who said negotiators should concentrate more on winning wider inspections of Iran than focusing on a full cessation of its atomic activities.

Breakout Time

IAEA inspectors reported on Nov. 16 that the country had increased the number of installed centrifuges at Natanz to 10,000 from about 9,150. The facility, built underground and beneath a thick layer of concrete, can hold 25,000 machines in the hall being used. Centrifuges are loaded with milled uranium hexafluoride and spin up to 1,000 meters (3,281 feet) per second to separate the Uranium-235 isotope used to generate nuclear power and bombs.

"The introduction of this machine will not affect safeguards at the plant," Persbo said. "It will reduce breakout time" if Iran were to choose to enrich uranium to weapons-grade quality at Natanz.

Negotiations will resume shortly between Iran and world powers over the nation's atomic program, European Union foreign policy chief Catherine Ashton told reporters in Brussels today.

"I'm confident there will be a meeting soon," she said. "We've been saying to the Iranians that we want to propose dates and venues in order that we can get the discussions moving as quickly as possible."

Fordo Facility

The Natanz Fuel Enrichment Plant was the facility detected in 2002 that triggered the IAEA's investigation because Iran didn't declare its construction to the agency. The country subsequently hid construction of a second facility, in Fordo, that was made public in 2009.

Fordo, built into the side of a mountain, produces most of Iran's medium-grade enriched uranium. The facility has drawn particular attention from Israel because it would be difficult to destroy in an air strike.

"Iran's technical capabilities will continue to develop in the uranium-enrichment field," Paul Ingram, executive director of the British American Security Information Council, a policy- advisory group, wrote in reply to questions. "This underlines the need for the West to be more flexible in the negotiations with Iran in order to focus agreement on bringing the tighter inspections and verification regime."

http://www.bloomberg.com/news/2013-01-31/iran-tells-un-nuclear-monitors-it-s-boosting-capacity-document.html

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Space War

Nuclear Test is 'People's Demand', Says North Korea

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By Staff Writers
Agence France-Presse (AFP)
January 26, 2013

SEOUL: North Korea Saturday renewed its threat to carry out a third nuclear test in the latest in a series of bellicose warnings sparked by a tightening of UN sanctions, saying it was the “demand of the people”.

It came a day after Pyongyang said the sanctions adopted earlier this week amounted to a “declaration of war”, threatening the South with unspecified “physical counter-measures”.

“A nuclear test is the demand of the people,” said the Rodong Sinmun, the official daily newspaper of the ruling communist party in a signed commentary titled “We have no other option”.

“The people’s demand is that we must do something even greater than a nuclear test. The United Nations Security Council has left us with no other options. We have no other ways but to push forward to the final showdown”, it said.

“The greatest threat to peace and security on the Korean peninsula comes from the hostile policy of evil forces led by the United States and the vast US nuclear arsenal backing them,” it added.

North Korean state media regularly use bombastic rhetoric and it was unclear what the Rodong Sinmun was referring to when it mentioned action “greater than a nuclear test”.

The current upsurge in tensions has its roots in Pyongyang’s defiant decision to push ahead with a long-range rocket launch on Dec 12, 2012 — insisting it was a peaceful mission to place a satellite in orbit.

The rest of the world saw it as a banned ballistic missile test and on Tuesday the UN Security Council unanimously adopted a resolution that expanded the number of North Korean entities on an international blacklist.

The United States, supported by Japan and South Korea, spearheaded the UN resolution.

Pyongyang reacted furiously, vowing to boost its nuclear arsenal and to conduct a third nuclear test and even longer-range rocket launches in an “all-out action” against its “sworn US enemy”.

After meetings on Friday with Chinese officials in Beijing, Glyn Davies, the US special representative for North Korea policy, said the two sides had “achieved a very strong degree of consensus”, adding that recent comments from Pyongyang were “troubling and counter-productive”.

In an unusually frank warning on Friday, China’s Global Times, which is close to China’s ruling Communist Party, indicated that Beijing would decrease North Korean aid if it went ahead with a third atomic test.

http://www.spacewar.com/reports/Nuclear_test_is_peoples_demand_says_North_Korea_999.html

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People’ Daily – China

China Succeeds in Land-Based Anti-Missile Test

People's Daily Online
January 28, 2013

China carried out another land-based intermediate-section anti-missile interception test in its territory on Jan.27, 2013 and achieved intended purpose, and the experiment is defensive and not directed against any country, according to the Ministry of National Defense.

According to previous reports, China has preliminary anti-missile capabilities and it is difficult to grasp the intermediate-section interception technology

It is in the intermediate section that the ballistic missile flies at the greatest height and fastest speed. As for the land-based intermediate-section defense system, it detects and tracks the enemy ballistic missiles with the land-based launch platforms, and then launches interceptors from the ground or at sea, intercepting and destroying the payloads of enemy missiles in space before they arrive at the targets.

China carried out a land-based intermediate-section anti-missile interception technology experiment in its territory on Jan.11, 2010. On Jan.7, the U.S. had announced the sales of Patriot missile systems to Taiwan. Some expert opinions have related the Chinese missile experiments to the U.S. arms sales to Taiwan.

It is in the intermediate section that the ballistic missile flies at the greatest height. The long-range ballistic missiles fly outside the atmosphere in the intermediate section. With the existing missile technological capabilities, only high-thrust land-based missiles are able to intercept the ballistic missiles that are flying in the intermediate section.

Therefore, China's land-based intermediate-section anti-missile interception technology experiment is more difficult than the U.S. Patriot air defense missile system.

Some web users rank it alongside China's atomic test.

Before China's land-based intermediate-section anti-missile experiments, the U.S. is the only country carrying out the experiment. It is part of the U.S. Star Wars to acquire the land-based intermediate-section interception capabilities. But it is so technologically difficult that not until Oct.2, 1999 had the U.S. carried out the National Missile Defense System flight intercept experiment for the first time.

Then it conducted more than 10 experiments, but many ended up a failure. The blames lie with the loss of targets by interceptors, and the untimely separation of interceptor warheads with boosters.

The anti-missile R&D cycle is so long, the costs so high, and the techniques so complicated that it is impractical even for the U.S. to deploy it in large numbers at present. It is reported that the U.S. deploys only dozens of land-based interceptors at the Vandenberg Air Force Base in California and Fort Greeley in Alaska to shield itself from the ballistic missile threats from the so-called "Rogue states."

http://english.peopledaily.com.cn/90786/8111254.html

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Boston Globe
Tuesday, January 29, 2013

Confirming North Korean N-Test almost Impossible

By HYUNG-JIN KIM, Associated Press

SEOUL, South Korea — North Korea appears all set to detonate an atomic device, but confirming the explosion when it takes place will be virtually impossible for outsiders, specialists said Tuesday.

The best indication of a test will be seismic tremors and abnormal radiation in the air, but even that can be masked if North Korea wants to. In all likelihood the first word of the test will come from Pyongyang itself, just as it happened when the country conducted nuclear tests in 2006 and 2009.

Last week, North Korea warned that it plans a third nuclear test to protest toughened international sanctions meant to punish it for firing a long-range rocket in December. The world sees the launch as a ballistic missile test banned by the U.N., while Pyongyang says it only launched a satellite into orbit as part of a peaceful space development program.

The U.S., South Korea and their allies have pressed the North to scrap its nuclear test plans, saying it will only worsen the country's decades-old international isolation.

The threats have placed scientists and experts in South Korea on high alert as any test is likely to aggravate the already high tensions on the divided Korean Peninsula.

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South Korea's Defense Ministry said Tuesday it believes North Korea has nearly completed its nuclear test preparations, confirming satellite analysis last week by the U.S.-Korea Institute, a research group at the Johns Hopkins School of Advanced International Studies.

Its satellite images of the Punggye-ri site — where the previous two nuclear tests were conducted — show that the North Koreans may have been sealing a tunnel into a mountainside where a nuclear device would be detonated.

In the event of such an underground nuclear test, earthquake monitoring stations in South Korea can detect seismic tremors accompanied by low-frequency sound waves. While earthquakes trigger seismic waves they don't produce sound waves.

But this is at best a strong indication of a test and not an absolute confirmation.

An earthquake expert at the state-run Korea Meteorological Administration said his office aims to find out the magnitude of the tremor, the time it started and the exact location on the map within 10 minutes of the explosion. He spoke on condition of anonymity because he wasn't authorized to speak to the media.

Experts also note that artificial earthquakes, such as those created by nuclear explosions, rarely trigger the same wave patterns as natural quakes.

North Korea could also try to deceive and give the impression that it exploded a nuclear device by simply exploding sophisticated conventional weapons that would trigger the same seismic waves produced by a nuclear test, said Chi Heoncheol, an earthquake specialist at the government-funded Korea Institute of Geoscience and Mineral Resources.

By raising tensions this way, North Korea may hope to wrest concessions or aid in return for promises to scale back its unproven nuclear capability.

"Even if they bring truckloads of high-powered conventional explosives, put them (into an underground tunnel) and explode them, they will generate the same seismic wave and sound wave," Chi said. The only difference is no radioactivity would be detected from the explosion of conventional weapons, he said.

The best course for scientists would be to collect air samples to look for increased radiation but the process could take days. Even if the wind is favorable — and assuming North Korea conducts the test at Punggye-ri in the country's northeastern corner — it will take more than one day for airborne radioactive isotopes like xenon to reach South Korea, according to an official at the government-run Nuclear Safety and Security Commission.

The official, who requested anonymity citing the sensitive nature of the subject, acknowledged it may be impossible to confirm a test if the wind doesn't blow southward or if North Korea plugs the underground tunnel so tightly that no radioactive gas escapes.

South Korea confirmed increased radiation levels following the North's 2006 nuclear test but didn't find anything in 2009.

And if North Korea decides to conduct a so-called subcritical test, there would be no release of radioactivity at all.

A sub-critical test only works on the properties of plutonium but stop short of creating a critical mass, the point at which a self-sustaining nuclear reaction occurs. Such an experiment requires a "very difficult technology" that only a few countries like the U.S., Russia and England have acquired, said nuclear expert Whang Joo-ho of Kyung Hee University.

"I believe North Korea's technology has not reached that level," Whang said.

North Korea said its upcoming atomic explosion will be a "high-level" test and many analysts said that refers to a device made from highly enriched uranium, which gives the country a second source for manufacturing bombs in addition to plutonium.

Whether North Korea detonates a uranium- or plutonium-based device, there won't be much difference in how easily scientists can detect the tests. The only difference is that they produce different radioactive gases, Whang said.

He also said a uranium-based test explosion would mean that North Korea's nuclear stockpile can continue to be enlarged at a time when there is no evidence of continued production of plutonium at its main Yongbyon nuclear complex.

North Korea watchers in South Korea are speculating various dates for a possible nuclear test, with some predicting it could happen as early as this week and others choosing days just before the Feb. 16 birthday of late North Korean leader Kim Jong Il.

There is no way to determine when North Korea will conduct a nuclear test, said analyst Shim BeomChul at the state-run Korea Institute for Defense Analyses in Seoul. U.S. spy satellites "can detect objects 15 centimeters (5.9 inches) in size on the ground but they cannot detect what's happening underground," he said.

http://www.boston.com/news/world/asia/2013/01/29/confirming-north-korean-test-almost-impossible/GermKv7RhITZnzAc21Pz7K/story.html

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Yonhap News Agency – South Korea
January 30, 2013

S. Korea Successfully Launches Naro Space Rocket

By Byun Duk-kun

NARO SPACE CENTER, South Korea, Jan. 30 (Yonhap) -- South Korea successfully launched its first-ever space rocket Wednesday, the country's science minister said, with the satellite carried by the rocket also believed to have entered its intended orbit.

Whether the Korea Space Launch Vehicle-1 (KSLV-1), also known as Naro, has successfully deployed its payload satellite will be determined early Thursday (local time), Lee Ju-ho, minister of education, science and technology, told a press conference.

"At 4 p.m. today, the Naro was successfully launched. The satellite was deployed 540 seconds after the launch and an analysis of related data shows the satellite has successfully entered its target orbit," he said.

Soon after its deployment, the Science and Technology Satellite-2C began transmitting beacon signals, which were successfully received by a ground station in Norway about 90 minutes after the launch of the KSLV-1 from South Korea's Naro Space Center, according to officials from the Korea Aerospace Research Institute.

The successful transmission of beacon signal means the satellite is working properly, they said.

A final confirmation will be available around 4 a.m. Thursday when the satellite makes its first contact with the country's own ground station at the Korea Advanced Institute of Science and Technology in Daejeon, 160 kilometers south of Seoul.

"The launch of the rocket itself succeeded," a KARI official said earlier. "Whether the entire mission of deploying the satellite into proper orbit was successful will be determined later in the day."

If the launch is confirmed to have been successful, it will make South Korea the world's 13th nation to have sent a satellite into space from its own soil.

Wednesday's launch of Naro was the country's third attempt to join the global space club after its two earlier attempts in 2009 and 2010 ended in failures.

The third launch of Naro had also been scheduled to take place on Oct. 26 and again on Nov. 29, but was delayed both times due to defective parts.

The lower or first-stage of the Naro was built by Russia's Khrunichev State Research and Production Space Center under a 2004 pact signed with Russia.

Seoul, however, is seeking to develop its own space launch vehicles with plans to develop an indigenous 10-ton thrust engine by 2016 already under way.

The country earlier had plans to launch an indigenous 300-ton thrust space rocket carrying a 1.5-ton satellite in 2021, but the science minister said the development may now be completed sooner for a launch in 2018 or 2019. "The launch of the rocket itself succeeded," a KARI official said earlier. "Whether the entire mission of deploying the satellite into proper orbit was successful will be determined later in the day."

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http://english.yonhapnews.co.kr/techscience/2013/01/29/66/0601000000AEN20130129008255320F.HTML

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People's Daily – China

Prompt Global Strike Weapons became Focus of International Arms Race

January 30, 2013

U.S. Boeing Company announced on Dec. 12, 2012 that the second X-37B space plane was successfully launched from Patrick Air Force Base in Florida. This is the third launch of X-37B space planes.

As the competitive product of prompt global strike weapons, X-37B space planes first achieved a breakthrough among numerous pilot projects.

As the basic concept embodied by prompt global strike weapons has begun to set trend of the development of international military technology, some other countries also started relevant tests. Some experts claimed that the prompt global strike weapons will become a new focus of international arms race.

An important choice to get rid of dependence on nuclear

Under the new situation, the nuclear weapons which had been used by the U.S. military to maintain its global strike capability and hegemony are no longer the ideal tools for the Pentagon to implement the prompt global strikes. The U.S. military must get rid of the dependence on nuclear weapons and develop conventional global strike weapons.

In addition to the nuclear weapons and terrorist threats, the space is also an important area for the U.S. military to implement global strikes in future. The Pentagon believes that the prompt global strikes are important means of fighting against the anti-satellite weapons of other countries. If the United States finds a dangerous target, it can use the prompt global strike weapons to destroy it before it is launched to the space, or destroy it in the space. The Falcon hypersonic UAVs and X-37B space vehicles on trial represent the future direction of development of space transportation technology.

Arms race has just begun

The tests conducted by U.S. military around the prompt global strike plan has taken the first to light a fire in the international military field, and the related arms race has begun. Some countries have regarded the hypersonic technology as an important direction of the development of military technology.

The world had a total of six flight tests of hypersonic aircraft in 2012, with the United States failing once while both Germany and Russia achieving success. On June 27, 2012, Germany had conducted a sharp edge flight test, with the speed of the aircraft reaching seven Mach.

Although these countries are far away from the United States in terms of investment scale and development process, they have obvious late-starting advantages because they can use the early experiences of the United States for reference.

http://english.people.com.cn/90786/8113969.html

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Global Times – China

NK Set for Nuke Test: Report

January 31, 2013
By Wang Gang in Seoul and Hao Zhou in Beijing

North Korea's young leader Kim Jong-un has given a secret order to thoroughly check the Punggye-ri nuclear test facility to pave the way for a third nuclear test, South Korean media reported Wednesday.

Officials and experts previously speculated that North Korea may choose February 16, the birthday of the country's late leader Kim Jong-il, or February 25, the day of the inauguration ceremony of South Korea's president-elect Park Geun-hye, to conduct a fresh nuclear test, the Joongang Daily said.

But the date has been brought forward by Kim in response to the UN Security Council resolution that "deplored" North Korea's rocket launch last December and expanded the list of existing sanctions against Pyongyang.

Kim made the decision in a Saturday meeting with a new panel of top security officials and diplomats, the newspaper said.

According to the report, Kim has ordered all North Korean troops to enter a state of emergency from midnight Tuesday, and ordered the troops along the border between the two Koreas and in the neighborhood of Pyongyang to prepare for war, in a clear indication that an early nuclear test was underway.

The North's National Defense Commission has threatened a "higher-level" nuclear test and its foreign ministry vowed to boost the country's military capability, including nuclear deterrence, immediately following the UN resolution.

The Yonhap News Agency on Wednesday, citing military and intelligence sources, also reported recent signs of increased activity of workers and vehicles at the Punggye-ri nuclear test facility in the northeast of North Korea.

Analysts said that if North Korea pushes for an early nuclear test, the timing would "not be so good."

"Kim Jong-un faces the heavy task of fixing the North's crippled economy. If he is really determined to defy pressure from the international community and let a third nuclear test go ahead, I would say he is too immature, compared with his late father, when it comes to handling regional relations," said Lü Chao, a researcher on Korean Peninsula issues at the Liaoning Academy of Social Sciences.

"North Korea will risk a full-fledged sanction targeting its defense capabilities following a nuclear test that the international community, including China, has seriously warned against," Lü added.

China's foreign ministry spokesperson Hong Lei on Wednesday again called for all concerned parties not to take actions to further escalate tension or to sabotage the efforts to realize the denuclearization of the Korean Peninsula.

Japan and South Korea on Wednesday also pledged joint efforts to dissuade Pyongyang from carrying out a third nuclear test.

US Secretary of State Hillary Clinton said Tuesday that the North's menacing rhetoric has disappointed US expectations that Kim Jong-un would be different from his father, but Washington still hopes to persuade Pyongyang to change course.

But the North's official Korean Central News Agency said in a commentary piece on Wednesday that the US is "chiefly to blame for the nuclear issue on the peninsula and has driven the situation into an extreme phase where it is hard to settle the issue."

Cui Zhiying, director of the Korean Peninsula Studies Center at Tongji University, said he believes that North Korea was intentionally trying to destroy the atmosphere for talks.

"Pyongyang is intentionally creating tensions before the incoming South Korean President Park has a chance to engage with the North or US President Barack Obama has a chance to shape his North Korea policy for his second tenure. North Korea believes that by making these moves it can increase its stake in future negotiations with any parties," Cui told the Global Times.

Rumors on the Internet said that on this occasion, North Korea might change the site for the planned nuclear test and it could take place as close as 20 kilometers away from the Chinese border with North Korea.

These rumors have touched the nerves of some Chinese people, who expressed their concerns over the potential hazards on the Internet.

However, residents living near the border with the North showed little concern, though the nuclear test in 2009 triggered tremors that could be felt on the Chinese side of the border.

"I learned the information (about North Korea's ongoing preparation for nuclear test) from the Internet, but I am not worried about it at all," said a lawyer who lives in Yanji, Jilin Province, only 50 kilometers from the China-North Korea border.

Agencies contributed to this story

http://www.globaltimes.cn/content/759297.shtml

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Yonhap News Agency – South Korea
February 1, 2013

N. Korea Covers Nuclear Site to Evade Monitoring: Source

By Kim Eun-jung

SEOUL, Feb. 1 (Yonhap) -- North Korea has covered the entrance to one of the tunnels at an underground nuclear site in an apparent effort to avoid satellite monitoring as the communist nation makes final preparations for an imminent nuclear test, intelligence sources said Friday.

The latest move comes as South Korea and the United States are mobilizing intelligence assets, including spy satellites, to detect early signs of a third atomic test in Punggye-ri in the North's northeastern tip. The sprawling nuclear test site in mountainous terrain has three known tunnel entrances and multiple support buildings.

"Analysis showed a camouflage net looking like a roof was placed on the tunnel entrance," a source said, requesting anonymity, as he is not allowed to discuss military information. "The move seems to be aimed at keeping nuclear test preparations near their completion from being exposed outside."

Another source, who also requested anonymity due to sensitivity of the issue, said the cover may be aimed at confusing outside watchers before detonating the nuclear device.

"It seems like a disturbing tactic, similar to one that was used when the North prepared for a long-range rocket in December last year," the source said.

Days before the Dec. 12 rocket launch, Pyongyang placed a camouflage net on a launch pad in its northwestern tip and assembled the three-stage rocket with the cover on, a move interpreted as evading spy satellites.

Citing satellite imagery that shows increased activity near the site, Seoul officials have been placed on high alert to cope with a third nuclear test, which could further escalate tensions in the region.

"North Korea has come to a level to be able to detonate a nuclear device any time if the leadership makes a decision," Wi Yong-seop, a defense ministry official said in a briefing. "Forces of South Korea and the U.S. are closely monitoring North Korea's preparations."

Pyongyang detonated nuclear devices at the Punggye-ri test site in 2006 and 2009, following long-range rocket launches.

http://english.yonhapnews.co.kr/northkorea/2013/02/01/11/0401000000AEN20130201004700315F.HTML

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The Korea Herald – South Korea

Defense Chief Calls for Early Deployment of 800-km Missiles

February 1, 2013

South Korea's defense minister on Thursday ordered an early development and deployment of long-range ballistic missiles that can hit all parts of North Korea.

Minister Kim Kwan-jin visited a front-line unit to urge the military to stay vigilant against any provocations from the North after it threatened a third nuclear test in response to the U.N.

Security Council sanction for Dec. 12 rocket launch.

His inspection came after President Lee Myung-bak warned of "grave consequences" against the North in case of another atomic test in a meeting with top security ministers earlier in the day.

"Many of North Korea's missile bases are located in the rear (northern region)," Kim told soldiers in Yeoncheon, north of Seoul.

"To be able to destroy the origin of provocations, ballistic missiles with an 800-kilometer range should be promptly put in place."

Concerns over a third nuclear test are growing, as recent satellite imagery show increased activity near a nuclear site in the North's northeastern tip, where the 2006 and 2009 tests were conducted.

After South Korea and the United States in October 2012 agreed to nearly triple Seoul's missile range to 800 kilometers, the military has worked on developing longer-range missiles. The missiles are capable of hitting all parts of North Korea.

The original plan calls for missile deployment by 2017, but the military is expected to advance the date by two years to 2015.

The latest move was seen as attempt to improve combat capability before Seoul regains its wartime operational control of its forces from Washington at the end of 2015.

South and North Korea share the world's most heavily fortified border. The two sides are still technically at war since the 1950-53 Korean War ended in a cease-fire instead of a peace treaty. (Yonhap News)

http://www.koreaherald.com/view.php?ud=20130131001128

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Boston Globe

NKorean Uranium Nuclear Test would Raise Stakes

By FOSTER KLUG, Associated Press
February 1, 2013

SEOUL, South Korea (AP) — As North Korea warns that it plans its third nuclear test since 2006, outside governments and analysts are trying to determine a crucial question: Just what will Pyongyang's scientists explode?

The last two tests are believed to have been of plutonium devices, but the next logical step for Pyongyang's ambitious nuclear program could be to conduct a highly enriched uranium explosion. That would be a major accomplishment for North Korea — and a worrying development that would raise already high stakes for the United States and its allies.

Here's why:

EASY TO HIDE:

Nuclear bombs can be produced with highly enriched uranium or plutonium. North Korea is believed to have exploded plutonium devices in the two tests it has conducted so far, in 2006 and 2009.

Uranium bombs worry Washington and North Korea's neighbors because plants making highly enriched uranium are much easier to hide than plutonium facilities. The latter are larger and generate more heat than uranium enrichment plants, making them simpler for outsiders to monitor and for satellites to detect.

Uranium can be enriched for use in bombs by using centrifuges that can be operated almost anywhere: in small factories or even in tunnels and caves. They can be spread around the country out of sight of nuclear inspectors. And it would take a relatively small amount of highly enriched uranium to build a simple bomb similar to the one dropped on Hiroshima at the end of World War II.

''A uranium test would be a big deal because a centrifuge plant is much easier to conceal than a plutonium reactor, which is practically impossible to hide,'' said Daniel Pinkston, a Seoul-based expert on North Korea with the International Crisis Group think tank.

It is also simpler in some ways to build a nuclear bomb with highly enriched uranium than one with plutonium.

''While a plutonium bomb requires the assembly of a complicated weapons system to deal with pre-detonation issues, a HEU bomb is relatively easy to construct,'' Harvard physicist Hui Zhang wrote in an analysis for the Bulletin of the

Atomic Scientists. ‘‘Moreover, unlike plutonium, HEU poses no significant health hazards during the construction phase because of its low level of radiation.’’

Scientist and nuclear expert Siegfried Hecker said plutonium is considered better for building small warheads, which North Korea is believed to be attempting to develop so it can threaten the U.S. with long-range nuclear-tipped missiles.

‘‘Switching to HEU at this point actually increases the technical challenge’’ for North Korean scientists to build miniaturized nuclear warheads, James Acton, a physicist at the Carnegie Endowment for International Peace, said in an email.

It’s not clear whether North Korea has made bomb-grade uranium. But Pyongyang confirmed long-held worries that it was enriching uranium in late 2010, when it showed foreign experts a facility at its well-known Yongbyon nuclear reactor site. Analysts strongly suspect Pyongyang has other uranium enrichment facilities, and it is feared that hidden plants could be producing large amounts of weapons-grade uranium.

EASY TO DIG UP:

North Korea says the program is for peaceful, energy-generating purposes. But while uranium enriched to low levels is used in power reactors, centrifuges can also be made to enrich uranium to the high levels needed for bombs.

North Korea apparently decided a few years ago to focus on highly enriched uranium rather than plutonium, Acton said. That’s probably because its leaders realized that ‘‘with a given amount of investment, it could produce more bombs-worth of HEU than plutonium,’’ he said.

North Korea has large deposits of uranium ore, and is far less able to acquire plutonium.

Hecker estimated that Pyongyang has only 24 to 42 kilograms of plutonium — enough for perhaps four to eight rudimentary bombs similar to the plutonium weapon used on Nagasaki in World War II. It does not appear to be making more; its plutonium reactor north of Pyongyang was shut down during disarmament negotiations.

‘‘It’s only logical that it would now test an HEU device, since that would be most helpful for designing its future arsenal,’’ Acton said, though he didn’t exclude the possibility of a plutonium test.

Acton, Hecker and other analysts have raised the possibility that North Korea may try to test both plutonium and uranium devices simultaneously.

AN OPEN SECRET:

Even as Pyongyang negotiated with the world to scrap its plutonium efforts in the latest round of nuclear disarmament talks, which began in 2003 and were last held in late 2008, its scientists were apparently working on a secret uranium program.

Outsiders have long raised suspicions of such a program.

James Kelly, a U.S. envoy during the George W. Bush administration, confronted North Korean officials with claims about uranium enrichment during a 2002 visit to Pyongyang, sparking a nuclear crisis that led to the creation of the now-stalled six-nation disarmament talks.

Former Pakistani President Pervez Musharraf has said North Korea worked with A.Q. Khan, creator of Pakistan’s atomic bomb, to obtain the centrifuges needed for uranium enrichment before Khan’s operation was disrupted in 2003. Musharraf wrote in his 2006 memoir that Khan transferred nearly two dozen centrifuges to North Korea.

In 2007, then-U.S. nuclear envoy Christopher Hill said Washington knew Pyongyang had bought equipment only used for uranium enrichment.

North Korea finally revealed at least some of its uranium enrichment equipment in November 2010 to visiting Americans. They saw what appeared to be a sophisticated, modern uranium enrichment facility with 2,000 centrifuges.

Pyongyang's long pursuit of uranium ''is the clearest indication that North Korea intends to retain and enhance its nuclear weapons capabilities and has no intention to give up these capabilities,'' according to Jonathan Pollack, a North Korea analyst at the Brookings Institution think tank in Washington. ''That is the fundamental fact that all outside powers must address.''

http://www.boston.com/news/world/asia/2013/02/01/nkorean-uranium-nuclear-test-would-raise-stakes/ysRdflHHyZum5PGpdTAkjN/story.html

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Times of India – India

India Test-Fires Ballistic Missile from Underwater Platform

By Press Trust of India (PTI)
January 27, 2013

NEW DELHI: Moving a step closer to completing its nuclear triad, India today successfully test-fired a ballistic missile, with a strike range of around 1500 kilometres, from an underwater platform in Bay of Bengal.

"The medium range K-5 ballistic missile was test-fired successfully today from an underwater pontoon and all parameters of the test firing were met," DRDO chief VK Saraswat told PTI from the undisclosed test area.

Nuclear triad is the ability to fire nuclear-tipped missiles from land, air and sea.

Saraswat said that the development phase of the K-5 missile, which is a submarine-launched ballistic missile (SLBM), was over and it was now ready for deployment on various platforms including the indigenous nuclear submarine INS Arihant which is under development.

K-5 is part of the family of underwater missiles being developed by Defence Research and Development Organization (DRDO) for the Indian strategic forces' underwater platforms.

This missile will help India to achieve the capability of launching nuclear warheads from underwater facilities. This is the first missile in the underwater category to have been developed by India. So far, India had the capability of delivering nuclear weapons from land and aerial platforms only.

India has a no-first-use policy for nuclear weapons and the development of an SLBM boosts its retaliatory strike capability, experts said.

India is also developing two more underwater missiles including K-15 and Brahmos with strike ranges of 750 kilometres and 290 kilometres respectively.

India has for some time possessed the Agni series of ballistic missiles as well as fighter-bomber aircraft to constitute the land and air-based legs of the nuclear triad.

India had on April 19, last year made a giant stride when it test-fired nuclear-capable Agni-V intercontinental ballistic missile (ICBM) that has brought China within its reach with a strike range of over 5,000 km. This missile also gives India the capability to hit targets in eastern Europe, east Africa and the Australian coast.

K-5 ballistic missile, which is also known as BO5, has been developed by DRDO's Hyderabad-based Defence Research and Development Laboratory (DRDL).

Officials said more than 10 trials of the missile have been performed earlier. Today's was the last development trial of K-5. Only a select few nations including the US, France, Russia and China have this type of missile capability.

"This is a significant development and capability enhancement. The launch of the SLBM is a complex technological development. And now since the missile is ready for induction, this is a major punctuation in India's indigenous missile development programme," said security expert Commodore (retd) Uday Bhaskar.

Another security expert Commander (retd) Sunil Chauhan said the development has helped India achieve a significant milestone for country's strategic forces. This success will give countervailing capability, he said.

Defence analyst Deba R Mohanty said by achieving the nuclear triad, India will certainly be on the upward trajectory of becoming a global military power in the real sense.

http://articles.timesofindia.indiatimes.com/2013-01-27/india/36576760_1_strike-range-fire-nuclear-tipped-missiles-slbm

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Daily Bhaskar – India

Can Pakistan's TNWs Counter India's Conventional Weapons?

By Dailybhaskar.com
January 29, 2013

New Delhi: Pakistan nuclear program is a point of concern for the entire world. Besides, the usual concern of Pakistan's nuclear weapons falling into wrong hands (read Islamic fundamentalists), there is a genuine concern over the ever increasing number of nuclear weapons being developed by the state infected by Islamic fundamentalist.

Pakistan possesses what is thought to be the fastest-growing nuclear arsenal in the world and if present trends continue, could equal or surpass Britain's stockpile within a decade, according to reports published in the Diplomat.

The ever increasing stockpile of nuclear weapon brings a not only Indian cities but a large number of EU's military facilities within the range of Pakistani long range missiles.

In case, the present fragile US-Pak relations break down; the large nuclear arsenal in Pakistan could be a subject of concern.

Number is not the only thing that is keeping the international community on its toes; Tactical Nuclear Weapons (TNWs) are a new concern.

The TNWs are built with the intention of targeting not only the Indian cities but Indian military formation on the battlefield.

"The main aim of the TNWs is to counterbalance India's move to bring conventional military offensives to a tactical level", Pakistani ambassador to US Maleeha Lodhi says.

The tactical weapon would be used on the Pakistani soil and would help in halting the Indian forces attack. However, this single strategy does not provide an absolute counter for an Indian attack. Experts predict that Pakistan will still lose if it unleashes nuclear weapon.

One calculation estimates that more than 436 nuclear weapons are required to halt a single Indian armoured division. The number is expected rise- if we consider the low yield of Pakistani weapons and if Indian defence formation is more disperse.

Moreover, Michael Krepon was quoted by the Diplomat, "Pakistan lacks the real-time surveillance capabilities to destroy [moving] armored columns, except where they are funneling into bridge crossings of water barriers."

Effective at the same time devastating, the TNWs are expected to cause widespread damage to the land supposedly being defended.

The TNWs are often associated with the dilemma, "use them or lose them", considering they are deployed in forward positions in close proximity to enemy lines.

The dilemma paved the way for "pre-delegated launch authority".

Pakistan's Strategic Plans Division (SPD), explained to the Diplomat that "partial pre-delegation" of weapons would be an "operational necessity because dispersed nuclear forces as well as central command authority … are vulnerable."

Having said that, pre-delegation inevitably dilutes command and control of nuclear weapons, however competent officials might be.

Pakistan is expected to rely heavily on its TNWs strategy to counterbalance the highly superior conventional warfare technology that India possesses.

http://daily.bhaskar.com/article/WOR-TOP-can-pakistan---s-tactical-nuclear-weapons-counter-india---s-conventional-weapons-4162818-NOR.html

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The Indian Express

Nukes Could Be Hijacked by Radicals, Warns Pak Scientist

By Press Trust of India (PTI)
Friday, February 1, 2013

London: Increasing radicalisation within Pakistan's military could lead to its nuclear weapons being hijacked by radical Islamists, a Pakistani scientist has warned.

"Safety and security of Pakistan's nuclear arsenal is of a major concern. The growing radicalisation within the military, given attacks on its own internal bases, could lead to these nuclear weapons being hijacked by radical Islamists," said Pervez Hoodbhoy, who was here for the London launch of his book 'Confronting the Bomb'.

The nuclear physicist and defence analyst estimated Pakistan's arsenal to be similar to India's, at around 120-130 warheads.

He was answering questions from members of the Indian Journalists' Association at the Indali Lounge here last evening.

"Earlier, such weapons were seen just as a means of deterrence. The most dangerous development is the increasing search for fissile material as a new dimension of tactical nuclear war has entered the picture. This means the number of weapons will steadily increase," he said.

Hoodbhoy, who received his PhD in nuclear physics from Massachusetts Institute of Technology (MIT), stressed that the issue needs to be addressed for the sake of sub-continental as well as global security.

"India and Pakistan have come close to nuclear war at least five times in 1987, 1990, during Kargil (1999), after the attack on the Indian Parliament (2001) and the Mumbai attacks in 2008.

Given the history of nuclear tension, we can't afford to be passive on this issue. The fallout, from the blast itself to the radioactive effects, will be felt not just in the sub-continent but around the world," he said.

"Confronting the Bomb: Pakistani & Indian Scientists Speak Out", published by Oxford University Press and edited by Hoodbhoy, is a compilation of essays by scientists from both sides of the border.

It kicks off with the atomic age in India in 1974, followed by Pakistan and traces the furious nuclear race after the 1998 nuclear tests.

"Pakistan started developing its nuclear weapons only because India embarked on it. India has remained primary enemy. But to some extent that perception is changing, with Gen Kayani [Chief of Pakistani Army Staff] recently saying that Pakistan's major challenge is the enemy within.

So there seems to be a doctrinal shift within the army but Kayani himself is under attack within the forces," said Hoodbhoy, who admits receiving threats against his own life.

"Jihadists still operate within Pakistan and the state's policy regarding Islamists has been a confused one," added Hoodbhoy, a visiting professor in the physics department at Lahore University of Management Sciences (LUMS)

He is known for speaking out against the Pak's nuclear establishment.

He is now even sceptical of the peaceful uses of nuclear technology in India and Pakistan.

"Whether electricity generated from nuclear sources is really efficient is a big question mark.

"The construction of nuclear reactors is very expensive and should an accident similar to Japan's Fukushima disaster in 2011 were to occur in India or Pakistan, both countries may not have the capacity to deal with it the same way," he added.

http://www.indianexpress.com/news/nukes-could-be-hijacked-by-radicals-warns-pak-scientist/1067877/0

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RIA Novosti – Russian Information Agency – Russia

'No Flexibility' in US Missile Talks - Medvedev

27 January 2013

MOSCOW, January 27 (RIA Novosti) – Russian Prime Minister Dmitry Medvedev said on Sunday he sees "no flexibility" in a dispute over US missile defense plans, warning that a new arms race could emerge if talks fail.

"If we talk about the subject itself, it is extremely difficult. And so far we don't see any flexibility. There are no easy solutions in terms of anti-missile defense. There is no flexibility. We have not changed our previous positions – the US has one opinion and the Russian Federation, unfortunately, has a different opinion. And these positions are not getting any closer," Medvedev said in an interview with CNN.

US President Barack Obama was famously caught on an open mic in March 2012 telling then President Dmitry Medvedev to pass on to Vladimir Putin that he would have "more flexibility" after his reelection.

Russia insists that the US set out its assurances that the missile shield will not be directed against it in legally binding documents, something Washington has refused to agree to.

"We do not want next generations of politicians in 2019 or 2020 to take decisions which would open a new page in the arms race. But such a threat exists and everyone in Russia and the United States should understand this, that's why we still have chances to come to an agreement," Medvedev said.

"We clearly understand that if we do not have guarantees such as the pairing of our programs, that means that missile defense could also work against the Russian nuclear arsenal. What does this mean? This means that the parity, which we recorded with President Obama by signing the New START treaty (a very important and very helpful treaty, by the way: I think this is the achievement of the so-called reset), [the parity] is being cracked by that, because the missile defense – is a direct continuation of nuclear offensive capability, combat nuclear weapons," Medvedev said.

The United States says the disputed missile shield is designed to protect against "rogue states" such as Iran and North Korea, but Russia is concerned it could be used to neutralize its own nuclear deterrent.

Russia has pledged to deploy a host of countermeasures to tackle any NATO missile defense shield in Europe, including forward deployments of tactical nuclear missiles in its Baltic enclave of Kaliningrad.

http://en.rian.ru/russia/20130127/179063928/No-flexibility-in-US-Missile-Talks---Medvedev.html

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Russia Beyond the Headlines – Russia

USAF COUNTERPROLIFERATION CENTER
CPC OUTREACH JOURNAL
MAXWELL AFB, ALABAMA

Russia May Resurrect its Missile Trains by 2020

According to official information from the Ministry of Defense, military railroad missile complexes are currently under development and will appear in Russia by 2020.

January 29, 2013

By Andrei Lvov

"Russia's political leadership has made the decision to start the development of a military railroad missile complex for the Strategic Missile Forces, as a response to the threat the European Missile Defense System will present between 2018 and 2020,"said Igor Korotchenko, editor-in-chief of the Natsionalnaya Oborona magazine and director of the Center for Analysis of World Arms Trade (CAWAT).

"By that time, the European Missile Defense System will be able to intercept Russian ICBMs, thanks to new versions of its SM-3 anti-BM missile. Under the circumstances, Moscow has been forced to take adequate countermeasures,"Korotchenko said.

He added that, once deployed, Russia's missile trains would make it totally impossible for American technical reconnaissance to determine their location.

"Besides mobile surface-based complexes, our country will receive additional potential to launch an effective counterstrike," said Korotchenko.

He believes that adapting the Bulava, solid-fuel, submarine-launched, ballistic missile for rail would be the optimal course of action, as the missile would fit into a standard railroad freight car — an extremely important consideration in terms of camouflaging the missile trains.

"What's more, it can be done very quickly, given the available technology," Korotchenko said.

Yuri Zaitsev, a veteran of both the Strategic Missile Forces and the Russian space program, also believes that the new missile trains will substantially increase the combat potential of the Strategic Missile Forces. Until recently, rail-based ICBMs were an integral part of Russia's surface-based nuclear deterrence force.

The Soviet Union began testing a missile train armed with the RT-23 solid-fuel missile in February 1983. The train was able to travel more than 1,000 kilometers (621 miles) per day without being discovered and could launch missiles from any point along its route. A missile train regiment included a train consisting of three locomotives and 17 railcars, with nine platforms carrying missile launchers. Missile trains were expected to become the core of the counterstrike group because of their improved durability and their ability to withstand a first enemy strike.

The first regiment armed with the RT-23UTTH Molodets missile went on combat duty in October 1987. Some 20 missile launchers had been deployed by the middle of 1988, and, in 1999 there were three missile divisions with four regiments each— that is, 36 launchers in total.

The trains were kept in stationary shelters located four kilometers apart. When on combat duty, they were dispersed. The Molodets only performed one live launch throughout its entire history, during a military exercise. A missile fired from the Kostroma region hit a target at Kamchatka. The Americans were unable to track down the train's coordinates before or after the launch.

The country's political leadership, which was represented by Mikhail Gorbachev at the time, decided in the early 1990s to suspend combat patrols by missile trains. Incidentally, according to Zaitsev, the Americans feared missile trains even more than the famous "Satan" missile — the RS-20 ICBM — and did all they could to make them disappear from the Strategic Missile Forces.

START II spelled the end of missile trains. Under the treaty, all RT-23UTTHs were to be scrapped. However, after the United States unilaterally withdrew from the Anti-Ballistic Missile Treaty, Moscow declared the START II null and void, especially since it was never ratified.

Nevertheless, a decision was made shortly afterward to decommission missile trains and gradually dismantle them. The first strategic train was disassembled in Bryansk in June 2003. Two years later, the last train of the Kostroma Missile Division was taken off combat duty and sent to a recycling yard, after spending a year at a storage base.

The fact that Russia has accumulated experience operating missile trains, in addition to a highly developed railway network, make the decision to restore a military railroad missile complex to Russia's nuclear missile arsenal a logical one.

http://rbth.ru/politics/2013/01/29/russia_may_resurrect_its_missile_trains_by_2020_22293.html

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Los Angeles Times

Pentagon Successful with Latest Missile-Defense Test off Pacific

By W.J. Hennigan
January 28, 2013

The Missile Defense Agency breathed a sigh of relief after carrying out a successful flight test of an interceptor missile from Vandenberg Air Force Base, northwest of Santa Barbara.

Saturday's test was on the Boeing-designed ground-based defense system's ability to defend the U.S. from the threat of ballistic missile attacks.

It involved the launch of a three-stage interceptor from a silo on the base at 2 p.m. PST. After blastoff, the booster deployed the Exoatmospheric Kill Vehicle made by Raytheon Co. to a designated point in space.

Once separated from the booster, the kill vehicle executed a variety of preplanned maneuvers to collect performance data in space.

The test did not involve a dummy target missile to intercept.

"If a target missile were present, the Exoatmospheric Kill Vehicle would collide directly with the threat warhead to perform a hit-to-kill intercept," the Missile Defense Agency said in a statement. "Engineering data from this test will be used to improve confidence for future intercept missions."

The kill vehicle is designed to lock on and eliminate high-speed ballistic missile warheads in space using nothing more than the sheer force of impact, known as a "hit-to-kill" defense, according to Raytheon.

Although the mission was deemed successful, the Missile Defense Agency has had a mixed record with the Ground-based Midcourse Defense System in the past.

Flight testing of the system was halted in early 2011 after a guidance error resulted in a failed intercept in a December 2010 test.

"Returning to flight has been the top priority for the … program. We have used industry and government's combined expertise to solve a complex technical issue related to what the interceptor's Exoatmospheric Kill Vehicle experiences in space," Boeing program director Norm Tew said in a statement. "Today's success is an important step toward our next goal of a successful intercept test."

The Missile Defense Agency did not say when the next test would take place.

In a statement, the agency said: "This test is the critical first step in returning ... to successful intercept testing."

http://www.latimes.com/business/money/la-fi-mo-missile-defense-test-20130128,0,4019647.story

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USAF COUNTERPROLIFERATION CENTER
CPC OUTREACH JOURNAL
MAXWELL AFB, ALABAMA

Pittsburgh Post-Gazette

Hagel Supports Nuclear Arms Cuts, Then Elimination

January 30, 2013

By Robert Burns, Associated Press (AP)

WASHINGTON -- Chuck Hagel, the likely next secretary of defense, would be the first to enter the Pentagon as a public advocate for sharply reducing the number of U.S. nuclear weapons, possibly without equivalent cuts by Russia. He supports an international movement called Global Zero that favors eliminating all nuclear weapons.

That puts him outside the orthodoxy embraced by many of his fellow Republicans, but inside a widening circle of national security thinkers -- including President Barack Obama -- who believe that nuclear weapons are becoming more a liability than an asset, less relevant to 21st-century security threats such as terrorism.

"Senator Hagel certainly would bring to office a more ambitious view on nuclear reductions than his predecessors," said Brookings Institution senior fellow Steven Pifer. "While he would likely take a less dramatic position in office, it might not be a bad thing to have a secretary of defense question what nuclear deterrence requires today."

The customary stance of defense secretaries in the nuclear age has been that the weapons are a necessary evil, a required ingredient in U.S. defense strategy that can be discarded only at the nation's peril.

Mr. Hagel, 66, takes a subtly different view -- one shared by Mr. Obama but opposed by those in Congress who believe that disarmament is weakness, and that an outsized U.S. nuclear arsenal must be maintained indefinitely as a counterweight to the nuclear ambitions of anti-Western countries such as North Korea and Iran.

Mr. Hagel argues for doing away with nuclear weapons entirely, but not immediately and not unilaterally. In a letter to Mr. Obama two months after his former Senate colleague entered the White House in 2009, Mr. Hagel wrote that Global Zero was developing a step-by-step plan for achieving "the total elimination of all nuclear weapons," but with a "clear, realistic and pragmatic appreciation" for the difficulty of realizing that goal.

Dozens of prominent politicians, diplomats and retired military leaders signed the letter. One month later, Mr. Obama spoke in Prague of "a world without nuclear weapons," while saying it might not happen in his lifetime. Mr. Obama declared that "as the only nuclear power to have used a nuclear weapon, the United States has a moral responsibility to act. We cannot succeed in this endeavor alone, but we can lead it, we can start it."

Mr. Hagel, a Republican from Nebraska whose nomination has drawn heated criticism for his past statements on Israel, Iran and gays, is likely to also face questions on nuclear issues at his Senate confirmation hearing scheduled for Thursday. A Vietnam war veteran, he served in the Senate from 1997 to 2009.

The questions actually began last week at the confirmation hearing for Sen. John Kerry, D-Mass, Mr. Obama's nominee for secretary of state, who was confirmed by the Senate on Tuesday. Sen. Bob Corker, R-Tenn., said he found Mr. Hagel's affiliation with Global Zero "very concerning," and he worried that Mr. Hagel's views appeared to make him "very different than previous defense leaders."

Mr. Kerry said he believes that Mr. Hagel is a realist on the topic of nuclear arms reductions. But he also acknowledged that when he first heard about Global Zero's central vision -- the elimination of all nuclear weapons -- "I sort of scratched my head, and I said, 'What? You know, how's that going to work?' " But then Mr. Kerry came to see this as nothing more than a long-range goal; "it's not something that could happen in today's world."

Mr. Hagel, indeed, is thinking long term. "Getting to global zero will take years," he wrote in the March 2009 letter to Mr. Obama on behalf of Global Zero. "So it is important that we set our course toward a world without nuclear weapons now, to ensure that our children do not live under the nuclear shadow of the last century."

Mr. Hagel stands out in this regard in part because history -- first, the demise of the Soviet Union, then the rise of terrorism as a global threat -- has changed how many people think about the deterrent value of nuclear weapons. For

decades after the birth of the atomic age in the 1940s, the chief concern was controlling the growth, and later managing the shrinkage, of nuclear arsenals without upsetting the balance of power.

Today, the thinking by many national security experts has shifted as the threat of all-out nuclear war has faded, and terrorist organizations with potentially global reach, such as al-Qaida, are trying to get their hands on a nuclear device.

"Hagel's views reflect the growing bipartisan consensus in the U.S. security establishment that whatever benefits nuclear weapons may have had during the Cold War are now outweighed by the threat they present," said Joe Cirincione, president of the Ploughshares Fund, which supports efforts to eliminate nuclear weapons.

Mr. Hagel was co-author of a Global Zero report last May that proposed, as an interim step, reducing the U.S. arsenal to 900 weapons within a decade, with half deployed and the other half in reserve. That compares with a current U.S. stockpile of 5,000, of which 1,700 are deployed and capable of striking targets around the globe.

The report said these cuts could be taken unilaterally, if not negotiated with the Russians or carried out through reciprocal U.S. and Russian presidential directives. It called the unilateral approach "less good" but feasible. At a later stage, China and other nations with nuclear weapons would be brought to the table for negotiations on further cuts on the path to global zero, it said.

The White House last year weighed options for substantial new cuts in the number of deployed weapons, possibly to about 1,000 or 1,100 and probably as part of a negotiation with Moscow. But a decision, following a lengthy review of U.S. nuclear targeting requirements, was put off prior to the November election. Officials and private experts close to the administration believe that Mr. Obama will soon embrace those cuts.

Previous secretaries of defense have supported reducing the U.S. nuclear stockpile under certain circumstances and have paid lip service to the United States' commitment under the 1970 Nuclear Non-Proliferation Treaty to eventually eliminate its nuclear arms. But none has pushed these ideas the way Mr. Hagel has. "It's historic," said Bruce Blair, a co-founder of Global Zero and a former Air Force nuclear missile launch control officer.

Leon Panetta, the current defense secretary, has not taken a public stance on future nuclear reductions. Some Pentagon chiefs, such as William Perry, became public advocates for eliminating nuclear weapons after leaving office.

At least one apparently harbored doubts about the conventional wisdom while still serving. In his 1995 memoir, Robert McNamara, who served as President John F. Kennedy's defense secretary, wrote that by the time he entered the Pentagon in 1961, he had privately concluded that nuclear arms served no useful purpose. But he could not say that publicly, he wrote, because it contradicted established U.S. policy.

http://www.post-gazette.com/stories/news/us/hagel-supports-nuclear-arms-cuts-then-elimination-672578/

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The Hill

White House Point Man on Arms Control Leaving for Harvard

By Julian Pecquet
January 30, 2013

President Obama's top adviser for arms control and weapons of mass destruction is leaving the White House to become the executive director of Harvard University's Belfer Center for Science and International Affairs, the center announced.

Gary Samore has served as Obama's coordinator for arms control and the prevention of weapons of mass destruction proliferation and WMD terrorism for the past four years. As such he led efforts to try to halt Iran's alleged nuclear weapons program and helped negotiate the New START arms control with Russia.

"Gary has been the principal architect of the President's Prague Agenda on nuclear security, arms control and nonproliferation," National Security Adviser Tom Donilon said in a statement. "I'm sure he'll help advance the Belfer Center's mission to prepare future generations for leadership on these challenging national security issues."

Before joining the Obama White House, Samore served as Special Assistant to the President and Senior Director for Nonproliferation under President Bill Clinton.

At the Harvard center, he's expected to "take a leadership role in the strategy, management, and operations of the Center's research agenda. He will become cochair of the Iran Working Group, participate in the Center's Managing the Atom Project, and carry out his own research and writing."

http://thehill.com/blogs/global-affairs/un-treaties/280227-white-house-point-man-on-arms-control-leaving-for-harvard

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Washington Times

Biden to Use Obama's Postelection 'Flexibility' on Weapons with Russia

By Dave Boyer, Washington Times
Thursday, January 31, 2013

Vice President Joseph R. Biden will discuss arms control Saturday with Russia's top envoy, a meeting that could shed light on President Obama's unguarded comment last year that he would have more "flexibility" to negotiate with the Russians after his re-election.

Mr. Biden will hold a one-on-one session with Russian Foreign Minister Sergey Lavrov in Munich during a four-day European trip with his wife, Jill, that begins Friday. Administration officials confirmed Thursday that the vice president's agenda with Mr. Lavrov includes an exploration of ways to reduce both nations' nuclear weapons stockpiles.

Mr. Obama "believes that there's room to explore the potential for continued reductions, and that the best way to do so is in a discussion with Russia," said Ben Rhodes, White House deputy national security adviser.

Mr. Biden also will meet with Syria's top opposition leader and discuss the Syrian conflict with Mr. Lavrov. Russia plays a key role in efforts to resolve the civil war because of its long-standing ties to the regime of Syrian President Bashar Assad.

Republicans in Congress are wary of Mr. Obama's plans for arms reduction and missile defense in Europe. Chuck Hagel, the president's nominee for secretary of defense, was questioned by lawmakers at his confirmation hearing Thursday about his support for the Global Zero nuclear-disarmament movement.

Under the auspices of the group, Mr. Hagel co-authored a report last year that advocates sharp reductions in nuclear weapons and a review of U.S. nuclear policy. Mr. Hagel told senators that any arms-control deal with Russia must be "bilateral and verifiable."

During a summit in South Korea last spring, Mr. Obama was caught in a "hot mic" moment as he spoke with outgoing Russian President Dmitry Medvedev. Mr. Obama asked the Russian for more time, "particularly with missile defense," until he was in a better political position to negotiate on the issue.

"This is my last election. … After my election, I have more flexibility," Mr. Obama said, strongly suggesting that he would win a second term.

Mr. Medvedev replied, "I will transmit this information to Vladimir." He was referring to Vladimir Putin, who since has reclaimed Russia's presidency. Mr. Putin and Mr. Obama have had a particularly contentious relationship.

When Mr. Obama's supposedly private comments were publicized in March, Republican presidential candidate Mitt Romney accused him of "pulling punches with the American people."

Some Republican lawmakers worry that Mr. Biden and National Security Adviser Tom Donilon, who will visit Moscow this month, will propose unilateral reductions in America's nuclear arsenal or modify missile defense without seeking congressional approval.

Sen. Jeff Sessions, Alabama Republican, asked Mr. Hagel at Thursday's confirmation hearing whether he would commit to notifying Congress of any planned changes to nuclear weapons treaties with Russia or alterations to missile-defense systems.

Mr. Sessions accused the Obama administration of keeping lawmakers in the dark.

"It seems like we've not been consulted on the Biden trip and the Donilon trip," Mr. Sessions said. "What's been going on is disturbing to us. The president said, you know, to Mr. Medvedev that we'll have more flexibility after the election. … He wasn't consulting with the American people, wasn't telling us or the Congress what he planned to do, but he was apparently willing to discuss it with the Russian leaders."

Mr. Sessions also told Mr. Hagel, "The president also has made it clear he believes in zero nuclear weapons. That is his policy for America. I think it's utterly unrealistic. Congress has a responsibility to the American people to ensure the national defense, and we need to know and have you share those negotiations with us."

Mr. Hagel said he was committed to keeping Congress informed.

Rep. Mike Rogers, Alabama Republican and chairman of the House Armed Services strategic forces subcommittee, wrote a letter to Mr. Biden this week trying to ascertain the administration's plans, as first reported by Foreign Policy magazine.

"Ahead of your unannounced discussions with Russian Foreign Minister Lavrov this weekend in Munich, and prior to Mr. Donilon's forthcoming February discussions in Moscow, I write seeking your assurance as to President Obama's plans for future potential U.S. arms reductions," Mr. Rogers wrote.

The lawmaker reminded the vice president that, as a senator in 2002, Mr. Biden urged the Bush administration to follow the precedent that "with the exception of the SALT I agreement, every significant arms-control agreement during the past three decades has been transmitted to the Senate pursuant to the Treaty Clause of the Constitution."

After a protracted fight in 2010, the Senate ratified the New START, a U.S. pact with Russia to reduce deployed, long-range nuclear warheads by up to 30 percent on each side.

Mr. Biden's trip will begin in Berlin, where he will meet with German Chancellor Angela Merkel. He will address the Munich Security Conference on Saturday before departing with Mrs. Biden for Paris and London, where the vice president will hold meetings with French President Francois Hollande and British Prime Minister David Cameron.

http://www.washingtontimes.com/news/2013/jan/31/biden-talk-arms-control-top-russian-envoy/?page=all#pagebreak

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RT (Russia Today) – Russia

Pentagon to Increase Cyber Security Force Fivefold – Report

28 January 2013

The Pentagon will expand its cyber security force from 900 personnel to a massive 4,900 troops and civilians over the next few years following numerous concerns over the dangerously vulnerable state of their defenses, according to US officials.

The *Washington Post* exposed details of the plan for the wide-scale expansion late on Sunday. An official confirmed that plans for an extremely significant expansion were underway, but remained ambiguous about the precise figure.

US Defense Secretary Leon Panetta said earlier this month that a 'cyber Pearl Harbor' would soon hit the US.

Whilst the *Washington Post* reported the official statistic to be 4,900, a US official told Reuters that the exact figures were "pre-decisional," whilst still confirming that Cyber Command was planning an enormous increase in the number of security personnel, potentially putting it on the same level as major combatant commands.

However, there are not yet any formal plans to change Cyber Command into a 'unified' command in the likeness of US Strategic Command, which is currently responsible for cyber security.

Included in the expansion would be the establishment of three separate forces united under the Cyber Command banner: 'national mission forces' (in charge of protecting computer systems that administer the US's power grid and critical infrastructure); 'combat mission forces' (in charge of planning and executing attacks on enemies); and 'cyber protection forces' (in charge of Pentagon computer system security).

The Pentagon will be on the lookout for "world class cyber personnel," to recruit, a defense official told the Washington Post on Sunday. They continued to report that as the expansion takes place, the Pentagon is making many cuts elsewhere, including in the size of its conventional armed forces.

An official who was not authorized to speak publicly told Reuters that any changes would be based on strategic and operational demands, and would take in to consideration the necessity to use taxpayers' money efficiently.

It has frequently been pointed out that the United States is in dire need of improving its cyber defenses, and particular concern has been aired over a series of attacks which destroyed the functions of over 30,000 computers at the Saudi Arabian state oil company, Saudi Aramco, in October. The decision to expand the security force was also made late last year.

The US suspected that the attacks were orchestrated in Iran, and some officials stated the deep-rooted concern that full-on cyber warfare was emerging between the two countries.

On January 18, RT reported the concerns of US General William Shelton, who described the atmosphere in Iran following the Stuxnet virus attack which targeted Iran's Natanz uranium enrichment facility.

"It's clear that the Natanz situation generated a reaction by them. They are going to be a force to be reckoned with, with the potential capabilities that they will develop over the years and the potential threat that will represent to the United States," he said.

A newsletter published by the Homeland Security Department's Industrial Control Systems Cyber Emergency Response Team, (ICS-CERT Monitor), reported earlier this month that 2012's cyber assault statistics demonstrated a 'terrifying' increase. While they identified 198 incidents last year, in 2009 that number was only nine.

These attacks are directed at important US infrastructure, and have been conducted primarily against the US's energy sector, which accounted for 40 per cent of all reported incidents. The ICS-CERT Monitor additionally stated the belief that there are only 18 to 20 people in the whole country qualified to protect the nation from such concerted attacks.

http://rt.com/usa/news/pentagon-increase-cybersecurity-863/

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Xinhua News – China
OPINION/Commentary

Commentary: China's Anti-Missile Test No Threat to Peace

January 28, 2013
by Liu Chang

BEIJING, Jan. 28 (Xinhua) -- China's Defense Ministry confirmed late Sunday that China succeeded in conducting a land-based mid-course missile interception test within its territory.

This was the second time that China announced such kind of missile test. A similar operation was launched on Jan. 11, 2010.

Such tests, which involve highly complicated technologies in detecting,tracking and destroying a ballistic missile flying in the outer space, have only been tried before by the United States and Japan.

The success in the anti-missile test, together with a string of other military equipment progress including the sail of China's first aircraft carrier and the test flight of a giant airfreighter, has demonstrated the country's fast-growing ability to defend its own national security and deter any possible threats.

It is understandable that some in the international community would speculate what China would do with these technologies. Some may even take these moves as proof for the ill-grounded "China threat theory."

China has maintained that these military advancements are purely defensive in nature, and has no specific targets.

The speedy disclosure to the public of such an important move has also testified to the country's increasing transparency in military affairs.

Moreover, a militarily stronger China will not abandon its determination to promote economic growth through the path of peaceful development and the construction of cooperative partnerships with countries around the world, as the Chinese people have been well aware that only a peaceful and stable world order can ensure China's national interests.

Also, at a moment when bloody conflicts continue to claim innocent lives in Syria and tensions over the nuclear issue on the Korean Peninsula are mounting in the Asia Pacific, it is well aware that no weaponry but candid talks, courageous compromises and wise diplomacy could effectively suffocate hostility, restore peace and nurture benevolence.

http://news.xinhuanet.com/english/indepth/2013-01/28/c_132133093.htm

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Japan Times – Japan
OPINION/Commentary

New Arms Race in East Asia

By Michael Richardson
January 28, 2013

SINGAPORE – The United States and its allies are in the midst of a major expansion of missile defenses in East Asia and the western Pacific. The planned network is designed to detect the launch of a ballistic missile, track the warhead as it arcs high above the earth, and shoot it down with an interceptor rocket before it can strike its target.

The U.S. says that the evolving missile defense system is primarily aimed at North Korea, which recently defied a United Nations Security Council ban by testing a long-range missile.

U.S. and South Korean analysis of the latest launch suggests that with further development and testing the missile will be able to reach the continental U.S. within the next few years.

U.S. Defense Secretary Leon Panetta said Jan. 17 that he was increasingly worried about the long-range missile the North tested last month. He said it reached as far as the Philippines and could lob a warhead much further. However, there is no evidence that North Korea has built a nuclear warhead small enough to fit on the missile.

Australia's foreign minister, Bob Carr, has described the launch as "illegal." With Australia taking its seat on the United Nations Security Council, Carr and his Japanese counterpart, Fumio Kishida, agreed to work together on an international response to the North Korean launch when they met in Sydney earlier this month.

China and Russia joined the condemnation of the North Korean missile launch. But they strongly oppose the U.S.-led ballistic missile defense (BMD) system, which is part of the Obama administration's move to shift military resources to the Asia-Pacific region to better protect U.S. interests, allies and friendly nations.

Australia signed a BMD Framework memorandum of understanding with the U.S. in 2004. U.S. officials have noted that Australia's Air Warfare Destroyer uses the Aegis Combat System and that could be upgraded in future to provide a missile defense capability.

Beijing and Moscow say that if the U.S.-led sea and land-based missile interception system develops as planned, it could degrade if not completely neutralize the mainstay of their existing strategic nuclear weapon force — intercontinental ballistic missiles (ICBMs) launched from land and from submarines at sea.

China is "greatly concerned" about the enhanced development of the U.S.-led BMD program, especially the recent increased deployment of the system in the Asia-Pacific area, says Gu Guoliang, director of the Center for Arms Control and Nonproliferation Studies at the Institute of American Studies in the Chinese Academy of Social Sciences.

"This certainly has implications for the credibility of China's limited number of nuclear weapons," he wrote Jan. 14. "If the United States continues its development of the BMD program, China will have to take measures to secure the credibility of its nuclear second-strike capability."

Most Asian and Western analysts believe that China has between 240 to 400 nuclear warheads, but only about 140 ICBMs (missiles with a range of more than 5,500 kilometers) to carry the warheads. If this estimate of China's nuclear arsenal is accurate, it is far smaller than the arsenals of the U.S. and Russia.

Both China and Russia are building new weapons that they say will counter the U.S. BMD network if it proves effective and develops global reach by 2020. They want to ensure that enough of their nuclear-armed missiles would survive a U.S. attack to be able to launch a devastating counterattack, or second strike.

In China's case, this includes developing a new ICBM, the DF-41, which can be launched at short-notice from mobile and hard-to-detect road or rail platforms. The DF-41 has an estimated range of between 12,000 and 15,000 km and be able to carry up to 10 separate nuclear warheads, each capable of striking different targets. This would complicate the task of any BMD system set up to block ICBMs.

The U.S. is expanding missile defense cooperation with two allies in Northeast Asia — Japan and South Korea — and may bring the Philippines into the network. The U.S. and Japan said in September that they had agreed to deploy another powerful early-warning missile defense radar, probably in southern Japan, to add to the capability of a similar X-Band radar stationed in the north of Japan since 2006.

On Jan. 15, Japan's Cabinet approved a request from the Defense Ministry for an extra $681 million to upgrade its missile defense system to "cope with a changing security environment." The ministry cited North Korea's missile development and growing activity in the seas and airspace around Japan's territory.

This was taken to mean China, which is at loggerheads with Japan over ownership of a group of islands in the East China Sea that are controlled by Tokyo but also claimed by Beijing.

U.S. officials have also been evaluating sites in Southeast Asia, particularly the Philippines, for a third X-Band radar to create an arc that would allow America and its regional allies to more accurately track any ballistic missile launches from North Korea and from parts of China. The radars could be networked with mobile missile interceptors deployed on U.S. and Japanese Aegis-equipped warships at sea and with land-based interceptors in the region.

The Aegis system, named after the mythological shield that defended the ancient Greek god Zeus, ties together space-based and other sensors, computers, displays, launchers and weapons.

A total of 27 Aegis warships are equipped for BMD and more are being built. Twenty three are in the U.S. Navy and four in Japan's Maritime Self-Defense Force. They are armed with Standard Missile-3 1A interceptors that the U.S. manufacturer, Raytheon Company, says offer initial capability against ballistic missiles with ranges up to 5,500 km.

Two improved versions of the Standard Missile are under development. The most advanced of the two is being codeveloped with a Japanese company and is scheduled for service by 2018. Raytheon says that a fourth version of the interceptor missile will provide "robust capability" against both intermediate-range ballistic missiles (3,000 to 5,500 km) and ICBMs. It says this interceptor is in the concept stage but is due to become operational by 2020.

The U.S. is deploying similar phased- array BMD systems in Europe and the Middle East, which it says are designed to counter Iranian missiles.

In response, Russia says it will build more powerful missiles and may resume production of the nuclear missile trains built by the former Soviet Union in the Cold War and dubbed the "vengeance weapon."

A missile train looks like a standard train and runs on public rails. But its disguised carriages and cargo containers could launch several missiles within three minutes, each carrying up to 10 separate warheads with ranges of 10,000 km.

Russia's Defense Ministry also said last month that it will start building hypersonic interceptor missiles in the next few years for its own expanded BMD system.

A 2010 Pentagon BMD report said the U.S. network, which includes ground-based rockets on U.S. soil intended to intercept long-range missiles coming from the west from North Korea, could not cope with large-scale Russian or Chinese missile attacks and was not intended to affect the strategic balance with those countries.

Clearly neither Moscow nor Beijing accepts U.S. assurances, but they may be using America's BMD plans as a pretext to do what they were going to do anyway. In either case, a new and destabilizing nuclear arms race is under way.

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

http://www.japantimes.co.jp/opinion/2013/01/28/commentary/new-arms-race-in-east-asia/

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Global Times – China
OPINION/Editorial

Missile Shield Adds New Layer of Security

January 29, 2013
By Global Times

China's Defense Ministry confirmed on Sunday that China had successfully conducted a second land-based mid-course missile interception test. At a time when East Asia is seeing intensifying disputes, the success of China's anti-missile test, together with the flight of its first heavy transport aircraft Y-20 a day earlier, inevitably led to speculation.

An anti-missile system is seen as a country's shield. China's anti-missile development started about 30 years later than the US, but it has a better technological base now compared with 30 years ago, which means China has the chance to narrow the gap.

China adheres to a defensive military policy. The scope of defense covers land, sea, and space.

China's current military strength is inadequate in terms of reaching its defense goals. Its defensive power is growing, as are demands to increase military strength. It's hard to say which is growing faster.

Who are China's rivals? What attitude should China take in dealing with its challenges? And what pace should China go at to build its effective defense range and retaliatory capability? We should have a clear mind on those questions. A

power with weak defenses will suffer losses, but having a strong defensive power could draw antagonism and even containment. A strong defense doesn't necessarily bring security.

The outside world will respond to whatever choice China takes on those questions. Different people hold different views on China's defense situation. Those who hold that aircraft carriers and anti-missile technology are unnecessary and those who advocate that they are urgently needed for China to prepare itself for war both have good arguments.

Today, China does not possess independent military technology that can worry the US. The primary task of China's defense was to deal with the Taiwan Strait crisis 10 years ago. The situation there has been alleviated now, but given the escalation in territorial disputes, the US pivot to the Asia-Pacific region and the complicated Korea Peninsula situation, it's hard to say whether China is safer or not.

China's annual expenditure on defense has surpassed $100 billion, ranking second in the world. The figure could also be seen as "small." This is because we cannot predict the strategic environment we will face as China's economic strength gradually approaches that of the US.

China's rise challenges the current international order and affects the development of certain global powers. We have to endure the pressure brought by China's development. Defense is the backbone that will support us.

Some believe China's current military power is sufficient for self-defense purposes. Such arguments are based on low standards. A major power should have the vision to make early preparations for more difficult defense tasks.

http://www.globaltimes.cn/content/758791.shtml

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People's Daily – China
OPINION/Commentary

Commentary: China's Greater Military Strength Promises Peace in Asia-Pacific Region

By Tian Wenlin
January 30, 2013

China's military industry has recently had a constant stream of good news, such as the commissioning of the China's first aircraft carrier "Liaoning ship", the successful test flight of the Y-20 large transport aircraft and the operation of the Beidou Navigation Satellite System. But for some one-track western media, China's improved military strength seems to have further verified the view of "China Military Threat Theory".

However, the simple integration of China's improved military strength and hegemonism is another empirical error. Contrary to some westerners' speculation, China enhances its arms just to better maintain regional and international peace.

Without a stable and peaceful external environment, China cannot realize its "Chinese dream" of achieving national rejuvenation. However, the tree desires stillness but the wind will not cease---things do not occur as people wish. The United States has accelerated its strategy of eastward movement to prevent the rise of China and China has been faced with increasingly complicated security environment in its bordering areas, and thus wars have become imminent. Obviously, as a structural contradiction, the security contradiction between the existing and emerging great powers cannot be avoided or overstepped but can only be managed and controlled.

Peace between nations is based on power balance. Strength is a prerequisite for goodwill and power is a precondition for peace. During the Cold War, it was due to the military balance between the U.S. and the Soviet Union that the two sides learnt restraint and did not escalate the Cold War into the Hot War. But upon the end of the Cold War, various regional conflicts and local wars occurred one after another. The exchange of inadequate national defense

preparations for opponents' pity will only arouse opponents' greed and malice in the end. On the contrary, adequate military preparations will make opponents full of worries, thus increasing the probability of peace.

"One should never intend to do harm to others, nor should one forget to guard against the harm others might do to him." On security issue, China has to rely on itself instead of pinning its hope on opponents' "goodwill". The news that China's military strength has been improved is particularly timely, especially under the circumstances of incessant external provocation and increasing security threat on the east side of China. The greater China's military strength is, the more promising the maintenance of peace and stability in Asia-Pacific region will be.

Tian Wenlin is a special commentator of the People's Daily and associate researcher of the China Institute of Contemporary International Relations (CICIR).

http://english.people.com.cn/90786/8113893.html

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Gulf News.com – U.A.E.
OPINION/Columnist

India's K-15 Launch and the Dangers Beyond

Even as New Delhi seeks deterrence stability against China, it realises that the latter's nuclear arsenal looks beyond India to include US and Russia

By Arun Prakash, Indo-Asian News Service (IANS)
January 30, 2013

The reason why nations place a significant part of their nuclear arsenals on board nuclear-propelled ballistic missile submarines (SSBNs) is because of their invulnerability, in comparison with static air force bases and missile sites or even mobile launchers. Once at its patrol station, a few hundred metres underwater, the SSBN is considered safe from prying sensors, including satellites.

From this top-secret redoubt, her battery of ballistic missiles poses the threat of a devastating riposte to any adversary who may contemplate a nuclear first-strike.

In this context, the final launch of India's K-15 submarine-launched ballistic missile (SLBM), marking successful completion of its development programme, is yet another feather in the cap of Defence Research and Development Organisation (DRDO). This event denotes the achievement of mastery over a sequence of esoteric technologies by Indian scientists. These include safe underwater ejection of the missile, ignition of its rocket-motor at the moment of breaking surface, control during its ballistic-trajectory and precise delivery of its payload over the target.

All that remains to be tested is how the K-15's nuclear warhead will fare during its hypersonic flight and white-hot re-entry into the atmosphere; and the kind of explosive yield that its nuclear blast will deliver. However, the last bit may remain an unknown, in view of India's self-imposed 1998 test-moratorium and the Comprehensive Test-Ban Treaty.

The primary aim of India's no-first use (NFU) nuclear arsenal has always been to deter China from threatening it or attempting coercion with its powerful nuclear arsenal. It is for this reason that Indian scientists have steadfastly persevered, since the early 1980s, in their endeavours to produce a missile capable of delivering a sizeable nuclear warhead out to an inter-continental range of 5,000-8,000km. Their worthy efforts were crowned by success, with the successful test-firing of the Agni-V last year, and India can now claim to have an effective, land-based, nuclear deterrent against China.

An SSBN, being a vessel of immense strategic value, has to be deployed with care and secrecy in areas which are not frequented by shipping traffic. Their patrol stations are, therefore, chosen in remote parts of the ocean where they can loiter for months at a time, without fear of detection or interference. The obvious corollary is that their missile range must be adequate to reach adversary targets from safe waters. For example, the Chinese Jin-class SSBN is armed with the JL-2 SLBM, which has a range of 8,000km and can target both San Francisco and Kolkata from the South China Sea.

In this context, it becomes obvious that the 750km range of the K-15 is grossly insufficient for it to zero in on targets in mainland China from home waters. To be a truly effective third leg of the nuclear triad, an Indian nuclear submarine will have to await the delivery of an underwater launched missile of intercontinental range, so that it can threaten desired targets from safe patrol areas in the Bay of Bengal and Arabian Sea.

However, it must be recognised that the American, Russian and Chinese navies had all followed a similar route before achieving SLBM capability of intercontinental range. Installed on board the soon-to-be-commissioned SSBN Arihant, there is no doubt the K-15 will serve as the most valuable stepping-stone and learning tool for more capable SLBMs that will follow.

Nuclear deterrence is all about sending the right signals to the adversary and there is a school of thought that Pakistan has already misinterpreted, inadvertently or deliberately, a number of Indian signals. The K-15 must not add to this list.

Even as India sought deterrence stability with respect to China, it clearly understood that the latter's strategic calculus and nuclear arsenal looked well beyond India to include the US and Russia. It is a most regrettable aspect of sub-continental geopolitics that Pakistan has been unwilling to acknowledge that India's arsenal, too, was predicated on factors other than Pakistan and has consistently sought to acquire parity with India.

Regardless of India's true intentions in undertaking the Pokhran I nuclear test in May 1998, Islamabad jumped to the conclusion that India had embarked on a Pak-centric nuclear weapon programme and accelerated its own ongoing bomb project. The test of the liquid-fuelled, nuclear-capable 150km-range *Prithvi* missile in 1988 and that of the 1,500km-range *Agni* the following year confirmed Pakistan's apprehensions that India's nuclear capability was intended, not against China, but itself. The range of these missiles seemed to confirm this. India's much publicised ballistic-missile defence programme, the launch of the Arihant and the maiden display of *Agni* V during the Republic Day parade may have all added to this paranoia. None of these developments are meant to be Pakistan-centric, but the induction of the 750km K-15 SLBM will certainly fuel the fears of Pakistan.

In a related context, since nuclear weapons have a large kill radius, accuracy is a relatively minor consideration for the delivery system — as long as the targeting strategy calls for counter-value attacks against cities, envisaged in the current Indian nuclear doctrine. However, the mention of single-digit accuracy' by the DRDO chief in the K-15 context raises the spectre of 'counter-force' targeting and an entirely different ball game.

Pakistan's nuclear ambitions have acquired such a desperate edge that its fissile plutonium production rate, from China-supplied reactors, will soon enable it to acquire one of the world's largest warhead inventories. Apart from inducting cruise missiles, Pakistan has also stepped into the dangerous realm of tactical nuclear weaponry, and, there has been intriguing mention of Pakistan Navy's Strategic Forces Command being the 'custodian of the nation's second-strike capability'.

With India's scientists having done their job well, it is high time India's national security experts and analysts step on to the strategic stage and, apart from considering the strategic context of the K-15, reflect on the state of mutual suspicion, rather than the actual needs of deterrence and stability that seem to be driving the growth of nuclear arsenals on the sub-continent.

Admiral (retd.) Arun Prakash is a former chief of the Indian Navy and former chairman, Chiefs-of-Staff Committee.

http://gulfnews.com/opinions/columnists/india-s-k-15-launch-and-the-dangers-beyond-1.1139370

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The Hill
OPINION/Congress Blog

Mounting Nuclear and Missile Menace

By Peter Brookes, senior fellow, Heritage Foundation
February 1, 2013

USAF COUNTERPROLIFERATION CENTER
CPC OUTREACH JOURNAL
MAXWELL AFB, ALABAMA

The security news from abroad hasn't been good for ol' Uncle Sam lately, especially the alarming headlines coming from North Korea and Iran, which tell troubling tales of advancing nuclear weapons and ballistic missile programs.

Not only is this worrisome, it also provides plenty of warning of some of the hot issues we'd better take firmly into account as we develop strategies such as the upcoming Quadrennial Defense Review and prioritize Pentagon budgets.

Just last week, North Korea provocatively announced to the world — but especially for its sworn enemy, the United States, to hear--its intention to conduct a third nuclear weapons test sometime soon, following tests in 2006 and 2009.

Some experts believe the purpose of the newest test, when it comes, is to further refine North Korea's ability to develop a nuclear warhead for placement atop the various ballistic missiles in its inventory.

This is no small matter.

Conducting an underground nuclear test is one thing, but "weaponizing" that test platform, that is, engineering it to fit in a missile nosecone and preparing it to withstand the extreme temperatures and pressures of long-distance flight is another thing altogether.

It gets worse.

There's a good chance that Pyongyang is prioritizing the development of a warhead for its intercontinental ballistic missile (ICBM) program, which is developing a platform capable of reaching the United States.

This notion is buttressed by North Korea's successful satellite launch in December. For the first time since its initial attempt in 1998, Pyongyang was able to send a small satellite into orbit, using a multi-stage space launch vehicle.

Of course, the dirty little scientific secret is that if you can launch a satellite payload of, perhaps, as little as 1,000 pounds into orbit, you can also, in theory, launch a nuclear warhead toward a target anywhere on the Earth's surface.

Without doubt, we're at the top of North Korea's target list.

Halfway around the world, the news from Iran isn't any better, where Tehran is reportedly vastly increasing its capacity for enriching uranium.

As most are aware, Tehran has been involved in a concerning — and largely covert-- nuclear program for over two decades; many international experts are convinced it has a "military dimension," a euphemistic phrase that means Iran is building bombs.

Naturally, Iran claims that its nuclear program is for peaceful power purposes, but that idea is undermined by the fact that Tehran has built a number of its nuclear facilities underground or on military bases.

Indeed, the cautious-to-condemn International Atomic Energy Agency, the UN's nuclear watchdog, has expressed worry Iran is not only being less than forthcoming about its nuclear activities (as required by international treaty), but may be involved in nuclear warhead design and associated explosives testing.

While estimates vary due to the opacity of Tehran's nuclear activities, it's estimated that Iran could have the scientific and material wherewithal to produce its first nuclear weapon in the next few years.

That's not the end of it.

Like North Korea, Iran has taken a strong interest in the prestige and power associated with developing and fielding a significant ballistic missile arsenal. Indeed due to technology transfers, some of Tehran's missiles are based on Pyongyang's designs.

Today, Iran has the largest and most varied ballistic missile force in the Middle East. Its missile arsenal can reportedly strike targets in the region as well as parts of Southeastern Europe — for the moment at least.

Not surprisingly, Tehran has also become involved in a civilian space program, which recently featured the Iranian press heralding the sending of a monkey into space, putting Iran on a trajectory to put a man into orbit someday.

More importantly, again like North Korea, Tehran has developed the capability to launch a satellite into orbit — and has done so three times now, joining the club of space-faring nations.

Consequently, supported by its various space launch efforts, the U.S. intelligence community estimates publicly that Iran will be able to field an ICBM by 2015, a few short years from now.

With the right outside assistance, an ICBM capability could be here even sooner.

Of course, the question is: What can or should be done?

Diplomacy and economic sanctions haven't worked to end North Korean or Iranian missile or nuclear programs so far. Military responses are fraught with the obvious risks and Cold War-style "Duck and Cover!" isn't the answer, either.

While other options are being pursued to capture the growing ballistic missile and nuclear threats radiating from Pyongyang and Tehran, nothing makes more sense than investing in American missile defense.

With the technologies available today, a capable missile defense will not only protect us from ballistic missiles and their nuclear and other payloads, it will provide decision-makers with additional policy options beyond retaliation.

Perhaps even better, due to missile defense's ability to blunt the effectiveness of the missile threat, it may well deter aggression with these weapons against us in the first place.

As such, the best option now is to move forward vigorously with developing and deploying missile defenses such as advanced SM-3 systems to guard the homeland, our troops abroad and our allies and friends from the growing nuclear and missile menace.

Brookes is a former deputy assistant Secretary of Defense.

http://thehill.com/blogs/congress-blog/foreign-policy/280575-mounting-nuclear-and-missile-menace

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