USAF COUNTERPROLIFERATION CENTER
CPC OUTREACH JOURNAL
MAXWELL AFB, ALABAMA

Issue No. 1044, 08 February 2013

Articles & Other Documents:

Featured Article: Roll Forward the Doomsday Train

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Bloomberg News

U.S. Ready for 'Serious' Direct Nuclear Iran Negotiations

By Jonathan Tirone
February 2, 2013

The U.S. is ready for direct talks with Iran over its contested nuclear program as soon as the Islamic Republic's Supreme Leader Ayatollah Ali Khamenei gives a commitment to negotiate, Vice President Joe Biden said.

"When the Iranian Supreme Leader is serious, we have made it clear at the outset that we would be prepared to meet bi-laterally with the Iranian leadership," Biden said today at the Munich Security Conference. "We would not do it in secret. That offer stands. It is real and tangible."

U.S. and Iranian diplomats haven't acknowledged bilateral meetings since October 2009, when they came together at a nuclear gathering in Geneva. The so-called P5+1, composed of China, France, Germany, Russia, the U.K. and U.S., held a series of meetings with Iran to defuse tension over the Persian Gulf nation's atomic work. Those negotiations broke down in June at the last round of talks in Moscow.

"We have to convince Iran that it isn't about regime change," Russian Foreign Minister Sergei Lavrov said at the Munich conference. "Any use of force, any threat of use of force will be unacceptable."

Iranian Foreign Minister Ali Akbar Salehi is scheduled to speak on a panel at the Munich conference tomorrow.

No Progress

United Nations nuclear monitors, who continue to verify the non-military use of Iran's atomic material, have been investigating the country's alleged weapons research for a decade. Iran, under dozens of international sanctions because it refuses to suspend its atomic work, has maintained its nuclear activities are peaceful.

"Let's be frank, we haven't gotten anywhere with Iran in the last year," German Foreign Minister Guido Westerwelle said today in Munich. "It is essential that we focus all our efforts on a diplomatic solution."

The U.S. imposed a diplomatic moratorium on Iran after the 1979 Islamic revolution, when 52 U.S. diplomats were held hostage in Tehran for 444 days. Israel, a key U.S. ally in the Middle East, has said military force may be needed to prevent Iran from acquiring nuclear weapons.

"Iran also has legitimate security concerns," Lavrov said. "It has been attacked several times while it hasn't attacked anyone."

Iranian nuclear scientists and facilities have been targeted by assassins and sabotage. Iran, which supports the militant Islamist group Hezbollah, fought an eight-year war with Iraq until 1988 after neighboring forces invaded it.

"There is still time, there is still space for diplomacy backed by pressure to succeed," Biden said. "The ball is in the government of Iran's court, and it's well past time to adopt a serious good faith approach to negotiations."

The leader of Iran's parliament, Ali Larijani, said last week that direct talks with the U.S. aren't a ''red line.'' The nations Supreme Leader Ayatollah Ali Khamenei, who has decreed nuclear weapons forbidden under the Islamic republic's laws, has in the past criticized what he described as Western hypocrisy over the atomic issue.

http://www.bloomberg.com/news/2013-02-02/u-s-ready-for-serious-direct-nuclear-iran-negotiations.html

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MEHR News Agency (MNA) – Iran
February 5, 2013

Iran to Send Astronaut to Space by 2015

TEHRAN, Feb. 5 (MNA) – The Head of Iran's Aerospace Research Institute, Space Agency, says Iran will send its first astronaut by 2015.

Speaking in the closing ceremony of Aerospace Systems Competition, Mohammed Ebrahimi assessed sending astronaut to space as one of the Agency's important projects.

"In the second phase, this project will send first Iranian astronaut to suborbital space, and sending the astronaut to orbital space and returning him back in full health," he said.

He asserted that to achieve this, the Institute would need to developments in 10 technology strands. "A strategic action plan should also be developed," he added.

Ebrahimi also pointed to the Agency's programs in the first phase, saying that "in the first phase, 2 trained Iranian astronauts will be send to suborbital space in 200Km altitude for 15 to 30 minutes." "After this phase, launching astronauts to orbital space would be possible," he said, "to enter this stage; much work should be done to prepare the grounds."

Ebrahimi pointed to steps to send astronauts to space, saying that "currently, US, Russia, and China, which are world's aerospace giants, are working on bio-capsules to send man to space." "To send astronauts to space, we need 10 technology strands such as propellants, power production, robotic constructs, information technology and communications, bio-recognition, exploration and operations, simulation, and entry to space," Ebrahimi said.

Commenting on the Agency's future plans, Ebrahimi said that Iran would send its first astronauts by 2016 to 2018 to suborbital space and return him back.

http://www.mehrnews.com/en/NewsDetail.aspx?NewsID=1809648

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Press TV – Iran
Tuesday, February 5, 2013

Iran's Nuclear Sites Impervious to any Attack: Cmdr.

A senior Iranian commander says the nuclear facilities of the Islamic Republic are totally impervious to any potential attack by the US or the Israeli regime.

"Today, we have achieved the defense capability to make vital infrastructure, especially nuclear installations, completely impregnable and impenetrable," Deputy Commander of Khatam al-Anbia Air Defense Base General Shahrokh Shahram said on Monday in an interview with Iran's Arabic-language news channel, Al-Alam.

> *Iran has tested the impenetrability of its nuclear sites with various weapons and tactics in different military drills, the commander said, adding that it can now be assured that the country has reached the capability to defend its sensitive sites with an indigenous defense system in the best possible way.*

The US and Israel allege that Iran's nuclear activities have been diverted towards non-civilian purposes and, based on the claim, have at times adopted an aggressive stance towards Iran, threatening to launch a military strike against the country.

Iran has categorically rejected the allegation, as the UN nuclear watchdog, the International Atomic Energy Agency (IAEA), has never found any evidence during its inspections of Iran's nuclear facilities to support the claims regarding Iran's nuclear energy program.

Iran has frequently declared that its nuclear energy program is solely civilian and made it clear that any aggression against the country will definitely face a crushing response.

http://www.presstv.ir/detail/2013/02/05/287365/irans-nuclear-sites-impervious-to-attack/

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Reuters – U.S.

Iran Nuclear Talks Set for Feb. 26; Signals from Tehran Mixed

** Citing "arrogance," official signals mistrust of West*
** Mixed message may reflect fragmented Iran political system*
Tuesday, February 5, 2013
By Yeganeh Torbati

DUBAI, Feb 5 (Reuters) - Iran and world powers announced new talks on Tehran's nuclear program on Feb. 26, but hopes of progress after Tuesday's announcement were tempered when an Iranian official said the West's goal in talking was to undermine the Islamic republic.

First word of the meeting, to be held in Kazakhstan, came in comments from Iran's Supreme National Security Council to state news agency IRNA. Later, a spokesman for EU foreign policy chief Catherine Ashton said she hoped to make progress in allaying concerns about a program Iran denies has a military purpose.

Both sides said the widely expected appointment to meet was made on Tuesday by Iran's deputy nuclear negotiator Ali Bagheri and European Union counterpart Helga Schmid. However, there were immediate signs from Iran, which holds a presidential election in June, that powerful figures were skeptical of their worth.

Western powers say Iran may be close to having the capacity to build a nuclear weapon, though Tehran insists it is seeking only electricity. The United States and its allies, which have imposed tough economic sanctions, are keen to show progress on an overall agreement for curbing and monitoring Iran's nuclear activities - not least because Israel, seeing itself especially threatened, has warned it could mount a pre-emptive attack.

"I hope that Iran is coming to these talks with a real sense of 'we want to make progress.' In every round I start from this principle, that the purpose of the meeting is to engage and I hope we will see that this time," Ashton told reporters in Brussels.

In Washington, U.S. State Department spokeswoman Victoria Nuland told reporters: "Our view is it's time for Iran to discuss substance." She declined provide details of what proposals the major powers will bring to the talks.

"What we want, though, is ... to see Iran take advantage of this opportunity and allay the international community's concerns (about its nuclear program)," she said.

WESTERN "ARROGANCE"

But comments by Abdollah Haj-Sadeghi, a representative of Supreme Leader Ayatollah Ali Khamenei to Iran's elite Islamic Revolutionary Guard Corps (IRGC), indicated continued differences of opinion in Tehran; those may limit the prospect of narrowing the dispute with the West at the talks in Almaty, the first of their kind since negotiators met in Moscow in June.

"They will never want real dialogue and negotiations," Haj-Sadeghi was quoted as saying by the ISNA news agency, addressing religious students in the theological centre of Qom.

"Their goal is to inhibit the Islamic revolution. If they can't eliminate the Islamic revolution, they want to weaken and inhibit this revolution," he said. "A revolution with a religious nature cannot reconcile itself with arrogance."

Iranian officials often use "arrogant" to denote Western nations. It was not immediately clear whether he was referring to the continuing process of negotiation with the six world powers, known as the P5+1, or to the prospect of direct negotiations with the United States, Iran's main adversary.

Haj-Sadeghi's remarks contrasted with those of Iranian Foreign Minister Ali Akbar Salehi, who said in Berlin on Monday that he was "optimistic" regarding what he saw as a new approach from the United States regarding Iran.

Shashank Joshi, a senior fellow and Middle East specialist at the Royal United Services Institute, said the mixed messages reflected Iran's "fragmented" political system, in which power is divided between elected and unelected bodies.

"Haj-Sadeghi's comments are consistent with a widely held Iranian view: That sanctions are less about the nuclear issue and more about regime change," Joshi said.

"He may therefore have been repeating a standard line rather than responding to Salehi."

Many Iranian leaders may be wary of entering talks which quickly collapse, Joshi said.

"Some of this rhetoric is therefore a way of managing expectations, and pushing responsibility for failure back on to the West," he said.

Additional reporting by Fredrik Dahl; Writing by Marcus George; Editing by William Maclean, Alastair Macdonald and Cynthia Osterman.

http://www.reuters.com/article/2013/02/05/iran-nuclear-talks-idUSL5N0B55VI20130205

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Press TV – Iran
Thursday, February 7, 2013

Ayatollah Khamenei Rejects Talks with US under Pressure

Leader of the Islamic Revolution Ayatollah Seyyed Ali Khamenei has rejected any talks with the United States under pressure and threats.

“I am not a diplomat. I am a revolutionary and speak frankly, honestly, and firmly. An offer of talks makes sense only when the side [that makes the offer] shows its goodwill,” Ayatollah Khamenei said in a meeting with the officials and commanders of Iran’s Navy on Thursday.

“You (the Americans) point the gun at Iran and say either negotiations or we pull the trigger! You should know that pressure and negotiations don’t go together, and the [Iranian] nation will not be intimidated by such things.”

Ayatollah Khamenei pointed to the remarks by American officials that ‘the ball is now in Iran's court,’ and noted, “The ball is in your court, because you should answer the question of whether speaking of negotiations at the same time as continuing pressure and threats makes any sense at all.”

> *The Leader pointed out, however, that, “We, of course, understand their (the Americans’) need for negotiations, because the Middle East policy of the Americans has failed, and in order to compensate for this failure, they need to play a trump card.”*

Taking Iran to the negotiating table is the trump card that the US needs, Ayatollah Khamenei noted, adding that the US seeks to tell the world it has good will. “However, no one sees any goodwill.”

Speaking at the 49th annual Munich Security Conference in Germany on February 2, US Vice President Joe Biden said Washington was ready to hold direct talks with Iran over the country’s nuclear energy program.

The United States, the Israeli regime and some of their allies have repeatedly accused Iran of pursuing non-civilian objectives in its nuclear energy program.

Iran argues that as a signatory to the nuclear Non-Proliferation Treaty (NPT) and a member of the International Atomic Energy Agency (IAEA), it is entitled to develop and acquire nuclear technology for peaceful purposes.

http://www.presstv.ir/detail/2013/02/07/287768/no-talks-with-us-under-pressure-leader/

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The London Guardian – U.K.

Ayatollah Ali Khamenei Rejects chance of Direct Talks with US

Iran's supreme leader forbids officials from engaging in bilateral negotiations despite foreign minister welcoming US overtures

By Saeed Kamali Dehghan
Thursday, 7 February 2013

Iran's supreme leader, Ayatollah Ali Khamenei, has killed off hopes for early talks with the US by forbidding officials in Tehran from holding bilateral negotiations with Washington.

"Negotiating with America will not solve any problems," Khamenei told air force commanders who had gathered on Thursday as part of anniversary celebrations of the 1979 Islamic revolution.

"If some people want American rule to be established again in Iran and are turning a blind eye to the country's national interests and independence in order to please Americans, then the nation will confront them," he said, according to his official website.

The warning came days after the US vice-president, Joe Biden, said Washington would be prepared for direct talks with Iran if Khamenei showed seriousness.

"There is still time, there is still space for diplomacy backed by pressure to succeed. The ball is in the government of Iran's court," Biden said during a security conference in Munich at the weekend.

"But we have also made clear that Iran's leaders need not sentence their people to economic deprivation and international isolation."

Khamenei's warning was a slap in the face for Iran's foreign minister. Ali Akbar Salehi welcomed Biden's comments, according to Iran's state-run Press TV, saying: "I would like to say that these are good signs … We are a rational government and we look into resolving all outstanding international issues through negotiation.

"This is not a forbidden zone. This is not a red line when it comes to holding bilateral talks on particular subjects. Here I mean the nuclear issue. This is not a red line."

Khamenei made clear in Thursday's speech that talks with the US will not feasible as long as Washington holds on to it carrot-and-stick approach to Tehran, offering talks while imposing its toughest sanctions against the Islamic republic.

In a direct response to Biden's comments, the ayatollah said: "The ball, in fact, is in your court. Does it make sense to offer negotiations while issuing threats and putting pressure?

"You are holding a gun against Iran saying you want to talk. The Iranian nation will not be frightened by the threats."

He described talk proposals as a "trick", adding: "American policy in the Middle East has been destroyed and Americans now need to play a new card. That card is dragging Iran into negotiations."

A public debate has recently been taking place inside Iran over pros and cons of direct talks with the US, with national newspapers publishing articles on the topic and state-run television holding debates. It led to speculations that the Islamic republic was softening up the public opinion and paving grounds for Tehran diplomats to be able to hold face-saving negotiations with "the Great Satan".

Khamenei made clear on Thursday that the times has not come yet, dashing hopes that bilateral talks between Tehran and Washington would help to find a way out for the current stalemate over the Islamic republic's nuclear programme. His remarks will loom over nuclear talks between Iran and the world's major powers that have been scheduled to resume in Almaty, Kazakhstan, later this month after a eight-month hiatus.

The UK foreign secretary said that the west will have "an updated and credible offer for Iran".

Welcoming confirmation on nuclear talk between Iran and the group P5+1, William Hague said: "We want to work with Iran, in the spirit of mutual respect, on the concrete steps needed to address the international community's serious concerns about its nuclear programme. We will approach the talks in Almaty with an updated and credible offer for Iran. The onus is on Iran to respond seriously and turn its declared willingness to negotiate into concrete action."

Also , Khamenei reacted to an embarrassing public spat between Iran's president, Mahmoud Ahmadinejad, and the speaker of the parliament, Ali Larijani, saying: "Officials need to take into account the national interest and put their squabbles to one side."

http://www.guardian.co.uk/world/2013/feb/07/ayatollah-ali-khamenei-direct-tallks-us

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Xinhua News – China

DPRK Denounces U.S. for Double Standards on Rocket Launches

February 2, 2013

PYONGYANG, Feb. 2 (Xinhua) -- The Democratic People's Republic of Korea (DPRK) on Saturday criticized the United States for employing double standards on the DPRK's space program and South Korea's rocket launch.

"The U.S. unconditional criticism of our satellite launch and its unconditional approval of a satellite launch by the South are at the height of double standards," an unidentified foreign ministry spokesperson was quoted by the state-run KCNA news agency as saying.

The accusation came three days after South Korea successfully launched its first space rocket, the Korea Space Launch Vehicle-1, putting a satellite into orbit.

U.S. State Department spokeswoman Victoria Nuland said Thursday that there was no basis for comparing the rocket programs of the DPRK and South Korea, given that South Korea "has developed its technology responsibly."

Washington and Seoul have long called the DPRK's rocket launch a cover for a test of Pyongyang's banned ballistic missile technology, while Pyongyang has insisted that the test was for peaceful purposes only.

On Jan. 22, the UN Security Council condemned the DPRK's satellite launch last December, demanding the DPRK not proceed with any further launches using ballistic missile technology.

The DPRK on Jan. 24 vowed to conduct more rocket launches and a higher-level nuclear test targeting its "sworn enemy," the United States.

Chinese Foreign Ministry spokesman Hong Lei said Wednesday that China opposes any moves that might escalate tensions and are not conducive to the denuclearization of the Korean Peninsula.

Beijing also calls on all parties to work together to safeguard the peace and stability of the peninsula.

http://news.xinhuanet.com/english/world/2013-02/02/c_132146607.htm

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Space Daily.com

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N. Korea Military Meeting Hints at Nuclear Test

By Staff Writers
Seoul, Agence France-Presse (AFP)
February 3, 2013

North Korean leader Kim Jong-Un has chaired a high-level meeting that discussed a "great turn" in military capability, state media said Sunday, fuelling expectations of an imminent nuclear test.

Kim made a "historic" speech at the ruling party's Central Military Commission meeting, attended by the heads of the army, the National Defence Commission and the strategic rocket force, the official Korean Central News Agency (KCNA) reported.

The meeting discussed "bringing about a great turn in bolstering military capability", said KCNA, which gave no date for the meeting or details of Kim's speech.

Experts and intelligence sources believe the country has completed preparations for a third nuclear test which it threatened in response to tightened UN sanctions imposed for a long-range rocket launch last December.

Over the past week Pyongyang has issued a series of daily warnings threatening action over the sanctions, including a promise Saturday of the "toughest retaliation".

Several observers in South Korea believe the nuclear test will come before Lunar New Year starts on February 10.

In his "important" speech to the military commission, Kim Jong-Un issued specific guidelines for "defending the security and sovereignty of the country", KCNA said.

It did not elaborate but said participants vowed to "thoroughly implement the military tasks set forth".

The North insists its December rocket launch was a purely scientific mission to put a satellite into orbit.

But the US and its allies, including the South, viewed it as a pretext for a ballistic missile test that violated UN resolutions prompted by the North's rocket launches and nuclear tests in 2006 and 2009.

South Korean President Lee Myung-Bak urged officials to "stand well prepared" for any test after a meeting Sunday with his top security advisers, the South's Yonhap news agency said.

Seoul's chief nuclear envoy Lim Sung-Nam left for Beijing Sunday to meet his Chinese counterpart as part of last-minute diplomatic efforts to dissuade Pyongyang from another atomic test, it said.

China is the isolated North's sole major ally and economic lifeline. It chairs long-stalled six-nation talks on the North's nuclear disarmament, which have been at a standstill since December 2008.

Recent satellite imagery showed unusually busy activity at the northeastern nuclear test site at Punggye-ri. The North has covered the entrance to a tunnel there in an apparent attempt to block satellite monitoring, Yonhap said last week.

On Monday South Korea and its ally the United States will start a joint naval exercise seen largely as a warning to the North.

The three-day drill involving a US nuclear-powered submarine and other warships is expected to be held in the Sea of Japan (East Sea) off the South Korean port city of Pohang.

The North Saturday slammed the drill as "war exercises" aimed at invading the isolated state.

Pyongyang also bestowed a new round of awards and medals on thousands of scientists behind the latest rocket launch, after making more than 100 awards last December.

http://www.spacedaily.com/reports/N_Korea_military_meeting_hints_at_nuclear_test_999.html

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The Chosun Ilbo – South Korea
February 4, 2013

Is N.Korea Planning Simultaneous Nuke Tests?

North Korea has virtually finished preparations for nuclear tests in two tunnels at the Punggye-ri nuclear test site in North Hamgyong Province, observers believe.

A South Korean government source said analysis of satellite images showed brisk activity of support vehicles and personnel at a tunnel on the southern side of the test site, and on Saturday the area was cleaned and personnel left.

Intelligence agencies suspect that this means a nuclear test is imminent. Preparations at a tunnel on the western side of the site were apparently completed earlier.

The government here is now watching for the possibility of two separate nuclear tests either simultaneously or in quick succession.

"There is a chance that the southern tunnel is a decoy, but we aren't ruling out that the regime will conduct nuclear tests simultaneously at both tunnels," a military source said.

The source said it might help North Korea to produce smaller nuclear warheads that could be mounted on missiles if it tests a couple of different devices at the same time.

In 1998, Pakistan conducted eight nuclear tests over two days, which allowed it to accelerate the miniaturization of nuclear weapons.

http://english.chosun.com/site/data/html_dir/2013/02/04/2013020400499.html

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The Korea Times – South Korea
February 4, 2013

Concern Grows over Arms Buildup in NE Asia

By Kim Young-jin

The debate over whether Northeast Asia is in the throes of an arms race has picked up after successful rocket launches by both North and South Korea.

The South, which placed a satellite in orbit last week, complied with non-proliferation guidelines and the feat was not outwardly taken as a threat. Pyongyang on the other hand was condemned for its Dec. 12 launch that defied U.N. resolutions.

Both say their space programs are for peaceful purposes, though the North's argument is undermined by a history of pursuing a "nuclear deterrent" directed at the United States. The technology used in the rockets can be used for missiles.

The competition comes as Pyongyang threatens to conduct a nuclear test it hopes will convince observers that it is a nuclear power.

This adds tension to the region, home to a thorny territorial spat between China and Japan and competition between Beijing and Washington for influence, which has prompted players to build up their militaries. If the trend persists, analysts worry a full-scale arms race could be on.

"If North Korea becomes a de-facto nuclear weapons state, ultra-conservative forces in Japan and South Korea, American pressures notwithstanding, are more inclined to push for their own independent nuclear deterrent forces," Moon Chung-in, professor of political science at Yonsei University said.

"And as long as a negative spiral of assertive nationalism amplifies over territorial issues, China, Japan, and North and South Korea are likely to engage in a conventional arms race," he added, noting that fiscal restraints in the South and Japan might be the only factor slowing the trend.

Big power relations

Experts point to uncertain China-U.S. relations as the lynchpin of the edgy atmosphere.

The Barack Obama administration hopes to shape China's economic and military rise by shifting military resources to the Asia-Pacific region. Beijing, wanting greater control over sea lanes off its coast amid growing energy needs, has embarked on dramatic efforts to build up its Navy.

Analysts suggest the naval push may also stem from fears the Washington is attempting to "encircle" Chinese influence. China reportedly boosted its military budget by over 11 percent last year.

Washington is moving to expand ballistic missile defense in the region, which it says is aimed at North Korea but would also cover China.

The effort, which includes the deployment of an early-warning radar system known as X-Band is being conducted with cooperation from Japan. This would add to radar installed in northern Japan in 2006.

China and Russia oppose the move as it threatens to neutralize their nuclear strategies.

In response, Beijing is said to be building sophisticated missiles to overcome the shield. According to the U.S. Defense Department's 2011 report, the buildup includes the acquisition of a new class of nuclear powered ballistic missile submarines and increasingly sophisticated radar systems.

Beijing is said to have test-fired a new intercontinental ballistic missile, the DF-41, which can be launched at short notice and can hit multiple targets.

Claiming the shield "fosters an arms race," the Chinese newspaper the Global Times said last March that in response, China can "copy it and upgrade its nuclear weapon capability due to possible threats posed by the U.S. system."

Cheong Woo-sik, director of the Peace Network in Seoul, said China's increased military spending in part stems from "strategic mistrust," especially in regards to Washington.

"There is a fundamental perception gap between China and its neighboring countries. Most of the surrounding countries are not having good relations with China. That's the driving force for Beijing wanting to build its military power. Neighboring countries regard that as a threat," he said.

Seoul, Tokyo to follow?

Seoul's rocket launch, which was long planned, came after the country reached a landmark agreement with the United States to more than double the range of its ballistic missiles to 800 kilometers. This is meant as a deterrent to North Korea but also puts Chinese cities in range.

Kim Jang-soo, a member of President-elect Park Geun-hye's transition team, said last month that the incoming administration will work toward "quickly putting in force ballistic missiles with a range of 800 kilometers" in response to the growing North Korean threat.

According to Cheong, Beijing may be concerned about South Korea's satellite capabilities.

"China may regard the program not as the South's independent program, but that it is allied with the U.S. and could be part of a containment strategy," he said.

Park's team has also sent signals that it will continue the nation's push to develop, expand and export nuclear power plant technology. While this would ostensibly be for economic growth, some say could it could be taken as a sign of wanting to convert the technology for military purposes.

Meanwhile, Japan's Cabinet has approved a budget that includes its first defense spending increase in 11 years, partly aimed at bolstering coastal and marine surveillance around what it calls the Senkaku Islands, a disputed area with China. Beijing has increased the number of ships and planes it sends to the area.

The new spending plan would reportedly seek to strengthen air and sea defenses around the disputed islands and increase the number of troops deployed there and to purchase early-warning aircraft.

Japan's moves to revise its current defense program outline comes amid concerns over a sharp nationalist turn there, which has seen a return to power of hawkish conservative Prime Minister Shinzo Abe.

"Japan may be trying to compensate for their economic decline relative to China and even Korea by beefing up military capabilities," an expert here said, asking not to be named.

NK's nuclear variable

The most urgent saber-rattling is coming from North Korea, which is threatening to conduct a "higher-level" nuclear test aimed at the United States.

While it remains unclear what type of test Pyongyang would opt for, some believe it is aiming to refine the ability to mount nuclear warheads atop ballistic missiles. They say this involves miniaturizing the technology and making sure it can withstand the heat of long-range flight.

Such a development is of great concern to Washington following the Kim Jong-un regime's successful launch which brought it closer to being able to targeting the mainland U.S. with a missile.

Reports citing U.S. officials suggest the regime is quickly advancing the development of its mobile KN-08 missile, an intermediate weapon that can be easily hidden and pose a threat the South, Japan and others.

Mitigating factors

According to a report on defense spending in Asia by the Center for Strategic and International Studies, South Korea's total defense spending increased in constant 2011 dollars from $17.1 billion in 2000 to $28.6 billion in 2011.

Some say the spending uptick can partly be equated to economic growth, as others say talk of an arms race is premature.

Bong Young-shik, a senior research fellow at the Asan Institute for Policy Studies, said that while the public welcomed last week's launch success, many noted that because it involved technological assistance from Russia, the country still has a ways to go to achieve the feat alone.

"Even by its own internal understanding, South Korea is nowhere near the point of threatening regional countries in what can be termed as an arms race or a satellite technology competition," he said.

The expert added that incoming Chinese President Xi Jinping has sent envoys to signal that Beijing wants to strengthen ties with Seoul, falling in line with Park's vision of regional "trust building."

The CSIS report said further increases in defense spending hinges on both political and economic factors.

"Overall, continued or increasing tensions in the Asia-Pacific region could drive further increases in defense spending. Should the economic climate of the Asia-Pacific region concurrently show positive growth, many countries will also have increased means to respond to security concerns," it said.

Analysts say the North's recalcitrance — and the concern that it could trigger more military spending — is stepping up the need to find a way to cap the growth of its program.

Moon, a former Seoul advisor on unification affairs and supporter of engagement, said the parties could look to the stalled six-party talks on Pyongyang's denuclearization, which last met in 2008.

"There must be new arrangements for multilateral regional security cooperation that can enhance trust-building, transparence and strategic stability," he said.

http://www.koreatimes.co.kr/www/news/nation/2013/02/180_130017.html

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The Korea Herald – South Korea

N. Korea Internally Promoting Latest Long-Range Rocket as Ballistic Missile

February 4, 2013

North Korea exhibited the fuselage of what is presumed to be the long-range rocket it launched in December, and explicitly called it a ballistic missile, despite its claims to the outside world that the Unha-3 was part of its peaceful space development program, a report said Monday.

The report by Japanese newspaper Asahi Shimbun quoted North Korean sources as saying that the fuselage was displayed under the name "Hwasong-13" among the exhibitions of the country's missile lineup in an exhibition hall in Pyongyang. The Hwasong line also includes shorter-range scud missiles, which the country has produced since the 1980s.

The fuselage was called a ballistic missile and displayed in the "strategic rocket" room of the arms exhibition hall, which opened in April last year, the report said.

With a diameter of 2.4 meters, the fuselage is the same as the long-range rockets the North launched in April and December of last year, according to the report. The Unha rockets are estimated to stand 30 meters high and weigh 91 tons when fueled.

The North's explicit naming of the rocket as a ballistic missile starkly contrasts with the country's efforts to portray it as a harmless space launch vehicle.

As it conducted the latest launch on Dec. 12, the country said the rocket was aimed to send a "working satellite" into orbit and protested the United Nations' adoption in January of a resolution designed to punish the launch. The outside world suspects the Dec. 12 launch was the North's cover for testing its ballistic missile technology.

The newspaper article said real and mock-ups of scud missiles were displayed along with the latest ballistic missile in the rocket room where foreigners were not given admittance.

The report also noted the North ordered tightened border security in an official letter given to border guards at the end of January, quoting another North Korean source.

It said a North Korean official visiting China has been urgently called back home, and it was presumed to be linked with the country's imminent third nuclear test.

The world is closely following the North's nuclear activities after the country threatened to conduct a nuclear test following the U.N.'s adoption of the punitive resolution. South Korean officials said the country is technically ready to test a nuclear device at any time upon approval from the North Korean leader. (Yonhap News)

http://www.koreaherald.com/view.php?ud=20130204000719

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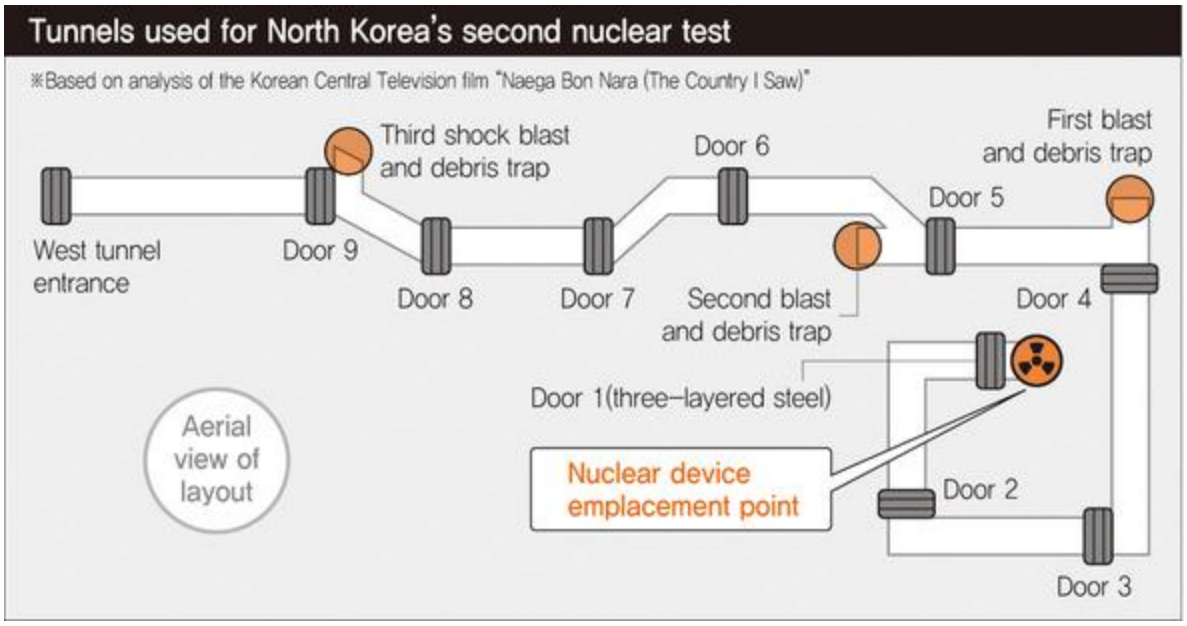
The Hankyoreh – South Korea

USAF COUNTERPROLIFERATION CENTER
CPC OUTREACH JOURNAL
MAXWELL AFB, ALABAMA

The Anatomy of North Korea's Nuclear Test Tunnels Released for the First Time

February 5, 2013
By Kim Kyu-won, staff reporter



The Ministry of National Defense diagram believed to show the composure of the test area

The structure of the tunnels used for North Korea's nuclear tests has come to light for the first time. The horizontal tunnels include nine doors and ten corners to absorb the shock of the blast.

On Feb. 4, the Ministry of National Defense released a two-dimensional diagram of what is believed to be the tunnel used in North Korea's second nuclear test in May 2009. The plan was based on an analysis by South Korean and US nuclear experts of a nuclear testing diagram that appeared in part four of "Naega Bon Nara (The Country I Saw)," a film broadcast on Korean Central Television on Sept. 8, 2010.

Judging from the film's content and the structure of the tunnel, it is believed to be the site used for the 2009 test. The film's plotline includes propaganda and justification for that test.

Based on the ministry's analysis, the entrance to the tunnel is located approximately halfway up Mt. Mantap, a 2,205-meter mountain in the Punggye village of Kilju county, North Hamgyong province. Unlike other countries that have conducted nuclear tests by digging anywhere from several hundred to a thousand meters vertically underground, North Korea developed its tunnels and testing system by digging horizontally in a mountainous region.

A ministry official called this a "unique method" that made use of the country's mountainous topography. Mt. Mantap is a granite peak, and the tunnel is known to have been built by boring into the granite.

Believed to be two to three meters wide and high and hundreds of meters long, the tunnel roughly forms the shape of a hammer, with the testing installation located where the head would be. To conduct the tests, the nuclear device and equipment to measure radioactivity and seismic waves are placed in the deepest part of the tunnel. This testing site is then linked to a control center outside the tunnel via cables weighing thousands of tons. The hole is then sealed with earth, gravel, sand, plaster, cement, and similar materials, after which the control center detonates the explosive.

The area with the weapon is sealed off by three steel doors. The measuring equipment is also placed inside this area.

The hundreds of meters of tunnel and nine doors or bulkheads are designed to absorb the entire blast. First, the tunnel includes four right-angle turns, one after each of the first four doors. After that is the first containment vessel, designed to absorb the blast wind and debris.

Because the area from the detonation site to the third and fourth doors absorbs the brunt of the blast, the tunnel bends at right angles to reduce the force.

A ministry official said the first door was believed to consist of three layers of steel, but added that nothing was known for certain as to whether the second through ninth divisions were doors or bulkheads.

“The tunnels and doors would be completely wiped out through the third to fourth divisions as the granite melted from the intense heat of the blast,” the official explained.

After the fifth door, the tunnel bends slightly, heading in a generally southward direction. The fifth through ninth doors lie between this area and the western entrance, with two more traps along the way to absorb the blast and debris. The shock wave from the explosion is believed to be absorbed completely along the way.

The ministry official said the most crucial task after a nuclear test is ensuring that no radioactive gases, such as xenon or krypton, leak out afterwards. It is believed that the angled tunnel was used for the second test to successfully prevent leaks after radioactive gases did escape during the first test in 2006, when the tunnel followed a straight-line path.

The ministry official said, “South Korean and US nuclear experts concluded after analyzing the floor plan that it did indeed look like the structure of North Korea’s actual nuclear testing site.”

Former Los Alamos National Laboratory director Siegfried Hecker, who visited North Korea in 2010, was one of the participants in the examination, the ministry said.

http://english.hani.co.kr/arti/english_edition/e_northkorea/572835.html

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The Chosun Ilbo – South Korea
February 6, 2013

N.Korean Nuke Test 'Likely in Mid-February'

Pundits cooling their heels as North Korea gears up to conduct another nuclear test now speculate that the test is likely to take place in the middle of the month.

The window for the test is limited now that preparations appear complete, due to the short lifespan of measuring devices. Including a super-high-speed camera, a thermal imaging camera, a thermometer and a barometer, they are usually installed in and outside an underground test tunnel.

But these state-of-the-art devices are susceptible to humidity and moisture.

An expert with a South Korean government-funded think tank said, "Generally speaking, you should conduct a nuclear test within two weeks if you have installed measuring devices in an underground test tunnel."

Possibly to make it more difficult to predict the timing of the nuclear test, the North dug up a smaller separate tunnel to put the measuring devices in but has not yet set them up, some experts believe.

Military sources have dismissed speculation that North Korea is going to test a hydrogen bomb. Ham Hyung-pil of the Korea Institute for Defense Analyses said there is no evidence that the North has acquired tritium, a material essential for the development of a hydrogen bomb.

Siegfried Hecker, a U.S. nuclear physicist who visited North Korea in 2010, was quoted by Yonhap News as saying the North could detonate a hydrogen bomb based on plutonium and highly enriched uranium.

It is doubtful how fast and accurately South Korea can determine the nature of the North's third nuclear test. Seoul needs to measure radioactive materials such as xenon and krypton within 24 hours after the nuclear test, since it is hard to determine based on seismic activity alone whether plutonium or uranium has been used for the test. The composition ratio in radioactive materials changes rapidly.

South Korea has radioactivity measuring devices, but the fallout is likely to reach the South only several days after the test.

Seoul and Washington therefore hope to obtain data with a WC-135 reconnaissance plane that will fly from the U.S.' Kadena Base in Okinawa, Japan to waters in the East Sea off Punggye-ri.

http://english.chosun.com/site/data/html_dir/2013/02/06/2013020601193.html

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Yonhap News Agency – South Korea
February 6, 2013

S. Korea Pushes for Deployment of Military Spy Satellites

By Kim Eun-jung

SEOUL, Feb. 6 (Yonhap) -- The South Korean military is pushing to deploy spy satellites to strengthen its surveillance of North Korea, a senior military official said Wednesday, in light of growing missile and nuclear threats from the communist country.

South Korea currently operates Arirang-3, a multipurpose satellite, which provides geographical information on the Korean Peninsula, including on North Korea's missile and nuclear test sites. However, it still relies on the United States for much of its intelligence due to the commercial satellite's limited vision and longer rotation period.

"Although the South Korean military can mobilize various intelligence assets to monitor the North Korean military's activities, its capability is limited in observing the control command and supporting facilities in the North," a senior military official said under anonymity, as he is not authorized to talk to the media. "To be able to independently monitor the enemy's activities, the military will include the deployment of military spy satellites in the mid and long-term plan."

The official did not provide further details on the envisioned plan, which would cost time and lots of money to implement.

With adding reconnaissance satellites to its monitoring capabilities, the military hopes to increase its surveillance of major North Korean military facilities to better anticipate aggressive actions from the communist state.

As part of increasing its defense capabilities, Seoul is in the process of developing longer-range missiles capable of hitting all of North Korea. The plan is to deploy them by the end of 2015 to coincide with Seoul regaining its wartime operational control of its troops from Washington.

"We need spy satellites for the military to more effectively monitor North Korea ahead of the wartime operational control transition," the official said.

Demands for advanced spy satellites increased after the North successfully launched a long-range rocket in December. The North is currently threatening to conduct a third nuclear test in response to the U.N. sanction enforced to punish the North for its December launch. The pressure for Seoul to build its surveillance capabilities has been building even more since Japan sent two spy satellites into orbit last month to better monitor the North.

Pyongyang claims its rocket launch was to put an Earth observation satellite into orbit, but the action has been widely seen as a test of its ballistic missile technology.

Aside from developing spy satellites, the Air Force is considering an early warning satellite system, which can detect missiles, spacecraft launches and nuclear explosions using sensors that can detect the infrared emissions from these intense sources of heat, according to officials.

The latest move comes as South Korea prepares to swear in President-elect Park Geun-hye on Feb. 25. Park has repeatedly warned the North to not go through with a third nuclear test.

In a show of force partly directed at the North, South Korea and the U.S. carried out a three-day naval drill in the East Sea, mobilizing a U.S. nuclear submarine and an Aegis destroyer as well as 10 South Korean warships.

The joint drill ended earlier in the day, and the South Korean Navy will separately hold exercises on the eastern coast until Friday, according to officials.

About 28,500 American troops are stationed in South Korea, a legacy of 1950-53 Korean War that ended in a truce, not a peace treaty.

http://english.yonhapnews.co.kr/northkorea/2013/02/06/80/0401000000AEN20130206006051315F.HTML

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The Hankyoreh – South Korea

North Korea Could Be Developing a Hydrogen Bomb

Ahead of expected third nuclear test, Seoul believes Pyongyang is testing lighter and more deadly weapons
February 7, 2013
By Kim Kyu-won, staff reporter

The South Korean government is under the impression that if North Korea goes ahead with its third nuclear test, it would likely use a small and lightweight nuclear warhead that could be mounted on a missile. It also appears likely that it will use highly enriched uranium instead of plutonium, which it is difficult to produce more of. Speaking before the National Assembly's national defense committee on Feb. 6, Joint Chiefs of Staff chairman Jung Seung-jo raised another possibility: that North Korea could begin developing a hydrogen bomb, a weapon with hundreds of times the force of an atomic bomb.

■ Testing a missile warhead?

Nuclear physicist Siegfried Hecker, who has visited North Korea on numerous occasions, told Yonhap News in a Feb. 6 interview that the chief aim of the country's nuclear test was to develop something small and lightweight. The South Korean Ministry of National Defense also has concluded that their goal is to develop something small and light enough to be mounted on a missile. A nuclear device carried by missile is the most deadly of weapons.

The Scud B missile carries a warhead weighing up to 1,000 kg and measuring 90 cm in diameter. But the actual size of the nuclear warheads mounted on missiles varies between 110 kg (the US) and 600 kg (China). For North Korea to succeed, its weapon would have to weigh less than 1,000 kg - the lighter the better. Generally, when other countries have conducted their first nuclear tests in the past, the devices weighed between 1,300 kg and 2,200 kg. North Korea's first device is believed to have weighed somewhere in this area. The question now is whether it can succeed in drastically reducing the weapon's weight.

Even if it does come with a light enough warhead, another question is whether it is capable of linking it to its rocket launch technology. In principle, a country that is capable of launching a satellite can also develop an intercontinental ballistic missile (ICBM). But Hecker was skeptical, saying it would take several launch attempts, and about five years, to develop a functioning ICBM because of the necessary reentry technology. In other words, if North Korea does come up

with a lightweight nuclear device, it would be able to launch an armed ICBM toward the continental US in roughly five years.

■ Plutonium? Uranium? Hydrogen?

For its test, North Korea is expected to detonate a device using highly enriched uranium (HEU). The reason for this is its depleted stock of plutonium, which was used for the previous two tests. It is believed to have produced about 50kg of plutonium since 2002 through reprocessing of spent fuel rods, with around 40kg of it left after its two tests. One nuclear bomb requires 6kg of plutonium, which means North Korea could make six to seven of them with its current stores. Its problem is that it won't be able to produce any more of it in the near term because its reprocessing facilities were disabled in 2008 as part of an agreement reached in the six-party talks.

Instead, it produced another type of weapon through uranium enrichment. When Hecker visited in 2010, North Korean authorities showed him centrifuge facilities in Yongbyon, North Pyongan province, and told him they had 2,000 of the devices. With that equipment, it would be able to produce 40kg of HEU in a year. In other words, it could have as much as 40 to 80kg of it already. This could be used to make two to six devices, since one bomb requires 15 to 20 kg of HEU. Hecker estimated that North Korea already had one or two such devices developed.

Another possibility that has been suggested is that North Korea may detonate both an HEU device and a plutonium device at the same time. Analysts said that Pyongyang's repeated mention of "qualitatively and quantitatively increasing the nuclear deterrent" may have been a reference not only to the development of lightweight uranium-based weapons, but also to a hydrogen bomb. Speaking before the National Assembly's national defense committee on Feb. 6, Jung said the military was "not ruling out the possibility that North Korea will test a boosted weapon as the next stage before, a hydrogen bomb using nuclear fusion." A hydrogen bomb has hundreds of times the force of an atomic weapon.

http://english.hani.co.kr/arti/english_edition/e_northkorea/573302.html

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Yonhap News Agency – South Korea
February 7, 2013

N. Korea Distances Itself from China, Russia Ahead of Nuke Test

SEOUL, Feb. 7 (Yonhap) -- North Korea has moved to distance itself from traditional allies such as China and Russia as it prepares to conduct another nuclear test in the face of stiff international opposition, diplomatic observers said Thursday.

Local observers said the "cooling off" of normally close relations became noticeable after Beijing and Moscow joined the 15-member U.N. Security Council (UNSC) last month in condemning the launch of the long-range Unha-3 rocket on Dec. 12.

Pyongyang has not directly lashed out at the two countries, but observers noted a rise in tensions with communist country's powerful National Defense Commission criticizing the inability of "big countries" to uphold fair global order at the U.N.

The mention of big countries is seen as a reflection of Pyongyang's disappointment toward China and Russia, who as permanent members of the UNSC, could have vetoed the resolution that calls for tightening of sanctions. The two countries also joined the global community in warning the North not to take further steps to destabilize peace and stability.

In particular, North Korea watchers said relations with its closest ally China have been frayed because of Pyongyang's insistence that it needs nuclear weapons to counter the United States, while Beijing has made clear that resolving the present impasse is in the best interests of all countries concerned.

China has steadfastly maintained that it supports non-proliferation of nuclear weapons.

"China's position has remained the same with the country expressing reservations after the North detonated nuclear devices in 2006 and 2009, but they seem to be taking a firmer line, compared to the past," a government source, who declined to be identified, said.

He added that there are even indications that if the North goes through with another detonation, Beijing may cut back on the aid it gives to the impoverished country.

Reflecting this view, a recent editorial on the Global Times, a newspaper operated by People's Daily, and indirectly reflecting the views of the China's ruling Communist Party, openly warned that if Pyongyang conducts another atomic weapons test in the face of opposition from China, it has to be willing to pay the consequences that can include a reduction in support.

Beijing may also be showing its irritation by not sending a special delegation to the North to persuade the country to give up the test.

Observers said that Pyongyang's relations with Moscow have been affected as well. They claimed that the North may have rejected a request by Valentina Matviyenko, the chairwoman of the Federation Council, to visit the country late last month.

The visit by the head of Russian parliament's upper house may have been rejected because Moscow signed off on the U.N. resolution.

The failed visit is noteworthy because Matviyenko is not only the highest ranking female statesman in Russia but also a confidant of President Vladimir Putin.

Besides not allowing the legislative leader to visit the country, Pyongyang's representatives at the Asia Pacific Parliamentary Forum held in Vladivostok declined a move arranged by the Federation Council to hold talks with legislators from South Korea.

Despite indications that the North will detonate a nuclear device regardless of international pressure, the isolationist country has hinted that it can hold talks with the incoming Park Geun-hye administration depending on what action it takes. The 61-year-old Park takes office on Feb. 25 as the country's first woman president.

This stance outlined in the Chosun Sinbo, the official paper of the General Association of Korean Residents in Japan, said that while Pyongyang has announced it will halt denuclearization efforts on the Korean Peninsula, a new administration that is willing to cope with all outstanding issues in the spirit of joint interest could permit talks to take place.

The paper that represents Pyongyang's views then hinted that negotiations can center on signing a peace treaty to formally end the Korean War (1950-53). The three-year conflict was settled with a cease-fire armistice, which means the two Koreas are still technically at war.

http://english.yonhapnews.co.kr/northkorea/2013/02/07/93/0401000000AEN20130207006100315F.HTML

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Chosun Ilbo – South Korea
February 7, 2013

'No Pre-Emptive Strike Planned on N.Korea's Nuke Test Site'

The chairman of South Korea's Joint Chiefs of Staff weighed into speculation about North Korea's imminent nuclear test on Wednesday, guessing that the North is preparing to test a "pre-hydrogen" nuclear weapon.

Gen. Jung Seung-jo made the guess in a report to the National Assembly's Defense Committee on Wednesday.

The weapon could be a "boosted fission weapon," a type of nuclear bomb that uses a small amount of fusion fuel to increase the yield of a fission reaction, he said.

This could make it possible to drastically reduce the size and weight of nuclear weapons to less than one ton, small enough to fit a nuclear warhead on a missile.

"When you develop nuclear weapons, you have such a goal in mind," Jung said. "I think the North has made a lot of progress in that regard."

He warned that South Korea will launch a pre-emptive strike "if there's a clear sign of the enemy using a nuclear weapon" but no such attack is planned on the nuclear test site in Pyunggye-ri, North Hamgyong Province.

"We may change our mind if the situation changes," he added.

Defense Committee chairman Yoo Seung-min said, "Are you sticking to your guns even if a pre-emptive strike on the North's nuclear weapons will lead to a full-scale war?" Jung replied, "It would be better to destroy the North's nuclear weapons first than to be struck by them, given that that would lead to a war in any case."

http://english.chosun.com/site/data/html_dir/2013/02/07/2013020700610.html

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The Hindu – India

Agni-VI all Set to Take Shape

It can deliver four or six warheads 6,000 km away
February 4, 2013
By T. S. Subramanian

CHENNAI -- Agni-VI with multiple nuclear warheads, which can reach targets 6,000 km away, is all set to be developed by the Defence Research and Development Organisation (DRDO).

Only in April last, it carried out the maiden launch of Agni-V, which has a range of more than 5,000 km.

So far, all the strategic missiles developed by the DRDO — Agni-I, II, III, IV and V, and the submarine-launched K-15 and its land-based version Shourya — can carry only single nuclear warhead. The DRDO's tactical missiles and supersonic cruise missile BrahMos can carry one conventional warhead each.

"We have started working on the multiple independently targetable re-entry vehicles [MIRV] version [Agni-VI]. It will carry four or six warheads depending upon their weight," DRDO missile technologists said. "The constraint is the vehicle's mass."

Although the Union government is yet to sanction Agni-VI project, the DRDO has done all the enabling studies, finalised the missile's design and started working on the engineering part. It had also figured out how to anchor four or six warheads in the vehicle, how to disperse them and the pattern of their dispersal. The warheads could be released in an order, one after another. If one warhead were to hit a place, another could fall 100 km away from it, the technologists said.

Both Agni-V and Agni-VI have three stages, all powered by solid propellants, and their diameter is two metres. And the comparison ends there.

While Agni-V weighs 50 tonnes and is 17.5 metres long, Agni-VI belongs to the 65-70-tonne class and will be 20 metres long. "Agni-VI will be a massive vehicle," the technologists said. It was too early to say when its first launch would take place. It would be road-mobile and blast off from trucks with launching platforms.

http://www.thehindu.com/news/national/agnivi-all-set-to-take-shape/article4379416.ece?homepage=true

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New Indian Express – India

Ballistic Missile Defence System to Be Tested in May

By Express News Service
06th February 2013

BANGALORE -- Come May, India will take a significant step towards operationalising its indigenous experimental Ballistic Missile Defence (BMD) system that can target incoming missiles with its own interceptor missiles.

The system, which will provide India with the capability to counter missile threats from China and Pakistan, will be tested at 200-km altitude in May.

“We are preparing to test the interceptor missile at 200-km altitude this May,” DRDO chief Dr V K Saraswat said here on Tuesday.

The DRDO is also preparing to operationalise the phase-I of the BMD system to provide a missile shield to major cities including the national capital by 2014.

http://newindianexpress.com/nation/article1451563.ece

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DefenseNews.com

Despite Missile Integration, Nuke Role Unlikely for Pakistan’s JF-17

February 7, 2013
By Usman Ansari

ISLAMABAD — Pakistan is integrating its nuclear-capable Hatf VII/Vengeance VII Ra’ad air launched cruise missile onto its JF-17 Thunder aircraft, but analysts are unsure if this signifies a nuclear deterrence role for the aircraft.

Air Commodore Khalid Mahmood at the JF-17 Project Management Office said integration work was ongoing with Chinese and Pakistani weapons, and that “most weapons have been integrated”.

“Ra’ad and the H-4 [glide bomb] will be for the Block I and Block II” aircraft currently in or about to enter service, not just the forthcoming Block III variant, he said.

Former Air Force pilot and analyst Kaiser Tufail said, “It makes good sense to get on with the wiring as well as flight trials of these weapons on the JF-17 at this stage. For one thing, all subsequent production aircraft would have the mod integrated from the outset and there will be no need for retrofits that also result in long down times at the flight lines. Secondly, the whole process is lengthy and it was about time we started it.”

He added, “Possibly, by the time the mods are in place on the JF-17, the first of the older Mirages would be retiring.”

The Mirage III carries the Ra’ad and is the delivery platform for Pakistan’s airborne arm of its nuclear deterrent. Its avionics were upgraded in the 1990s under the Retrofit Of Strike Element (ROSE) program.

They have been in service for many years, however, and are approaching the end of their useful lives.

Most recent major military developments have aimed to strengthen the nuclear deterrent, such as the unveiling of the Hatf IX/Nasr battlefield ballistic missile and the submarine-launched variant of the Babur cruise missile.

However, analysts are uncertain if the airborne arm of the nuclear triad is set to be similarly strengthened with the introduction of the JF-17 in this role.

Tufail said the Ra’ad’s integration onto the JF-17 would be very beneficial.

"It would certainly add to PAF's [Pakistan Air Force's] stealthy ingress capability [due to low cross-section of the cruise missile], considering that the parent aircraft do not have it," he said.

However, Mansoor Ahmed, from Quaid-e-Azam University's Department of Defence and Strategic Studies, and who specializes in Pakistan's national deterrent and delivery program, is unconvinced that replacement of the Mirages with the JF-17 is imminent.

"The Mirage is a tested and well-integrated platform, it would take some time to have the Thunder in large numbers to do the job", he said.

"Secondly, how good are the Thunder's ground attack/avionics capabilities compared to the ROSE Mirages?"

Tufail, who flew the Mirage operationally, does not see the Ra'ad-capable Mirages as "less credible as a nuclear deterrent in any way."

"However, the JF-17 would certainly be a better and more modern platform, about which there should be no debate. As and when the JF-17s attain full operational capability with the Ra'ad, that role will be withdrawn from the Mirages, but that is not to mean that the Mirages would be retired — they do a lot more than just carry Ra'ads," he said.

"The Mirages would be retired as they outlive their airframe hours or run out of spares support, which I see starting to happen over the next five years or so."

Depending on the material state of the Mirage aircraft, Ahmed said they should give the PAF enough time to bring the Block III variant of the JF-17 into service, which is to have an improved avionics suite.

Mahmood said the avionics suite of the Block III variant is not yet finalized as the PAF is "looking for something to give more operational capability, and still examining avionics options."

A perennial issue for the JF-17 has been the question of the continued availability of its powerplant. Currently, it is powered by a Russian Klimov RD-93.

It has been speculated for some time that the JF-17 will eventually be powered by a Chinese engine, a possible thrust vector control (TVC) variant of the Guizhou WS-13 Taishan.

Mahmood, however, would only say that the engine "depends on customers," and that "we have options with regards to engines; we're not restricted."

Tufail is unconvinced a TVC variant is a necessity at present.

"Personally, I don't see the JF-17 as a 'do-all' fighter, and I feel that it needs other areas to be looked at for modifications, rather than just follow fads," he said.

"TVC helps in air combat maneuvering, whose days are numbered, if one goes by the technological developments underway. If that be true, it would make much more sense to focus on enhancing BVR [beyond visual range] capabilities, including radar and weapons, which need to be constantly upgraded during the life of an aircraft."

The JF-17 is only rated to plus 8g, and for this reason Tufail said "the JF-17 cannot fully exploit the TVC potential, which a 9g aircraft can do far better."

Analyst Usman Shabbir of the Pakistan Military Consortium think tank said the JF-17 airframe "can certainly handle more than +8g, but the restriction is in place to increase the airframe life."

He said this "may be increased in later variants where more composites are used to increase airframe strength and reduce the overall weight."

http://www.defensenews.com/article/20130207/DEFREG03/302070024/Despite-Missile-Integration-Nuke-Role-Unlikely-Pakistan-8217-s-JF-17?odyssey=nav|head

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Russia Beyond the Headlines – Russia

Russia, US May Sign a New Arms Disposal Agreement

Russia may sign a new agreement with the U.S. for cooperation in the disposal of obsolete weapons and in the non-proliferation of weapons of mass destruction, to replace the Nunn-Lugar program. By strengthening cooperation in the spheres where their interests coincide, Russia and the U.S. might heal some of the recent cracks in their relations.

February 5, 2013

By Yelena Chernenko, Kommersant

The United States wants to bring its relations with Russia back on track, U.S. Vice President Joe Biden told Russian Foreign Minister Sergey Lavrov. Washington proposes starting the normalization of relations with practical cooperation in spheres that do not give rise to controversy. One such sphere is the non-proliferation of weapons of mass destruction.

Lavrov and Biden met on the fringes of the annual international security conference in Munich, which the Russian foreign minister regularly attends. The American vice president last attended the Munich conference in 2009, when he called on Moscow"to press the reset button."

In his speech this time around, Biden said that the reset had not been in vain, recalling the signing of the START treaty, the peaceful nuclear energy agreement, Russia's accession to the WTO, the creation of a bilateral presidential commission, cooperation on Afghanistan, as well as cooperation on the Iran and North Korean nuclear problems.

At the same time, Biden said that the U.S. would "never recognize" the sovereignty of Abkhazia and South Ossetia and would not agree to individual countries having special spheres of influence. He listed other topics on which the U.S. and Russia differ, including Syria, ABMs, NATO expansion, democracy and human rights.

Lavrov, in his turn, also reproached the U.S. for applying double standards during the Arab Spring, in addition to accusing the U.S. of seeking to build NATO-centric relations in Europe, "exploiting the thesis of the Russian threat," and"artificially dividing integration projects into 'good' and 'bad' ones."

It would seem that, after this exchange of mutual accusations, there would have been a lot of plain talking during the Biden-Lavrov meeting. All the more surprising, therefore, was the Russian minister's controlled statement after the meeting.

"We drew the U.S. vice president's attention to the fact that they have made some moves that our public opinion received with dismay," Lavrov said, apparently referring to the Magnitsky Act recently adopted by the U.S. Congress. "We hope there will be no more causes for that."

A source in the Russian delegation explained Lavrov's optimism: Biden told the foreign minister that the U.S. would like to put its relations with Russia "back on track" and was thinking about how to do it.

Lavrov was obviously in the mood for compromise after his meeting with Biden. "Both sides understand that, alongside the differences, we have many interests in common,"said Lavrov.

One such interest is in the non-proliferation of weapons of mass destruction (WMD). The Russian authorities decided not to extend the Nunn-Lugar program, which expires in June 2013. Under the program, excessive Russian nuclear warheads and obsolete strategic missiles have been disposed of since the early 1990s, with the U.S. paying the cost. Moscow says it no longer requires these subsidies.

Meanwhile, the source in the Russian delegation explained that Moscow might sign a new agreement with Washington in this field, on the condition that "it is based on equality and meets modern realities."

The source said an example could be the 2002 agreement on plutonium disposal, which was updated in 2010 and whereby both sides share the cost and responsibility fairly. Under the Nunn-Lugar program, the American contractors

hired to work in Russia bear no responsibility for any accidents or emergencies they might cause. When signing the new agreement, Moscow would like to limit U.S. access to some facilities.

The new agreement might envisage use of joint expertise in the disposal of WMD from third-party countries. That, however, could entail some problems. Speaking in Munich, former congresswoman Jane Harman named Syria (with its chemical arsenal) and Pakistan (with its nuclear arsenal) as potential places for such cooperation, while Sam Nunn, co-author of the Nunn-Lugar program, mentioned North Korea and Iran. Still, none of these countries has yet asked for help in disposing of WMD.

Rose Goethemuller, senior assistant secretary of state, will visit Moscow in February to discuss the parameters of the future agreement. A source at the U.S. Department of State said that Washington would like to achieve concrete agreements as soon as possible. A source in the Russian delegation warned that, unlike in the 1990s, Moscow "would not do anything in haste."

First published in Russian in Kommersant.

http://rbth.ru/international/2013/02/05/russia_us_may_sign_a_new_arms_disposal_agreement_22517.html

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RIA Novosti – Russian Information Agency

Missile Sub Rejoins Russia's Northern Fleet After Refit

6 February 2013

MOSCOW, February 6 (RIA Novosti) – The Russian Navy ballistic-missile submarine Verkhoturye has returned to service with the Northern Fleet after completing a refit, Fleet Spokesman Captain First Rank Vadim Serga said on Wednesday.

The Project 667 class boat (NATO Delta 4) arrived at the main nuclear submarine base in Gadzhiyevo, Murmansk Region, after refit at the Zvezdochka shipyard at Severodvinsk, Serga said.

"During the refit, defense shipyard specialists made around a hundred improvements to the submarine," Serga said.

The Verkhoturye is the second Northern Fleet Project 667 class boat to be refitted, he said.

"In August 2012, the Northern Fleet was reinforced with the Novomoskovsk submarine, which also underwent repairs and upgrade at the Severodvinsk defense shipyard," he said.

Project 667 class boats displace 12,000 tons, have a maximum diving depth of 400 meters, a cruising speed of 24 knots and a crew of 140 men. They are armed with 16 Sineva intercontinental ballistic missiles.

http://en.rian.ru/military_news/20130206/179258899/Missile-Sub-Rejoins-Russias-Northern-Fleet-After-Refit.html

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British Broadcasting Corporation (BBC) – U.K.
4 February 2013

Roll Forward the Doomsday Train

By Sharon Weinberger

The US is mulling over radical ideas for how to operate and deploy its aging cache of nuclear missiles – including a vast subway network.

By the middle of this century, a large chunk of the United States' nuclear arsenal could be located on a doomsday subway system, where unmanned cars move back and forth on a single track, prepared to launch at a moment's notice.

Or a least that's one of several ideas that the Air Force is potentially mulling over as it prepares to replace its decades' old intercontinental ballistic missiles (ICBMs). To jumpstart those preparations, the Air Force earlier this month released an open call for proposals that would help the Air Force decide what the future land-based nuclear force would look like for the 50-year period starting in 2025.

At stake is a part of the nation's rapidly aging nuclear arsenal, which consists of the "triad" of land-based ICBMs, submarine-launched missiles, and bombers armed with nuclear weapons.

Supporters of this deterrent argue that, despite the end of the Cold War, it is still needed to deter a potential enemy from threatening the United States with nuclear weapons, or even other weapons of mass destruction. "The official reason is still one of flexibility, and survivability in the event of a nuclear attack," says Ivan Oelrich, a long-time defense analyst and expert on nuclear issues. "The real unspoken argument is bureaucratic inertia."

In recent years, some US Pentagon officials have questioned whether keeping all three elements of this costly triad is really needed, though no changes have yet been made. In the meantime, parts of the system are rapidly approaching their use by date. The current ICBM, the Minuteman III, is expected to reach the end of its life by 2030.

Of the five different ideas the Air Force is currently exploring, the underground tunnel concept would be one of the more dramatic changes from the current system, which has missiles located in fixed, underground silos spread out across three bases. The tunnels would in theory allow the missile to survive direct nuclear attacks, since an enemy wouldn't know precisely where the missile is located at any given time.

"The tunnel concept mode operates similar to a subway system but with only a single transporter/launcher and missile dedicated to a given tunnel," the Air Force says. "The vehicle moves at random down the length of the tunnel."

That, however, is not the only possible new system. Another concept involves putting the missiles above ground, perhaps on specialised vehicles called "transporter erector launchers." Those vehicles may have to venture on to public roads or lands, according to the Air Force, or even travel off road.

'Fancy ideas'

While the idea of off-road vehicles and underground trains transporting nukes may sound wild, the Air Force says it's also considering more basic options, such as simply keeping the current Minuteman III through until 2075, or undertaking modifications to the system. Yet another option would be building a new missile that would replace the Minuteman, but still use underground silos.

None of these proposals are right around the corner, cautions retired Lt. Gen. Frank Klotz, who last served as the commander of Air Force Global Strike Command, which is responsible for the US ICBMs, as well as nuclear-armed bombers. "The purpose of sending out the request for concepts is to flesh out the ideas in greater detail so that at some point, they can be subjected to intense analysis as to the cost, feasibility, and operational effectiveness," says Klotz, who is now a senior fellow at the Council for Foreign Relations.

While any such proposal for underground tunnels or mobile ICBMs is likely far off in the future, he says that such options are not necessarily more expensive in the long run, since it would allow the Air Force to consolidate its operations. When the Minuteman missile was first deployed some 50 years ago, the concept was to disperse them to reduce their vulnerability to a Soviet attack. But maintaining and protecting missiles over such a large area, such as paying for vehicle fuel, can be burdensome.

Today, missile fields are spread out across three bases: the smallest, at Minot Air Force Base in North Dakota, covers some 22,000 sq km (8,500 sq mi). "That's roughly the size of the state of New Jersey," Klotz says.

Arms control experts agree that a mobile ICBM force is probably not around the corner. The recent Air Force announcement "is a preliminary first step to explore theoretical options for replacement of the Minuteman III ICBM force," says Daryl Kimball, executive director of the Washington DC-based Arms Control Association.

Kimball points out that the US has cut its nuclear arsenal in recent years - there are currently just 420 Minuteman IIIs, and to invest now in an entirely new system makes little sense. “The reality is that the current plans for modernising the strategic triad, which were developed years ago, is too costly given the current budget environment,” he says.

The idea of putting a nuclear weapon on a moving vehicle is also too risky, according to *Hans Kristensen*, director of the Nuclear Information Project at the Federation of American Scientists. “This notion of rolling around on country roads and rural areas, with an increased risk of accidents, seems to be a step back in this day and age,” he says.

But this is not the first time the Air Force has looked at mobile ICBMs, Kristensen notes. In the 1980s, the government debated putting the Peacekeeper missile on trains, or even “race tracks.”

“At the end of the day, all these options were way too expensive and they ended up in silos,” he says. “You can come up with fancy ideas, but the reality check at the end of the day is: what is needed, what is necessary, and how much can we afford?”

The mostly like outcome is that the United States will simply keep the Minuteman III, and refurbish it as it has done before. It just finished a multi-billion dollar refit, which involved updating everything from fuel to guidance parts, and the end result is a nearly “new” missile.

Repeating that refurbishment to keep the Minuteman III going until 2075 is the most likely path for the Air Force, according to Kristensen. “Mobile and tunnel systems, that’s a pie in the sky,” he says.

http://www.bbc.com/future/story/20130201-roll-forward-the-doomsday-train

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Bloomberg News

Heavier Bunker-Buster Bomb Ready for Combat, General Says

By Tony Capaccio
February 6, 2013

Crews for U.S. Air Force B-2 stealth bombers have been trained to drop the Pentagon’s 30,000-pound“bunker-buster” bomb, making it ready for combat, according to the commander of the service’s long-range strike command.

“We’re qualified” for using the weapon on the B-2 “and we have sufficient inventory to meet requirements,” Lieutenant General James Kowalski, head of the Air Force Global Strike Command, said today at a breakfast meeting with reporters in Washington.

The Massive Ordnance Penetrator made by Boeing Co. is six times bigger than the 5,000-pound bunker-buster that the U.S. Air Force and the Israeli Air Force have in their arsenals to attack deeply buried nuclear, biological or chemical sites.

Pentagon officials have said the 30,000-pound (13,600-kilogram) bomb could be used if the U.S. decides to attack Iran’s nuclear program, with its deeply buried and hardened Fordo facility, which holds a stockpile of enriched uranium.

The bomb “is an extremely capable weapon against hardened” and deeply buried targets, said Kowalski, who is in charge of ensuring the U.S bomber fleet and crews are trained and equipped for any missions directed by U.S. regional commanders. He declined to discuss how the weapon may be used.

Tests last year demonstrated the redesigned bomb “is capable of effectively prosecuting selected hardened, deeply buried targets,” Michael Gilmore, the Pentagon’s director of operational testing, said in a report to Congress last month.

The bomb has a hardened-steel casing and can reach targets as far as 200 feet underground before exploding, according to a December 2007 statement by the Air Force News Service.

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http://www.bloomberg.com/news/2013-02-06/heavier-bunker-buster-bomb-ready-for-combat-general-says.html

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London Daily Telegraph – U.K.
OPINION

The Alternatives to Trident Carry an Enormous Risk

Britain's nuclear deterrent is effective and affordable says the Defence Secretary, Philip Hammond
By Philip Hammond
02 February 2013

For almost 45 years, Royal Navy submariners have provided round-the-clock at-sea deterrence, delivering the ultimate guarantee of our national security. Carrying first Polaris and now Trident ballistic missiles, the undetected patrolling of our nuclear-armed submarines provides an essential protection against nuclear blackmail or attack.

Although no state currently has both the intent and the capability to threaten the integrity of the UK, there are countries in unstable regions that possess, or are on the verge of possessing, nuclear weapons. North Korea has tested nuclear devices and ballistic missiles. Iran appears bent on the production of highly enriched uranium and continues to develop a ballistic missile capability. And no one can predict the nature of the threats we will face in the future. In the face of this uncertainty, it would be deeply irresponsible for any British government to dismiss the possibility of a nuclear threat to our country.

That is why, in May 2010, Conservatives and Liberal Democrats confirmed in the Coalition's Programme for Government that "we will maintain Britain's nuclear deterrent". Of course, there are differences between the two parties about how deterrence should be delivered. So, while the 2010 Strategic Defence and Security Review announced that we would proceed with replacing the Vanguard submarines as they come to the end of their life in the late 2020s, the Programme for Government specified that the "Liberal Democrats will continue to make the case for alternatives". The current Trident Alternatives Review was designed to help them do that.

Yet despite our differences on the means, we were clear on the nature of the deterrent we require: to be credible, it must provide effective deterrence against the full range of current and future threats. With the Vanguard Successor submarines costing some £11-14 billion at 2006/07 prices and delivering security to 2060 and beyond, the deterrent must be carefully scrutinised for savings. If there is a more cost-effective way of delivering the required deterrence, of course we should investigate it, and we have already identified more than £1 billion of cost reductions. But we must be under no illusion that we can pick and choose the threats we face. A deterrent only deters if it is credible and available. All the evidence points to a continuous at-sea presence, based on Trident, as the most cost-effective route to deliver the deterrent effect.

Some have argued that we should sacrifice our continuous at-sea deterrence. But not having a submarine permanently at sea would make us vulnerable to a pre-emptive strike. What is more, having to take the decision to arm and deploy our deterrent at sea in a period of tension would risk escalation at the critical moment. And although it may seem counter-intuitive, the evidence points to a replacement for Vanguard being a lower-cost solution than the proposal for a less capable option based on Astute submarines with nuclear-tipped cruise missiles. The Vanguard replacement would use existing warheads and missiles and elements of the submarine would be designed in collaboration with the US. The cruise alternative would mean designing new warheads and missiles, without American partnership, as well as making major modifications to the launch submarines – and the greater vulnerability of cruise missiles means we would need many more of them to deliver any meaningful effect. A cruise-based deterrent would carry significant risk of miscalculation and unintended escalation. At the point of firing, other states could have no way of knowing whether we had launched a conventional cruise missile or one with a nuclear warhead. Such uncertainty could risk triggering a nuclear war at a time of tension. So, the cruise option would carry enormous financial, technical and strategic risk.

Trident remains the best option for Britain. By keeping our deterrent at sea, we maximise our freedom of manoeuvre, while the Trident missile offers range, endurance and invulnerability with the cost savings of operating a common system with the US. At around 5 to 6 per cent of the annual defence budget, the deterrent is affordable and reinforces our special relationship with the US and our status as a force for good in the world.

Philip Hammond is Secretary of State for Defence.

http://www.telegraph.co.uk/news/uknews/defence/9843848/The-alternatives-to-Trident-carry-an-enormous-risk.html

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Washington Post
OPINION/Editorial

Cyberwar, Out of the Shadows

By the Editorial Board
February 3, 2013

A PLANNED FIVEFOLD increase in the staff of the U.S. Cyber Command is indicative of how conflict is moving toward center stage for the military, a domain similar to land, sea, air and outer space. The anticipated growth, described in an article by Ellen Nakashima in The Post last week, is intended to protect the country and its private sector from attack, an urgent mission. But now that the United States is going beyond defense, expanding forces for offensive attack, there's a crying need for more openness. So far, forces exist almost entirely in the shadows.

The Post reported on plans for creation of three types of forces under the Cyber Command. Two are familiar: "combat mission forces" to serve in parallel with military units and "protection forces" to defend Pentagon networks. A third area is new: "national mission forces" that would seek to head off any threat to critical infrastructure in the United States, such as electrical grids, dams and other potential targets deemed vital to national security. These "national mission forces" are expected to operate outside the United States, perhaps launching preemptive strikes on adversaries preparing to take down an American bank or electric grid. However, senior defense officials told The Post that the forces might respond inside the United States if asked by an authorized agency such as the FBI.

The national mission teams seem to be a response to growing evidence that the United States is being swamped by assaults — espionage, theft and disruption — from abroad. If U.S. forces manage to stop enemies from turning out the lights of a major city or crashing the stock market, they will prove their worth. This is no longer a science fiction fantasy. The attacks are real and happening every day.

What concerns us is not the growth of forces but the way it is happening behind the scenes. The U.S. Cyber Command is a military unit, but its chief, Gen. Keith Alexander, is also director of the National Security Agency, which is part of the intelligence community. So far, operations and deployments are being handled almost entirely in secret.

Aside from a line in a speech last fall by Defense Secretary Leon Panetta, and some vague language in a 2011 strategy paper, the missions, purpose and scope of conflict have yet to be satisfactorily revealed. One large missing piece is a declaratory policy similar to that used for nuclear weapons in the Cold War, when nuclear policy was openly debated without divulging important secrets. There's also little public information about rules of engagement for forces or about chain of command and authority to use them. The nature of the threat should also be exposed to a generous dose of sunlight. If conflict in cyberspace is underway, then it is important to sustain support for the resources and decisions to fight it, and that will require more candor.

http://www.washingtonpost.com/opinions/cyberwar-out-of-the-shadows/2013/02/03/a35f9b96-6a4a-11e2-95b3-272d604a10a3_story.html?wprss=rss_opinions

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Foreign Policy
OPINION/Argument

What to Expect from a North Korean Nuclear Test

Pyongyang is about to make some more trouble. Here's what to look for when Kim Jong Un debuts his new bomb.

BY SIEGFRIED S. HECKER
February 4, 2013

Pyongyang lashed out harshly at the United States following the most recent U.N. Security Council resolution condemning its December missile test. The Kim Jong Un regime threatened to increase its nuclear deterrent both quantitatively and qualitatively and vowed to conduct a third nuclear test at a "higher level." So what might we expect from another test? Why, what, how will we know, when, and what difference will it make?

First, why test? Without additional nuclear tests, North Korea is greatly limited in its ability to miniaturize a nuclear device to fit on one of its missiles. The 2006 and 2009 tests demonstrated that North Korea can build a nuclear device, but that its nuclear arsenal is likely limited to bulky devices that would need to be delivered by plane, boat, or van, thereby greatly limiting their deterrent value. To make its nuclear arsenal more menacing and provide the deterrent power Pyongyang's vitriolic pronouncements are aimed to achieve, North Korea must demonstrate that it can deliver the weapons on missiles at a distance.

During my previous visits to the Yongbyon nuclear complex, which housed both its plutonium production and its uranium enrichment facility, North Korea's nuclear specialists told me that the first two nuclear devices tested used plutonium as the bomb fuel. Pyongyang voluntarily suspended its plutonium production in 2008 and I estimate it has only 24 to 42 kilograms of plutonium, sufficient for 4 to 8 primitive nuclear devices, with no more in the pipeline. Yet with only two plutonium tests, one successful and one only partially successful, they need more tests to have confidence that they can build a smaller nuclear warhead.

The next test, however, could just as well be designed to demonstrate a highly enriched uranium (HEU)-fueled bomb. For years, Pyongyang had consistently denied having a uranium enrichment program, but in 2010 North Korean officials showed my Stanford University colleagues and me a modern centrifuge facility for uranium enrichment, ostensibly dedicated to making low-enriched uranium reactor fuel for electricity production. Based on what we were shown and our subsequent analysis of the time scales for constructing this facility, I concluded that Pyongyang must have a covert centrifuge facility, and that it has likely also produced HEU. I believe the amount of HEU produced to date is relatively small, but quite likely sufficient for a nuclear test.

What will they test? The most likely choice is an HEU device. Pyongyang threatened to increase the size of its nuclear arsenal; it can only do so with HEU, but it has a limited plutonium inventory and has decided to suspend plutonium operations. One can only speculate why it made that choice. Its plutonium facilities could have continued to produce one bomb's worth of plutonium per year. It is possible that the North Koreans believe they can develop a significantly larger HEU production capacity. In addition, the reactor operations necessary to produce plutonium are fully visible from satellite imagery because the reactor's cooling tower emits a visible steam plume, whereas the location and operations of uranium centrifuge facilities cannot be monitored from a distance, as was clearly demonstrated when we were shown the previously undiscovered Yongbyon centrifuge facility.

The apparent decision to pursue HEU devices is also puzzling because plutonium bomb fuel is more suitable for miniaturized nuclear devices than HEU (which is why the modern nuclear arsenals of established nuclear powers use plutonium). Yet Pyongyang may have decided it would require too many tests and too much plutonium, which is in short supply, to demonstrate a miniaturized plutonium device. And, it is likely that A.Q. Khan sold the North Koreans a Pakistani HEU design that could be mounted on some of North Korea's short or medium-range missiles. If Khan provided both design and test-performance data, Pyongyang may have decided that HEU, albeit less effective than plutonium, was a quicker and more certain route to miniaturized nuclear devices.

In an article co-authored last summer with Frank Pabian in the *Bulletin of the Atomic Scientists*, we speculated that it is possible that the North Koreans may decide to test both plutonium and HEU devices -- simultaneously in one test tunnel. One more plutonium test provides valuable information on the yield-to-weight ratio, critical for miniaturized designs. An HEU test allows them to move to a possibly expanded future arsenal. Multiple simultaneous tests have been conducted by the United States and the Soviet Union, and most recently in 1998 by India and Pakistan. Such tests have some technical limitations and are more challenging to conduct, but they have the huge advantage of not incurring additional political cost -- in other words, they can get two for the price of one.

Pyongyang had previously announced that it has mastered nuclear fusion technologies, prompting some observers to predict that the next test could be a fusion-boosted device or possibly even a thermonuclear device, typically referred to as a hydrogen bomb. North Korean nuclear specialists are undoubtedly familiar with these technological advancements and likely have tried their hand at designing such devices, but I consider application of these concepts to be still out of reach of their specialists, unless they are prepared to conduct multiple nuclear testing campaigns.

How will we know? A successful nuclear test will be easily detected because its seismic signals will be monitored around the world by the International Monitoring System established under the Comprehensive Test Ban Treaty to monitor potential clandestine nuclear tests anywhere in the world. Both the 2006 and 2009 tests gave indisputable seismic evidence of nuclear tests. This one may be even easier to detect because Pyongyang has vowed to test at a higher level.

But what exactly did Pyongyang mean by a "higher level?" Was it just a higher explosion yield? That is possible, because much of the international community dismissed the 2006 test as a failure and the 2009 test as not very successful. The yield of the 2006 test is estimated at somewhat less than 1 kiloton (1,000 tons of TNT equivalent). Experts are still divided on the yield of the 2009 test; our best estimate is between 2 and 7 kilotons. In any case, if the North Koreans can explode a device with a yield in that range, then they most likely can produce a Nagasaki-like bomb with a yield of 20 kilotons. Perhaps that is what Pyongyang means by a higher level.

More likely, however, and consistent with Pyongyang's pronouncement that it will also increase its nuclear deterrent qualitatively, is an attempt to test a more sophisticated, miniaturized design. How will we know? Pyongyang will almost certainly claim that the test was successful and will tout its sophistication. It will be difficult to distinguish truth from propaganda, but experience shows there is often a nugget of truth in North Korea's claims. It will also be difficult to discern from seismic signals if one or two devices were tested if they are simultaneous and closely spaced.

Aside from seismic signals, which tell us only the size of the explosion and do not allow us to differentiate between plutonium and HEU, nor tell us anything about the sophistication of the device, there are only a few other signals that can be monitored. If the nuclear blast carried out in the tunnel deep underground causes sufficient fissures in the overburden rock, then gaseous fission products can escape and may be detected by airborne instruments or radiological monitoring stations around the world. The U.S. government reported that it picked up such signals after the 2006 test with offshore airborne monitors. It announced that these signals gave definitive proof that North Korea had detonated a nuclear device, but did not specify whether it was plutonium or HEU. There are different telltale signatures for HEU and plutonium devices, but they must be detected and analyzed very rapidly to allow conclusive identification. There were no reports that anyone detected radiological signals after the 2009 test. This could likely be a result of better containment or just bad luck of not having the detectors in the right place at the right time.

If a next test is well contained, then we may learn nothing about the device detonated. However, one of the risks Pyongyang takes in trying to demonstrate a test at a higher level is that they may produce fissures that allow radioactive seepage or possibly cause a major blowout from the tunnel. The U.S. testing program experienced such problems even after having conducted hundreds of tests. Unrecognized complex geological conditions apparently led to a blowout during the 1970 underground Baneberry nuclear test at the Nevada Test Site. The blowout released a radioactive cloud nearly 10,000 feet high. Were something similar to happen in North Korea's next test, we would be more likely to learn technical details about the type of device detonated due to radiological contamination. However,

spewing a radioactive cloud over the skies of Northeast Asia would create an enormous political storm from the nearby countries.

When will they test? Overhead imagery of the Punggye-ri nuclear test site demonstrates conclusively that North Korea is prepared to test. A third test tunnel, identified by the south portal, has been ready for nearly a year. It has been kept prepared through summer floods and winter snow. There has been a flurry of recent activity there and at the west portal, site of the 2009 test, and a nearby support area. Security appears particularly strict around the west portal, potentially indicating that the test device is or will be housed there until emplacement into the south tunnel. Everything we can see indicates North Korea is technically ready to test with little notice. When to test is now largely a political decision.

What difference will a test make? A successful test will make Pyongyang's nuclear weapons appear more threatening and make its deterrent more credible because it may then possess a missile-deliverable nuclear weapon. It may also set North Korea on a path of substantially expanding its nuclear arsenal through stepped-up HEU production. It may make Pyongyang more aggressive and provocative in dealing with South Korea and Japan. However, one more test does not fundamentally change the security threat North Korea poses. Pyongyang can threaten South Korea, Japan, or U.S. regional assets, but it can only use its nuclear weapons if it is prepared to accept the destruction of the regime.

A successful test will, however, destabilize the region -- precisely the scenario China has tried to avoid by supporting Pyongyang over the years, and the reason it is in China's interest to use all its influence to stop the test. The combined military forces of South Korea, Japan, and the United States will be forced into higher alert status. A test will likely drive them to increase their ballistic missile defense protection against North Korea, which will clearly complicate relations with China.

One of the most damaging results of another test will come from potential cooperation with Iran. Sharing Pyongyang's nuclear test experience with Tehran similarly to how it has shared missile technologies will greatly increase the Iranian nuclear threat. Iran now has the capacity to enrich uranium to weapons grade, although it has claimed to have enriched it only to lower levels for peaceful purposes. It would be very difficult for Iran to continue its peaceful nuclear façade if it tested to further its nuclear weapons capabilities. However, if Pyongyang were to involve Iran or share its testing experience, that would change the picture dramatically. Should Iran make the decision to build nuclear weapons, it is more likely to do so without necessarily testing its own device.

But perhaps the greatest impact of another North Korean nuclear test is that it will signal that the new regime, like its predecessors, has chosen bombs over electricity. Another nuclear test will make it impossible for the new South Korean government or the second Obama administration to look for resolution of long-standing enmities by focusing on issues beyond the nuclear dispute. Normalization of relations, a peace treaty, access to energy and economic opportunities -- those things that come from choosing electricity over bombs in the nuclear arena and have the potential of lifting the North Korean people out of poverty and hardship -- will be made much more difficult, if not impossible, for the next five years, if not longer.

Siegfried S. Hecker is senior fellow of the Freeman Spogli Institute for International Studies, and research professor in the Department of Management Science and Engineering at Stanford. He was director of Los Alamos National Laboratory from 1986 to 1997.

http://www.foreignpolicy.com/articles/2013/02/04/what_to_expect_from_a_north_korean_nuclear_test?wp_login_redirect=0

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RIA Novosti – Russian Information Agency
OPINION/Columnist

USAF COUNTERPROLIFERATION CENTER
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View From the Global Tank: Russia Can Shoulder Obama's Challenges - After a BMD Deal

5 February 2013

The record of second-term presidents has been mixed. Some were unable to accomplish anything historically meaningful while others failed to complete their second term. Two were assassinated. And, naming no names, one faced the embarrassing prospect of impeachment – and resigned early.

Not all commanders-in-chief succumbed to this "second-term curse" – governing actively right through to the end, whereupon they passed the presidency on to a fellow party member. I can think of three recent leaders who fit these criteria: Theodore Roosevelt, Franklin D. Roosevelt and Ronald Reagan (although, perhaps, some long-retired Nicaraguan Contras still feel cheated – Reagan never quite fulfilled their hopes).

Whether or not Barack Obama joins this small cohort of successful second-termers will largely depend on his ability to ride out Congressional gridlock and tackle the domestic challenges that most Americans view as threatening to their wellbeing. The country's anemic economy is chief among these – with scarce jobs and soaring debt.

And if the American public were to judge Obama's second term intentions against the yardstick of his second inauguration speech, they would have little doubt that their president really means to get down to domestic business this time around.

In that January 21 speech, Obama put forth an artfully crafted argument about why the major publicly-funded social programs for the poor and middle class really are pillars of economic growth and individual freedom.

At the same time, Obama largely avoided foreign policy issues. His "signature" first term initiatives, such as achieving a "global nuclear zero" or strengthening nuclear security worldwide were conspicuously absent, apparently warranting not even a perfunctory mention.

However, no matter how grave and time-consuming the country's domestic woes might be, a contemporary US president simply does not have the luxury of turning his back on the world, and hope to go down in history as a successful leader.

There remain a number of international challenges that directly impact (or could eventually impact) important US interests in this increasingly volatile world.

Iran and North Korea are relentlessly advancing their nuclear and missile programs. Afghanistan is far from being a viable state, and Al-Qaeda-affiliated insurgents spread violence throughout the greater Middle East and Africa. And then, of course, there is the peaceful but relentless rise of China.

While struggling with these inherited foreign policy problems, President Obama has also seen new challenges emerge on his watch, such as the EU economic crisis. Some initiatives his Administration put in place during his first term are now stalling: the "reset" with Russia is just one example.

These issues will require constant attention from Washington throughout Obama's second term and beyond. Nevertheless, my bet is that Obama will be able to divert even more energy to the domestic issues, provided he manages to forge deeper partnerships with other countries that can shoulder some of the costs in the international domain. Russia, properly incentivized, is one such country – it could do a great deal more to secure progress on a wide range of international issues that are vital to US interests.

The days when, in the words of Edward Abbey, humanity would not be free "until the last Kremlin commissar is strangled with the entrails of the last Pentagon chief of staff" certainly seem to have passed. But Russia still matters to the United States, and indeed the whole world, if only because of its geography, resources and other capabilities.

Post-Communist Russia's ability to advance (or disrupt) US-led efforts on non-proliferation, nuclear security, arms control, counter-terrorism, regional stability and energy supply is well understood.

Hopefully, Obama's selection of Democrat Senator John Kerry and former Republican Senator Chuck Hagel for the posts of foreign and defense secretaries will help bring the two sides closer to reaching a compromise on the issue, notably – it is one on which Obama has promised to display greater flexibility in his second term. Kerry and Hagel are viewed in both Washington and Moscow as pragmatists who advocate constructive engagement with Russia.

But with all the low-hanging fruit already picked, even these veteran politicians may find it hard to win Russia's cooperation on these issues, especially since what began as a pre-election spat between Moscow and Washington seems to have continued to escalate.

The main obstacle toward reversing the current backslide and securing Moscow's greater cooperation is obvious: America's ballistic missile defense (BMD) program in Europe, which Russian leaders claim will (eventually) be capable of targeting and intercepting their ballistic missiles.

This missile defense dispute can be resolved. But this would require both sides to display the goodwill needed to reach a compromise, possibly in the form of a founding act on missile defense cooperation which contains mutual non-targeting pledges, but which stops short of requiring ratification.

The act would emulate the 1997 NATO-Russia cooperation act, and establish continuing channels for sharing information, including radar data and interceptor technologies.

The BMD act should pave the way for complimentary capabilities of information and interception components of the US/NATO and Russian missile defense systems. One of the first steps should be introduction of continuous sharing of information, including radar data and interceptor technologies.

And to the conservatives who oppose such mutual exchange, I say this: remember that, even in the heat of the Cold War, the father of Star Wars (Reagan, not George Lucas) deemed it necessary to promise to share US missile defense technologies with the "Evil Empire," on condition that the latter agreed to bilateral nuclear cuts.

Of course, even deep US-Russian BMD cooperation will not be a cure-all. Russia's leaders may favor a transactional approach, bundling issues in negotiations with stronger counterparts, but I see no possible deals that could allow America to secure Russia's assistance in managing China's rise as Washington would, in an ideal world, prefer.

A BMD deal certainly could reverse the recent cooling in the bilateral relationship and ensure that the Kremlin remains a constructive partner on such issues of vital interest to the United States as deeper nuclear cuts, reinvention of the nuclear security partnership with Russia, and stabilization of Afghanistan. And, of course, such a deal will make America and its allies better protected against missile attacks. Moscow, which seems determined to terminate all the bilateral donor-recipient arrangements with the United States that date back to the 1990s, would also benefit from such a partnership of equals both militarily and geopolitically.

However, even the deep cooperation for which I (and others) hope, could prove unsustainable in the longer-term, unless it is put on solid economic foundations. As of 2012, Russia was 20th on the list of America's trading partners, while for Russia the United States came 8th. Indicatively, given this trade imbalance, the United States did not make it onto the list of the top ten investors in Russia that year.

How to develop deeper economic ties, especially given America's progress toward self-sufficiency in energy and Russia's investment climate, is an issue that Obama, Putin and their successors will have to grapple with.

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The views expressed in this column are the author's alone.

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To Cut Wasteful Spending, Start With Nuclear Weapons

By Richard Klass, Colonel, USAF (ret.)
February 5, 2013

The first "fiscal cliff" was temporarily averted through a last-minute congressional deal. The next "fiscal cliff", the automatic budget cuts, known as sequestration, is scheduled to arrive March first. Between now and March, Congress and the president will be searching for a way to reshape the budget in a more surgical, strategic way, rather than through mindless, across-the-board cuts. One place to start is with the nuclear weapons programs at the Departments of Defense and Energy.

Consider this: over the next decade nuclear weapons and related programs could cost $640 billion. This colossal price tag is impossible to justify. Since the end of the Cold War, nuclear weapons have played a far smaller role in ensuring American security -- yet the nuclear weapons budget remains stubbornly high. For a modern and cost-effective defense budget, we must reshape and right-size this area of defense spending.

Many are unaware of the hidden costs of simply keeping the nuclear arsenal operational: it costs money not only to maintain nuclear weapons, but also to refurbish them, keep them secure, operate the bases where they are housed and train the professionals who manage and protect them. By the estimate of the Washington-based Stimson Center, those operations and maintenance costs add up to approximately 31 billion dollars a year, and are slated to expand in coming years.

And the spending doesn't stop there. Rather than optimize our nuclear policy and posture for the 21st century, the government has actually pushed to expand nuclear programs -- and the costs are spiraling out of control. Here are just a few examples:

The plan to modernize the B61 gravity bomb will cost $10 billion. In total, each new B61 bomb will cost more than its weight in gold -- a steep price for a bomb whose primary purpose was to prevent the Soviet armor from rolling across Germany, a threat that has long since disappeared.

In a classic example of runaway spending, the projected cost of a brand-new nuclear facility at Los Alamos, New Mexico has ballooned from $375 million to at least $3.7 billion -- a tenfold increase. The Obama administration and both houses of Congress have agreed on a five-year delay to the project, a sign of bipartisan agreement that the building's considerable costs outweigh the potential benefits.

Another new facility, the Uranium Processing Facility in Tennessee, has also seen its estimated costs nearly double, going from $3.5 billion to $6.5 billion in just one year. This is all the more egregious given that the facility may not even be necessary: it has been reported that the existing infrastructure could simply be upgraded instead -- for less than 1/1,000th of the cost of the new laboratory.

Finally, the Navy has an ambitious plan to build twelve new ballistic missile submarines, which will cost nearly $350 billion over their lifetime. The Navy itself has admitted that this staggering cost will compromise its ability to build other ships. To reduce costs, the Navy could build a smaller fleet of eight submarines, which could, if necessary, house the same number of nuclear warheads as the proposed fleet of twelve. The programs to modernize the other two legs of the nuclear triad, bombers and long range missiles, should also be closely reviewed for cost and strategic necessity.

Nuclear weapons programs account for a significant portion of unnecessary defense spending and hence the deficit. The billions of dollars spent on the upkeep and upgrading of nuclear weapons could be used to pay down the deficit, or invest in higher-priority defense programs.

Those who argue that we need more nuclear weapons for national security are trapped in a Cold War mindset. The world has changed since the Soviet Union collapsed -- and our strategy must change, as well. As former STRATCOM Deputy Commander Lt. General Dirk Jameson put it, "Having more nuclear weapons doesn't mean we are winning... It merely reflects that our strategy is ill-suited to our times."

The strategic way to cut defense spending is not by cutting across the board, but by focusing on specific wasteful and unnecessary weapons systems. Nuclear weapons programs should be at the top of this list. With the Cold War far behind us, and an era of difficult budgetary choices ahead, we must ask whether we want to continue bearing the costs of an expensive nuclear arsenal that is a relic of a bygone era and doesn't help to keep us safe.

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This article was written in collaboration with Usha Sahay a Herbert Scoville, Jr. Peace Fellow at the Center for Arms Control and Non-Proliferation.

http://www.huffingtonpost.com/richard-klass/to-cut-wasteful-spending_b_2624340.html

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The Center for Public Integrity
OPINION/Investigative Report

Obama Administration Embraces Major New Nuclear Weapons Cut

Advisers reach consensus that current arsenals are larger than needed to target foes
By R. Jeffrey Smith
February 8, 2013

Senior Obama administration officials have agreed that the number of nuclear warheads the U.S. military deploys could be cut by at least a third without harming national security, according to sources involved in the deliberations.

They said the officials' consensus agreement, not yet announced, opens the door to billions of dollars in military savings that might ease the federal deficit and improve prospects for a new arms deal with Russia before the president leaves office. But it is likely to draw fire from conservatives, if previous debate on the issue is any guide.

The results of the internal review are reflected in a draft of a classified decision directive prepared for Obama's signature that guides how U.S. nuclear weapons should be targeted in the future against potential foes, according to four sources with direct knowledge of it. The sources, who requested anonymity because they were not authorized to talk to a reporter about the review, described the president as fully on board, but said he has not signed the document.

The document directs the first detailed Pentagon revisions in U.S. targeting since 2009, when the military's nuclear war planners last took account of a substantial shrinkage — roughly by half from 2000 to 2008 — in the total number of nuclear weapons in the U.S. arsenal. It makes clear that an even smaller nuclear force can still meet all defense requirements.

Although the document offers various options for Obama, his top advisers reached their consensus position last year, after a review that included the State Department, the Defense Department, the National Security Council, the intelligence community, the U.S. Strategic Command, the Joint Chiefs of Staff and the office of Vice President Joseph Biden, according to the sources.

Several said the results were not disclosed at the time partly because of political concerns that any resulting controversy might rob Obama of popular votes in the November election. Some Republican lawmakers have said they oppose cutting the U.S. arsenal out of concern that it could diminish America's standing in the world.

The new policy directive, which formally implements a revised nuclear policy Obama adopted in 2010, endorses the use of a smaller U.S. arsenal to deter attack or protect American interests by targeting fewer, but more important, military or political sites in Russia, China, and several other countries. This can be accomplished by 1000-1100 warheads, the sources said, instead of the 1,550 allowed under an existing arms treaty.

The 2010 policy called for reducing the role of nuclear weapons, arguing that they are "poorly suited to address the challenges posed by suicidal terrorists and unfriendly regimes seeking nuclear weapons." But many critics have charged that not much of the policy has been implemented. Obama himself even joked in a video message to the Jan. 26 annual dinner of Washington's exclusive Alfalfa Club, that he could not recall why he won his 2009 Nobel Peace Prize [the Oslo committee attributed it partly to his stimulation of "disarmament and arms control negotiations"].

With the election behind him and a new national security team selected, Obama is finally prepared to send this new guidance to the Joint Chiefs of Staff and to open a new dialogue with Russia about corresponding reductions in deployed weapons beyond those called for in a 2011 treaty, according to two senior U.S. officials involved in the deliberations.

"It is all done," said one. "We did so much work on that there is no interest in going back and taking another look at it." The second official said completion of the new directive would become public in coming weeks, when Obama may mention the issue in his State of the Union address on Feb. 12, or in another speech specifically dedicated to the subject, similar to the April 2009 Prague address in which he promised to "take concrete steps towards a world without nuclear weapons."

Arms talks now being explored

While the draft directive opens the door to scrapping a substantial portion of the U.S. arsenal, it does not order those reductions immediately or suggest they be undertaken unilaterally, the officials said. Instead, the administration's ambition is to negotiate an addendum of sorts to its 2010 New Start treaty with Russia, in the form of a legally-binding agreement or an informal understanding. Officials said the latter path could be chosen if gaining the assent of two-thirds of the Senate to a treaty is not possible.

Preliminary discussions about this ambition occurred in Munich on Feb. 2 between Vice President Biden and Russian foreign minister Sergei Lavrov, and additional talks are slated in Moscow this month with acting undersecretary of state Rose Gottemoeller and White House national security adviser Thomas Donilon. Obama "believes that there's room to explore the potential for continued reductions, and that, of course, the best way to do so is in a discussion with Russia," deputy national security adviser Ben Rhodes said on Jan. 31.

White House spokesman Tommy Vietor declined comment on Feb. 6 on the draft directive.

The New Start treaty limits each side to deploying no more than 1,550 strategic nuclear weapons by 2018, but uses a counting rule that pretends strategic bombers carry only a single warhead, instead of up to 20. So the actual arsenals after the treaty takes effect are likely to be closer to 1,900, a number that Obama's advisers now think is too high.

New Start also imposes no limits on nuclear weapons in each country that are held in storage or considered of "tactical" or short-range use — a number estimated by independent experts as roughly 2,700 in the United States and 2,680 in Russia. Under the new deal envisioned by the administration, Russia and the United States would agree not only to cut deployed warhead levels below 1,550 to around 1,000 to 1,100 but also — for the first time — begin to constrain the size of these additional categories.

Several officials said that as a result, the total number of nuclear warheads could shrink to less than 3,500 and perhaps as low as 2,500, or a bit more than half the present U.S. arsenal, without harming security or requiring a major reconfiguration of existing missiles or bombers.

A much steeper reduction, to around 500 total warheads, was debated within the administration last year, but rejected, sources said. Known as the "deterrence-only" plan, it would have aimed U.S. warheads at a narrower range

of targets related to an enemy's economic capacity and no longer emphasized striking the enemy's leadership and weaponry in the first wave of an attack.

Nuclear weapons experts have long considered the latter "warfighting" goal destabilizing because it arouses fears among all the combatants of a decapitating, preemptive strike that could obstruct a significant retaliation, but it has been a salient feature of the U.S. nuclear policy for half a century. China, in contrast, has adopted a "deterrence-only" strategy, keeping only a minimal arsenal of missiles aimed partly at targets in or near large cities.

Some officials at the State Department, the NSC staff, and Vice president Biden's staff urged consideration of the smaller arsenal and new targeting policy, officials said. But "a small brake" was applied by the Joint Chiefs of Staff chairman, Army Gen. Martin E. Dempsey, who worried that making such a major policy change was too risky at a moment of upheaval in conventional military strategy, and would create too much uncertainty among allies, said one of the sources with knowledge of the discussion.

Obama, who followed the deliberations intermittently, "decided we did not need to do deterrence-only targeting now," but did not rule it out, the source added.

Air Force Lt. Gen. James Kowalski, who as head of the Global Strike Command oversees the operations of bombers and land-based missiles capable of carrying more than a thousand nuclear warheads to foreign targets, said at a breakfast with reporters on Feb. 6 that if asked, "can you go below 1,500" treaty-accountable weapons, his response is, "Yeah, I think there is some headroom in there." But he warned that shrinking the force to well below 1,000 would require "major structural changes in how we do this business."

Additional cuts will save billions of dollars

The financial savings from even the modest reduction now being contemplated could be substantial, according to officials and independent experts. Already, to comply with New Start, the Pentagon has been pulling warheads from land-based missiles and making plans to decommission some of the missiles themselves; it is also planning to reduce the number of missile tubes aboard its Trident submarines.

By pushing the arsenal size even lower, it could close perhaps two of its three land-based missile wings and cut at least two of the 12 new strategic submarines it now plans to build — saving $6 billion to $8 billion for each one. Eliminating a single wing of 150 missiles would save roughly $360 million a year, or more than $3 billion over a decade, according to Tom Collina, research director at the Arms Control Association, a nonprofit research group in Washington. Modernization of the remaining land-based missiles might also be deferred, bringing additional savings.

Russia, meanwhile, has been phasing out three older missile types that loomed large during Cold War tensions — the SS-18, the SS-19, and the SS-25 — and is replacing them with a more modern missile, the SS-27, in three forms. It is also planning to build a costly, larger missile, capable of carrying multiple warheads. Pentagon officials are not alarmed by that possibility, but say that a new arms deal could give Russia reason to scale back its own spending.

"The Russian Federation…would not be able to achieve a militarily significant advantage by any plausible expansion of its strategic nuclear forces, even in a cheating or breakout scenario" because it cannot destroy U.S. missile-carrying submarines at sea, the Defense Department said in a May 2012 classified report to Congress, partially declassified and released last month to the Federation of American Scientists (FAS).

Three participants in the targeting policy review said Russia nonetheless remains the sole U.S. target that still requires potential use of a large number of nuclear warheads to achieve damage that military planners deem adequate, even though Obama famously said last September at the Democratic National Convention that "you don't call Russia our number one enemy — not al-Qaeda, Russia — (laughter) — unless you're still stuck in a Cold War mind warp."

U.S. nuclear targets include China, North Korea, and Iran, officials have said. But the list of predictable enemies has been steadily shrinking: Iraq was once on the list — as recently as 1997, the Defense Department studied radioactive fallout distribution patterns from a potential U.S. attack there — but it now poses no threats, and Syria — another

perennial listee — is in the midst of imploding and unable even to muster a response to Israel's recent bombing of an arms factory in its capital.

Russian arms reductions taken to date make U.S. targeting revisions feasible now, according to Hans Kristensen, a nuclear arms expert at FAS. A decade ago, the U.S. military was targeting 660 Russian missile silos with multiple warheads, he said; now, the number of such silos is less than half that, and in a decade, it is unlikely to exceed 230. Several officials also pointed out that Russia presently fields a smaller and weaker conventional military force than it once did, also allowing U.S. targeting to be scaled back.

Obama's new appointees are on board

Key members of Obama's new national security team are on board with the reduction strategy.

"There's talk of going down to a lower number," Secretary of State John F. Kerry said during his confirmation hearing on Jan. 24. "I think, personally, it's possible to get there if you have commensurate levels of — of inspections, verification, guarantees about the capacity of your nuclear stockpile program, et cetera."

Secretary of Defense nominee Chuck Hagel drew fire from Republicans at his Jan. 31 confirmation hearing for signing a report last summer that said current stockpiles "vastly exceed what is needed to satisfy reasonable requirements of deterrence" and that nuclear weapons are arguably "more a part of the problem than any solution." An appropriately modernized force, the Global Zero report said, would consist of just 900 total strategic weapons on each side, not 5,000, and get rid of land-based missiles subject to accidental or unauthorized launch.

Sen. Jeff Sessions (R-Ala.) told Hagel that cuts of that magnitude would "create instability, rather than confidence and stability; create uncertainty in the world among our allies and our potential adversaries." He said the current U.S. arsenal projects "an image of solidity and — and steadfastness" to citizens around the globe.

Hagel responded at the hearing that the report simply provided illustrative scenarios, not recommendations. But he affirmed the report's conclusion that "we have to look at" the value and cost of continuing to keep land-based missiles and made no promise to build all 12 new missile-carrying submarines sought by the Navy.

The United States is not the only nuclear weapons state considering a retrenchment. A senior British treasury official told the London Guardian several weeks ago that given fiscal pressures in London, the country needs a wide debate "over the approach we take to nuclear deterrence" and should consider scaling back either its purchase or deployment of costly new nuclear missile-carrying submarines. Michael Portillo, the defense minister under Conservative prime minister John Major in the 1990's, told the Financial Times last month that Britain maintained its arsenal "partly for industrial and employment reasons, and mainly for prestige." He called it "a tremendous waste of money."

UN Secretary General Ban Ki-Moon is among those urging a major shift. In a speech last month in California, he called for all nuclear-armed states to "reconsider their national nuclear posture," and said the United States and Russia had a special obligation to undertake deeper cuts. "Nuclear disarmament is off-track," he said. "Delay comes with a high price tag. The longer we procrastinate, the greater the risk that these weapons will be used, will proliferate or be acquired by terrorists."

Some senior U.S. officials are skeptical that Russian president Vladimir Putin would agree to a new treaty, because his government claims to depend more heavily than Americans on nuclear arms for security; others worry that Republican opposition in the Senate may obstruct ratification of any new treaty. But there remains high interest, officials said, in at least exploring a new joint, lower limit.

R. Jeffrey Smith is a reporter at the Washington Post and was awarded the Pulitzer Prize for Investigative Reporting in 2006.

http://www.publicintegrity.org/2013/02/08/12156/obama-administration-embraces-major-new-nuclear-weapons-cut

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