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

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Iran Waiting for Another Nuclear Jump

TEHRAN (FNA) - An Iranian top security official announced on Wednesday that the Tehran government would soon announce some "good news" on the country's new achievements in the field of civilian nuclear technology.

"During the next few days, some good news on nuclear achievements will be announced to the people," Supreme National Security Council (SNSC) Undersecretary for Media Affairs Abolfazl Zohrehvand said in a conference in Iran's Northeastern city of Bojnord, the capital city of the North Khorassan province, on Wednesday.

As regards Iran's nuclear activities, the official underlined the peaceful nature of Iran's nuclear program, and noted, "Today, the world has accepted Iran as a nuclear state, and the Islamic Republic of Iran is also committed to the peaceful use of the nuclear technology."

Zohrehvand said the Iranian government, whose approach is based on nuclear transparency, is continuing nuclear activities with maximum power .

Earlier this month, Iran announced that it would soon supply the Tehran Research Reactor with the nuclear fuel enriched inside Iran.

"Our scientists took action to supply fuel for the Tehran research reactor and this fuel which is the fruit of the efforts made by our country's scientists will be loaded into the Tehran Research Reactor this year," Supreme National Security Council (SNSC) Undersecretary Ali Baqeri said in early April.

Iran's move to use nuclear fuel in its research reactor came after the West failed to fulfill its pledge to supply nuclear fuel for the reactor.

After Iran announced to the International Atomic Energy Agency (IAEA) in 2009 that it would soon run out of nuclear fuel for its research reactor in Tehran, the Agency proposed a deal according to which Iran would send 3.5-percent-enriched uranium and receive 20-percent-enriched uranium from potential suppliers in return, all through the UN nuclear watchdog agency.

The proposal was first introduced on October 1, 2009 when Iranian representatives and diplomats from the Group 5+1 held high-level talks in Geneva.

But France and the United States, as potential suppliers, stalled the talks soon after the start. They offered a deal which would keep Tehran waiting for months before it could obtain the fuel, a luxury of time that Iran could not afford as it is about to run out of 20-percent-enriched uranium.

The Iranian parliament rejected the deal after technical studies showed that it would only take two to three months for any country to further enrich the nuclear stockpile and turn it into nuclear metal rods for the Tehran Research Reactor, while suppliers had announced that they would not return fuel to Iran any less than seven months.

Iran then put forward its own proposal that envisaged a two-staged exchange. According to Tehran's offer, the IAEA would safeguard nearly one third of Iran's uranium stockpile inside the Iranian territory for the time that it took to find a supplier. The western countries opposed Tehran's proposal.

Subsequently, Iranian, Brazilian and Turkish officials on May 17, 2010 signed an agreement named the 'Tehran Declaration' which presented a solution to the longstanding standoff between Iran and potential suppliers of nuclear fuel. According to the agreement, Iran would send some 1200 kg of its 3.5% enriched uranium to Turkey in exchange for a total 120 kg of 20% enriched fuel.

But again the western countries showed a negative and surprising reaction to the Tehran Declaration and sponsored a sanctions resolution against Iran at the UN Security Council instead of taking the opportunity presented by the agreement.

Russia, France, and the US, in three separate letters, instead of giving a definite response to the Tehran Declaration, raised some questions about the deal, and the US took a draft sanctions resolution against Iran to the UN Security Council, which was later approved by the Council.

Iran in a letter responded to the questions raised by the Vienna Group on the Tehran Declaration and voiced its preparedness to hold talks.

In a later move, IAEA Director-General Yukiya Amano proposed a plan to resume talks between the two sides, and former Iranian Foreign Minister Manouchehr Mottaki announced Tehran's agreement with Amano's proposal.

"Iran is ready to take part in the meeting brokered by Amano," Mottaki said.

He referred to Iran's letter to Amano in which the country had declared its readiness for talks with the Vienna Group and said, "Mr. Amano has forwarded the letter to other members of the group and it seems that he is arranging for holding the meeting."

Mottaki said that the country wants to determine and approve details of fuel swap through talks with Vienna Group.

Yet, despite all the efforts Iran has made so far to swap or supply fuel from potential suppliers, West has refrained to do so.

After Iran saw western suppliers rock the boat and shrug off their responsibility - as enshrined in the Non-Proliferation Treaty (NPT) and International Atomic Energy Agency (IAEA) statute - it started domestic plans to enrich uranium to the purity level of 20 percent.

In April 2010, Iranian President Mahmoud Ahmadinejad ordered the AEOI head to start domestic plans to supply fuel for the Tehran Research Reactor which produces radioisotopes for medicinal use.

<http://english.farsnews.com/newstext.php?nn=9002076973>

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Al Bawaba News – Jordan

Report Says Ahmadinejad Stepped Down and then Changed his Mind

Iran's president on Wednesday shunned a Cabinet meeting for the second consecutive time.

April 28, 2011

Iran's president on Wednesday shunned a Cabinet meeting for the second consecutive time, apparently expressing his discontent over a recent government appointment by the country's supreme leader. Sources in Tehran claim there is a growing rift between Mahmoud Ahmadinejad and Ayatollah Ali Khamenei.

The confrontation stems from Ahmadinejad's recent dismissal of the intelligence minister, Heidar Moslehi, who was then promptly reinstated by Khamenei. Sources believe Moslehi's resignation came following a dispute between him and the president's chief of staff, Esfandiar Rahim Mashai.

Iranian media said Moslehi attended Wednesday's Cabinet session. Ahmadinejad abstained, as he did on Sunday. Al Arabiya TV channel reported that Ahmadinejad submitted his resignation but later changed his mind.

Meanwhile, 12 Iranian MPs have called for the impeachment of Ahmadinejad for numerous violations of laws approved by parliament.

On its part, the pro-Ahmadinejad Dolatyar website wrote that persistent "attacks and pressure" against the government could turn Iran into "a bloody scene of clashes."

However, a conservative MP told Borna News Agency yesterday that Ahmadinejad visited the Supreme Leader Monday night to discuss "his concerns." Some conservative figures have accused Ahmadinejad of resisting the orders from Ayatollah Khamenei.

<http://www1.albawaba.com/main-headlines/report-says-ahmadinejad-stepped-down-and-then-changed-his-mind>

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Boston Herald

Syria's Referral to UNSC Likely

By Associated Press

Friday, April 29, 2011

VIENNA — The International Atomic Energy Agency is setting the stage for potential U.N. Security Council action on Syria as it prepares a report assessing that a Syrian target bombed by Israeli warplanes was likely a secretly built nuclear reactor meant to produce plutonium, diplomats say.

Such a conclusion would back intelligence produced by Israel and the United States. Syria says the nearly finished building had no nuclear uses. It has repeatedly turned down IAEA requests to revisit the site after allowing an initial 2008 inspection that found evidence of possible nuclear activities.

In interviews over the past week, three diplomats and a senior U.N. official said such an assessment — drawn up by IAEA chief Yukiya Amano — would be the basis of a Western-sponsored resolution at a meeting of the 35-nation IAEA board that condemns Syria's refusal to cooperate with the agency and kicks the issue to the U.N. Security

Council. They said reporting Syria to the council would likely come as early as a June board meeting and no later than in November.

All asked for anonymity in exchange for discussing confidential information.

In an apparent slip of the tongue that could have been a window on his plans, Amano on Thursday said for the first time that the bombed site was in fact a nearly finished nuclear reactor in taped comments at a news conference and later to The AP.

Suggesting that Amano had erred in making such comments publicly, the IAEA later put out a statement that "he did not say that the IAEA had reached the conclusion that the site was definitely a nuclear reactor."

The rollback reflected previous, more circumspect, IAEA language. In a February report, Amano had said only that features of the bombed structure were "similar to what may be found at nuclear reactor sites."

Once formally involved, the council has options ranging from doing nothing to passing its own resolutions demanding compliance with the IAEA, followed by sanctions to enforce such demands. This has been the scenario for Iran, under four sets of U.N. sanctions for ignoring council demands to stop activities that could be used to build nuclear arms and to cooperate with an IAEA probe of experiments that could be used to develop such weapons.

Syria sanctions are unlikely. While Tehran continues with its nuclear program, intelligence services believe that the Israeli bombing of the Al Kibar site effectively ended Syria's covert activities. As well, said the diplomats, forcing the issue with Syria would detract council attention from Iran, the main focus of nuclear concern, and could muddy efforts to focus on an end of the bloody crackdown by the Damascus government on the grass-roots pro-democracy movement.

Still Security Council involvement carries both symbolic weight and opens the path for concrete action later should new evidence be found.

http://www.bostonherald.com/news/international/general/view/20110429syrias_referral_to_unsc_likely/srvc=news&position=recent_bullet

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USA TODAY

Carter: N. Korea Wants Guarantees to Give Up Nukes

Associated Press (AP)

April 27, 2011

SEOUL, South Korea (AP) — Jimmy Carter left North Korea on Thursday with a message that Pyongyang had demanded U.S. security guarantees in return for abandoning its nuclear weapons programs.

But a key part of the former president's three-day visit — a hoped-for meeting with leader Kim Jong Il and his son and heir-apparent Kim Jong Un — was still in doubt. Neither Carter nor North Korea's state media provided immediate word on whether he'd met the Kims.

Carter, who traveled with three former European leaders, said in a blog post that North Korea insisted during the visit that it wants to improve relations with the United States and is willing to talk with Washington and Seoul without preconditions.

"The sticking point — and it's a big one — is that they won't give up their nuclear program without some kind of security guarantee from the U.S.," he wrote in a message posted Wednesday night.

That's an apparent reference to North Korea's claim that its atomic weapons programs deter the United States and South Korea from staging a northward invasion that would allow Seoul to rule the entire Korean peninsula.

Carter is well-respected in North Korea for his role in helping work out a 1994 nuclear deal that may have averted a war. But officials in Seoul and Washington have put little stock in his ability to engineer a breakthrough in long-stalled, acrimonious nuclear negotiations.

Han Sung-joo, South Korea's foreign minister during Carter's 1994 trip, said in an interview that "both South Korea and the U.S. government are a little bit wary of Mr. Carter trying to represent North Korea in a better light than it actually is."

Despite widespread skepticism, however, interest was still high in whether the Nobel Peace laureate might thaw ties between North Korea and the outside world.

Carter and the former leaders of Finland, Norway and Ireland met with the foreign minister and the president of the North's parliament.

Carter's group waded into a difficult situation: It has been more than two years since nuclear negotiators from the United States and neighboring nations last met with the North in an effort to persuade it to abandon its atomic weapons programs.

Since then, the North has conducted missile and nuclear tests and proudly unveiled a new nuclear facility that could give it another way to make atomic bombs. Late last year, the North Korean military rained artillery shells on a front-line island, killing two South Korean civilians as well as two marines. Seoul also accuses Pyongyang of sinking a warship in March 2010, killing 46 South Korean sailors.

North Korea has also made progress in building what could be a light water nuclear power reactor, according to commercial satellite imagery taken in early March but released Thursday by the Institute for Science and International Security in Washington. While ostensibly for civilian energy purposes, such a reactor gives the North reason to enrich uranium that could be used in atomic weapons.

The United States says it won't push forward on nuclear talks until South Korea is satisfied that the North has taken responsibility for last year's bloodshed. North Korea has shown no willingness to apologize and denies involvement in the ship sinking.

Enter Carter, 86, whose credentials as a North Korea specialist largely stem from his drama-filled trip to Pyongyang in 1994. At the time, the North had expelled international nuclear inspectors and was threatening to destroy Seoul. Many feared war would erupt.

Carter, traveling with then President Bill Clinton's approval, met directly with Kim Il Sung, the country's revered founder and father of the current leader, just weeks before the president's death.

Those talks set up U.S.-North Korean negotiations that resulted in a deal that called for freezing the North's nuclear facilities in exchange for proliferation-resistant power reactors. The accord fell apart in 2002, after the George W. Bush administration claimed North Korea had embarked on a secret uranium enrichment program.

Carter traveled this week as a private citizen. The State Department said he was carrying no special messages.

South Korea played down the visit, saying it didn't have high hopes that Carter's trip would change North Korea's attitudes.

But Carter's trip could also be valuable at a time when, with few official contacts, determining Pyongyang's motivations and goals is often guesswork and left to unofficial envoys.

Government talks are preferable, Joel Wit, a former State Department official responsible for implementing the 1994 deal, wrote recently. "But at a time when they aren't talking, unofficial channels of communication run by seasoned practitioners can be indispensable."

<http://www.usatoday.com/news/world/2011-04-25-carter-korea.htm>

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Bangkok Post – Thailand

N.Korea Makes Progress at Nuclear Site: Images

Agence France-Presse (AFP)

April 28, 2011

North Korea is making progress on a project that it says is a light water reactor but has raised overseas concerns, a US think tank said Wednesday after obtaining satellite images.

The Institute for Science and International Security released images that showed activity at Yongbyon near the site of a former cooling tower, which the North destroyed in 2008 to showcase its commitment to denuclearization.

The images, which were taken commercially on March 8, showed a crane and what appeared to be construction material along with a 21-meter (69-foot) cylinder whose exact use was unclear.

South Korea's KBS television earlier obtained pictures that showed progress on the site and what some Seoul media said might be new nuclear facility. The US think-tank said its images, taken several weeks earlier, did not show the structure.

North Korean officials last year told US scholar Jack Pritchard that they planned to build an experimental light-water reactor at Yongbyon, which is around 100 kilometers (60 miles) north of the capital Pyongyang.

Yongbyon already has an aging reactor that produced plutonium for North Korea's nuclear weapons. Light-water reactors are generally used to generate electricity.

However, the North Korean plans have raised concerns that the regime may also be making new efforts to build nuclear weapons or that it is boasting of its atomic prowess to strengthen its hand diplomatically.

Some foreign experts also questioned the safety of nuclear power in impoverished North Korea in light of the crisis at the Fukushima plant in much more developed Japan.

Six-nation talks on ending North Korea's nuclear program have been at a standstill since 2009, with US President Barack Obama's administration demanding concrete commitments by Pyongyang before it resumes talks.

But former US president Jimmy Carter, an advocate of engagement with the regime, is leading a delegation of elder statesmen to Pyongyang this week. He wrote on a blog post that North Korea wants better ties with Washington.

<http://www.bangkokpost.com/news/asia/234115/n-korea-makes-progress-at-nuclear-site-images>

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Yonhap News – South Korea

April 29, 2011

China's Nuke Envoy to Visit N. Korea amid Nuclear Deadlock

INCHEON, April 29 (Yonhap) -- China's chief nuclear envoy said Friday he plans to visit North Korea to coordinate efforts to revive six-party talks on the North, wrapping up a South Korean visit that coincided with a trip to Pyongyang by former U.S. President Jimmy Carter.

Speaking to Yonhap News Agency before departing for China, Wu Dawei, however, said he did not yet have a specific timetable for his visit to North Korea, the focal point of the long-stalled talks that also group South Korea, the United States, Russia and Japan.

Wu declined to comment specifically on Carter's three-day trip to North Korea that ended Thursday, during which the former U.S. leader said North Korean leader Kim Jong-il proposed holding a summit with South Korean President Lee Myung-bak.

Wu had proposed earlier this month that the nuclear envoys of the two Koreas first hold dialogue to set the stage for other forms of dialogue such as the six-party denuclearization-for-aid talks.

Carter did not meet with Kim Jong-il during his trip that also involved three other former Western leaders such as Mary Robinson of Ireland. After failing to meet with President Lee here, Carter left for the U.S. earlier in the day from Incheon International Airport.

Wu later left for China from the same airport, located west of Seoul.

<http://english.yonhapnews.co.kr/national/2011/04/29/26/0301000000AEN20110429010200315F.HTML>

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Defense Update – Israel

April 27, 2011

Pakistan Tests Nuclear-Capable Short Range Tactical Guided Weapon

Pakistan has tested a nuclear-capable tactical missile dubbed HATF IX (also known as Nasr). The missile was developed as a 'quick response weapon', two missiles contained in transported and launched from a Transporter-Erector-Launcher (TEL) unit carried on a vehicle, similar to a multiple rocket launcher. The single stage solid-fuel missile, developed by Pakistan's National Development Complex (NDC), has a range of 60 km. It is powered by a high-thrust single-stage solid-propellant rocket motor. The missile has a midcourse guidance system, employing movable control surfaces emplaced behind the nose. Tail fins also help stabilizing the missile in flight. A terminal guidance system is also employed, further improving hit accuracy. Nasr test firing also demonstrates that Pakistan has progressed with the development of compact sub-kiloton, low yield tactical nuclear warheads.

The test indicates Pakistan has the technology to build a small nuclear warheads for all kinds of delivery platforms, said Mansoor Ahmed, a lecturer at Quaid-e-Azam University here who specializes in nonconventional weapons and missiles, quoted by Defense News. "Theoretically, 1 kilogram of weapons-grade plutonium boosted with 4-5 grams of tritium gives a 10-20KT yield, provided the trigger is sophisticated," Ahmed said. "However, the diameter size of

Nasr suggests that the warhead would be less than 1 kilogram, and would be of sub-kiloton range, suitable for battlefield use and could be a fission boosted sub-kiloton fission device."Pakistan will now "not accept any cap in plutonium production in the foreseeable future," he said.

The missile offers Pakistan's military a quick response system, enabling the country to rapidly deploy massive firepower based on nuclear delivery capability, employing effective "shoot-and-scoot" tactics. These assets are believed to effectively counter India's 'Cold Start' strategy, part of its 'limited war' doctrine, using massive air-land attack by forces maintained at high readiness level. According to Pakistani Lt. General (Retd.) Khalid Ahmed Kidwai, Director-General of Pakistan's Strategic Plans Division at the National Command Authority, Nasr represents a new milestone in consolidating Pakistan's strategic deterrence capability at all levels of the threat spectrum. It means Pakistan could potentially refrain from using strategic nuclear weapons in a limited conflict, by employing a low-yield tactical warheads as 'battlefield weapons' capable of deterring and inflicting unacceptable losses among overwhelming mechanized forces that could be employed by India under a 'Cold Start' attack. While India is not expected to reassess its 'Cold Start' strategy yet, such a move will be required once Pakistan demonstrates its tactical weapons capability by detonating such a low-yield warhead.

While the Pakistani move was applauded at home, as a counterweight to a potential Indian threat, some voices are also questioning the value within Pakistan's overall defense strategy.

http://defense-update.com/wp/20110427_hatf_ix_nasr.html

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Hindustan Times – India

Pakistan Tells Kabul to Dump America

Joshua Partlow, Hindustan Times

Kabul, April 28, 2011

When Pakistan's prime minister visited Kabul this month, he spoke grandly to the public of an enduring friendship between neighbours and his country's commitment to help Afghans in the war with the Taliban. But in private meetings, Yousaf Raza Gillani and the leaders of Pakistan's military and intelligence service offered a startling proposal for cooperation: The Afghan government should distance itself from the US and seek new allies, particularly China, according to current and former Afghan officials with knowledge of the meeting.

Gillani read to President Hamid Karzai from a paper outlining Pakistan's view that the US military strategy had no prospect for success, that its troops antagonised the region and that the Afghan government should avoid any agreement that allows long-term US military bases in Afghanistan, according to the Afghans.

Because of the growing fiscal problems in the United States, Gillani argued, America was a power in decline, one without the ability to support Afghanistan and Pakistan in the future, and Afghans should look "for alternative allies," a senior Afghan official said. "That was the first time that the whole Pakistani state, military and civilian, spoke to us with one voice. That is important," the Afghan official said.

Although Pakistan is a US ally, top Pakistani officials have long been deeply disdainful of US policy in the region, and have been hedging their bets in case US efforts in Afghanistan fail. Pakistan's overture to the Afghan government marks one of the clearest signals to date that Pakistan is moving away from its partnership with the United States.

A spokesman for Gillani denied that the Pakistanis delivered any such message but would not discuss the content of the meeting. "Whatever you're saying is not true," Shabir Anwar said.

Pakistan's Foreign Ministry released a statement on Wednesday saying that "Pakistan recognises the key role of the United States in promoting stability, peace and harmony in Afghanistan."

<http://www.hindustantimes.com/Pakistan-tells-Kabul-to-dump-America/Article1-690852.aspx>

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Indian Express – India

April 29, 2011

Pakistan Tests Nuclear-Capable Hatf-8 Cruise Missile

Islamabad - Pakistan today successfully tested the nuclear-capable Hatf-VIII or Ra'ad cruise missile that has a range of 350 km, with the military saying the weapon system would give the country "greater strategic stand-off capability" on land and at sea.

The air-launched cruise missile, which can carry a nuclear or a conventional warhead, was tested at an undisclosed location.

The Inter-Services Public Relations (ISPR) said the test was successful.

"This missile system has enabled Pakistan to achieve a greater strategic stand-off capability on land and at sea," said a statement issued by the ISPR.

"The missile test was conducted as part of the continuous process of improving the technical parameters of the weapon system," it said.

The Ra'ad missile, which was first tested in August 2007, was developed exclusively for launch from combat aircraft.

The Ra'ad, meaning thunder in Arabic, has stealth capabilities and is a "low-altitude, terrain hugging missile with high manoeuvrability" that can "deliver nuclear and conventional warheads with great pin-point accuracy".

The launch was appreciated by President Asif Ali Zardari, Prime Minister Yousuf Raza Gilani and the Joint Chiefs of Staff Committee Chairman, who congratulated scientists and engineers on their achievement.

<http://www.indianexpress.com/news/pakistan-tests-nuclear-capable-hatf8-cruise-missile/783407/>

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London Telegraph – U.K.

Libya: Col Gaddafi Still Has Quarter of Chemical Weapons Stockpile

Colonel Muammar Gaddafi still has a quarter of his stockpile of chemical weapons and is ready to use mustard gas in a "desperate" fight to the death, a senior Libyan rebel military commander claimed yesterday.

By Bruno Waterfield, Brussels and Richard Spencer

28 April 2011

General Abdul Fatah Younis, who was Col Gaddafi's interior minister before defecting to the opposition and is now the rebel army's chief of staff, gave the warning as he pleaded for Nato allies to arm the rebels with heavy weapons, including helicopters and anti-tank missiles, to defend the besieged city of Misurata.

He predicted the Libyan dictator would "never accept retreat" and would be ready to use chemical weapons in a last stand against rebels or the civilian population.

"He will fight up to the final drop of his blood," he said. "He has been offered chances to leave and he refused them all the chances. Most probably he will be killed or commit suicide.

"Gaddafi is desperate now. Unfortunately he still has about 25 per cent of his chemical weapons, which he might use as he's in a desperate situation. He always says: 'You will love me or I will kill you'."

Col. Gaddafi is known to have around ten tons of mustard gas remaining from stocks that he had been destroying under the supervision of a United Nations body, the Organization for the Prohibition of Chemical Weapons.

Last month American intelligence sources reported that forces loyal to Gaddafi had stepped up security around Libya's principal remaining stockpile of agents used in chemical weapons. The question of arming the rebellion in Libya has divided the international community, including the alliance of countries carrying out bombing raids over Libya.

Britain supports the idea but the United States is lukewarm and others oppose it outright.

"We are not talking about light or small weapons. We're talking about more advanced weapons like Apache helicopters, anti-tank missiles as well as fast boats equipped with torpedoes," said Gen. Younis.

"We are still waiting. Unfortunately the arms are delayed up to now."

The city of Misurata has seen the most intense fighting of the war, though rebels say they have driven pro-Gaddafi forces out and are now attacking them in their base at the city's airport. Government forces have hit back with Grad missile launchers, while a doctor in the city also said yesterday that 12 rebels had been killed by a misdirected NATO bomb.

Meanwhile, a major new front has opened in the west of the country, where rebels who have previously been limited to a number of local towns broke out and seized a border crossing with Tunisia last week.

Pro-Gaddafi forces yesterday launched a major counter-attack, sending missiles pouring into one rebel-held town, Zintan, and staging major desert operation to recapture the border post. Some missiles landed inside Tunisian territory.

By nightfall, they were in control of the border, with rebel forces retreating into Tunisia and laying down their weapons.

"Many in the Western Mountains in towns such as Yefrin, Zintan and Kabau are being killed by this indiscriminate shelling," a National Council spokesman, Abdel Hafiz Ghoga, told a news conference in Benghazi.

<http://www.telegraph.co.uk/news/worldnews/africaandindianocean/libya/8481250/Libya-Col-Gaddafi-still-has-quarter-of-chemical-weapons-stockpile.html>

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SpaceWar.com

Russia Tests Missiles amid Nuke Talks

By Staff Writers

Moscow, United Press International (UPI)

April 27, 2011

Russia has successfully test-fired a Sineva ballistic missile from one of its nuclear-powered submarines, a spokesman of the Russian Defense Ministry said.

Fired from the Delta-IV class Yekaterinburg submarine that was diving in the Barents Sea, the third-generation, liquid-propellant RSM-54 Sineva missile (NATO codename Skiff) hit its target on time, the spokesman told Russian news agency RIA Novosti.

The missile, produced by the Krasnoyarsk Machine-Building Plant, can be fired from under water at targets more than 6,000 miles away. It's able to carry up to 10 warheads and is a key segment of Russia's nuclear deterrent.

The Russian navy's last missile test was in October 2010, when a pair of submarines fired a Sineva and a Stingray ballistic missile, with both hitting their respective designated targets, Russian officials said at the time.

The latest test comes as Washington and Moscow are negotiating to reduce their nuclear weapons arsenal.

Washington is making every effort to reach an agreement, U.S. Assistant Secretary of State Rose Gottemoeller said last week.

"Consistent with the president's agenda to reduce the role and number of nuclear weapons and the Senate's call for pursuing negotiations with Russia on tactical nuclear weapons, we are working intensively throughout our government on these issues while also consulting with our NATO allies," Gottemoeller was quoted as saying during her speech at the U.S. Naval Academy in Annapolis, Md.

"We will be working with NATO to shape an approach to reduce the role and number of forward-based U.S. non-strategic nuclear weapons in Europe, as Russia takes reciprocal steps to reduce its non-strategic nuclear weapons and relocate them away from NATO's borders," she added.

Russian Prime Minister Vladimir Putin said in March that Russia would double its ballistic missile production starting in 2013 and spend, over the next decade, around \$2.6 billion on new strategic and tactical missiles such as Yars, Bulava and Iskander-M.

In what was seen as a major step forward for anti-proliferation efforts, the presidents of the United States and Russia, Barack Obama and Dmitry Medvedev, last spring signed a new arms reduction treaty.

Ratified by U.S. and Russian lawmakers in December and January, it cuts the number of strategic warheads in each country to 1,550, down from 2,200; and the number of land-, air- and sea-based launchers to 800, down from 1,600.

http://www.spacewar.com/reports/Russia_tests_missiles_amid_nuke_talks_999.html

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RIA Novosti – Russian Information Agency

Russia Outlines its Vision of European Missile Shield

29 April 2011

Commander of Russian Space Forces Lt. Gen. Oleg Ostapenko outlined on Friday Russia's proposals for the future European missile defense network.

Russia and NATO agreed to cooperate on the so-called Euro missile shield during the Russia-NATO Council summit in Lisbon in November 2010. NATO insists there should be two independent systems that exchange information, while Russia favors a joint system with full-scale interoperability.

"We are ready to develop together with NATO experts on missile defense the architecture of this [joint] network, from the concept and selection of the best sites for the deployment of radars and interceptors to the set up and operation of joint data processing and control centers," Ostapenko said in an interview with Izvestia daily newspaper.

The general said it would be logical and efficient to create a network of "sector" defenses where each member state or group of states would assume responsibility for intercepting and destroying ballistic missiles over assigned territory.

Russia is ready to provide a "missile shield" over Eastern Europe, the Black Sea, the Barents Sea and the Baltic Sea, Ostapenko said, adding that a decision to deploy missile defenses must be coordinated by a joint command center on the basis of information provided by a joint data processing center.

"In order to ensure a reliable and uniform exchange of information it is necessary to set up a joint data processing center which would obtain, process and relay target data to a joint fire control center," he said.

Russian military specialists must be part of teams operating these centers on rotation basis, the general added.

Ostapenko stressed that Russia had no plans to place interceptor missiles outside its territory.

Russia has retained staunch opposition to the planned deployment of U.S. missile defense systems near its borders, claiming they would be a security threat. NATO and the United States insist that the shield would defend NATO members against missiles from North Korea and Iran and would not be directed at Russia.

Ostapenko said a joint missile defense network would alleviate Russia's concerns over potential missile threats from NATO.

"In case of a joint missile defense network, there would be no need to place missile systems on the territory of the countries protected by the Russian missile umbrella," the general said.

In addition, cooperation in the framework of the European missile shield would allow all the participants to cut the expenses on the project because NATO will need to protect less territory on its own, Ostapenko said.

MOSCOW, April 29 (RIA Novosti)

http://en.rian.ru/military_news/20110429/163762332.html

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Nextgov.com

Nearly a Decade behind Schedule, New Satellite is to Provide Earlier Missile-Launch Warning

By William Matthews

April 26, 2011

WASHINGTON -- Nine years late, the Air Force is finally ready to launch a new missile-spotting satellite that it says will usher in "a new era in persistent infrared surveillance" (see *GSN*, Aug. 23, 2010).

Barring further delays, the first of four Space-Based Infrared System satellites will blast off May 6 and climb to an altitude of about 22,200 miles, where it will park in a geosynchronous orbit and stare at Earth, watching for missile launches and searching for new military targets.

Air Force Brig. Gen. Roger Teague, chief of the Air Force Infrared Space Systems Directorate, emphasized the new satellite's expected capability during a telephone press conference Tuesday.

Infrared sensors on the spacecraft are "so much more sensitive" than those in use on current missile-detecting satellites, he said. "They can see much more much earlier" and they "can see much dimmer targets."

Teague said he could not elaborate on what more the sensors can see or what dimmer targets might be without disclosing classified information. Dimmer targets are expected to include smaller, shorter-range missiles.

While extolling the new satellite, Teague also acknowledged that the SBIRS program "has faced and overcome a number of challenges in the past."

Those include major delays and exorbitant costs. Begun in 1995, SBIRS was supposed to be a \$4.5 billion program that put new missile launch detecting satellites in orbit starting in 2002. Nearly a decade behind schedule, the program has consumed \$15.9 billion, and according to the Government Accountability Office, costs are still going up.

Teague said the last of four geosynchronous satellites now planned won't be launched until 2016 if the current schedule holds.

The SBIRS satellite constellation also includes four sensor payloads that are hosted on non-Air Force satellites in highly elliptical orbits, he said. Two of those already have been launched.

As they are launched one by one, the SBIRS satellites will begin augmenting the existing Defense Support Program system of early warning satellites that watch for hostile missile launches, Teague said. They will become "the gold standard for missile warning," he said.

In addition to missile launch warnings, the new satellites are intended to contribute to missile defense, to battle space awareness and to gather "technical intelligence," the Air Force says.

Their contribution to missile defense is to gather intelligence and send it to the ground to be processed and distributed fast enough to provide theater commanders with actionable intelligence for planning defenses, Teague said.

Gathering technical intelligence involves spotting new targets on the ground and gathering data "to figure out the profiles of the new targets," said Jeff Smith, a Lockheed Martin vice president for SBIRS.

Smith, too, noted the "many challenges" that SBIRS has faced, but said Lockheed is confident that the satellites "will meet or exceed customer expectations" to deliver "unprecedented global persistent and taskable infrared surveillance."

But even now, costs continue to escalate and there is danger of further delays, GAO told Congress in March. The Defense Contract Management Agency "projects nearly \$600 million in cost overruns at contract completion, more than twice the amount reported last year," GAO reported.

The SBIRS program office "is working to rebaseline" SBIRS cost and schedule estimates "for the sixth time," GAO said, referring to the process of re-estimating costs and schedules after they have been exceeded.

Recent delays were caused by faulty flight software designed to monitor the health of the satellite, GAO said.

http://www.nextgov.com/nextgov/ng_20110426_9742.php?oref=topnews

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Defense Professionals

Continuing to Strengthen Nuclear Operations: USAF Munitions Squadrons to Realign

By Vicki Stein, Secretary of the Air Force Public Affairs
Air Force News Service (AFNS)
April 28, 2011

WASHINGTON - U.S. Air Force officials announced April 27 here plans to transfer munitions squadrons responsible for nuclear mission support from Air Force Materiel Command to Air Force Global Strike Command in the next 12 months.

This is another step in continuing to strengthen the nuclear enterprise; under a previous move, these munitions squadrons were consolidated under AFMC's Air Force Nuclear Weapons Center.

With Air Force Global Strike Command now fully mission-capable, the time is right for a final realignment under the command that also has responsibility for daily nuclear deterrence operations, Air Force Chief of Staff Gen. Norton Schwartz said.

"The munitions squadrons were placed under Air Force Materiel Command at the outset of our effort to reinvigorate the nuclear enterprise," General Schwartz said. "AFMC and its leaders have done an outstanding job restoring excellence in munitions operations, and they, along with the Air Force Nuclear Weapons Center, will remain a key part of the nuclear munitions sustainment and integration process."

The re-alignment will allow for enhanced unity of command under a single major command responsible for most of the nuclear operational mission, he said.

"Most important, by doing this we are continuing to strengthen the nuclear enterprise while seeking constant improvement and doing things the best way possible for safe, secure and effective operations," General Schwartz said.

Squadrons will re-align in place as well as remain about the same size organizationally, so disruptions to operations and people at the units will be minimal.

"Almost two years after being established, Air Force Global Strike Command is now a mature organization capable of integrating the munitions function into the larger nuclear mission," General Schwartz said.

Affected organizations are: 798th Munitions Maintenance Group at Minot Air Force Base, N.D.; 498th Munitions Maintenance Group at Whiteman AFB, Mo.; 15th Munitions Squadron at F.E. Warren AFB, Wyo.; 16th Munitions Squadron at Malmstrom AFB, Mont.; 17th Munitions Squadron at Minot AFB; 19th Munitions Squadron at Whiteman AFB; 498th Nuclear Systems Wing at Kirtland AFB, N.M.; and 798th Munitions Maintenance Group, Detachment 1, at Vandenberg AFB, Calif.

Over the next several months, officials at the Air Force's Strategic Deterrence and Nuclear Integration Directorate, as the Air Staff nuclear mission integrator, will lead the internal implementation process, including specifics regarding final manpower and unit realignments.

<http://www.defpro.com/news/details/24010/?SID=31621f0bda0da79b5ab8f69d4a592997>

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Duke Today

Physics for Safer Ports

Physicists develop method of fingerprinting shipped material to identify cargo

April 28, 2011

While 700 million travelers undergo TSA's intrusive scans and pat-downs each year, 11 million cargo containers enter American ports with little screening at all. And the volume of those containers, roughly equivalent to 590 Empire State Buildings of cargo, could contain something even worse than box knives or exploding shoes, namely nuclear weapons.

Two teams of North Carolina physicists are mapping the intricacies of the atomic nucleus, which could provide better security at the ports. The scientists have identified new "fingerprints" of nuclear materials, such as uranium and plutonium. The fingerprints would be used in new cargo scanners to accurately and efficiently identify suspicious materials. The physics might also be used to improve analysis of spent nuclear fuel rods, which are a potential source of bomb-making materials.

The problem starts at ports, where terrorists may try to smuggle an entire dirty bomb or even smaller amounts of plutonium or uranium by hiding it within the mountains of cargo that pass into the country each day. Cargo scanners using the new nuclear fingerprints would be sensitive enough to spot an entire bomb or the smaller parts to build one, according to Mohammad Ahmed, a nuclear physicist at Duke University.

Ahmed and his colleagues are developing the fingerprints for the next-generation detectors with HIGS, the High Intensity Gamma-Ray Source. It is the world's most intense and tunable source of polarized gamma rays and is located on Duke's campus as part of the Triangle Universities Nuclear Laboratory. HIGS produces gamma rays that are guided to collide with target materials, causing a variety of nuclear reactions.

In the reaction Ahmed and his Duke colleagues study, the collision creates a spray of particles, which fly into a group of detectors. The detectors count the number of neutrons knocked from the atomic nuclei of the target material in either a parallel or perpendicular direction, compared to the polarization plane of the gamma-ray beam. Dividing the number of neutrons emitted parallel to the plane by the number emitted perpendicular is distinct to each material, giving it a unique fingerprint.

Ahmed said these fingerprints could eventually be used to distinguish special nuclear materials, like weapons-grade uranium, from naturally occurring uranium or ordinary objects such as clothing or granite countertops, distinctions that current port scanners cannot make.

In a separate but related project, nuclear physicists from three North Carolina universities are slamming the HIGS beam into atomic nuclei and observing the energy pattern and distribution of the gamma rays that fluoresce back out of the collision. Each material has a distinct fluorescence pattern based on its nuclear structure, according to physicist Calvin Howell, who leads the Duke group.

Howell and his collaborators are studying the fluorescence patterns of potentially dangerous nuclear materials and non-nuclear contraband such as explosives and drugs. They are also identifying the patterns of steel and lead because terrorists can use the metals to conceal and ship weapon-making materials.

The two anti-terrorism projects were developed with the support of the Department of Homeland Security's Domestic Nuclear Detection Office, or DNDO. The agency awarded Ahmed and his colleagues a \$2 million grant, while Howell and his collaborators received grants totaling \$2 million. DNDO is funding both projects in response to the SAFE (Security and Accountability For Every) Port Act of 2006, which requires security agents to scan for nuclear materials in all of the containers entering the United States through the nation's 22 busiest ports.

Five years after Congress and the president approved the legislation, the equipment to satisfy this mandate still doesn't exist. Meanwhile, the United States transfers about 20 percent of the world's freight across its borders and has more than 300 maritime ports for sea containers and an additional 300 access points, such as border crossings, where dangerous materials might enter the country.

The Duke scientists say their use of polarized gamma-ray beams could one day help satisfy the SAFE policy, and they are building the fingerprint library to make it happen.

The HIGS data show, for example, that a precisely tuned gamma beam at 6 MeV causes weapons-grade uranium, U-235, to emit one neutron parallel to the polarization plane for each neutron emitted perpendicular to the plane, giving the material a neutron fingerprint of one.

Naturally occurring uranium, U-238, emits three parallel neutrons for every one emitted perpendicular to the polarization plane of the beam, giving it a neutron fingerprint of three.

Beryllium, which can also be a neutron source in nuclear weapons, has a neutron fingerprint of 10. The team is now measuring the neutron fingerprints of plutonium and other fissile materials, Ahmed said.

Howell and his collaborators, meanwhile, work at lower energies on HIGS, about 3 MeV. (Surgeons, for comparison, use a "Gamma Knife" at roughly 1 MeV to treat brain tumors.) Their team has already identified the fluorescence patterns of several special nuclear materials and lead.

Both teams will report their results at a meeting with DNDO officials on Thursday, April 28 in Washington D.C. and will store their results in a nuclear identification database.

Ahmed and Howell said that engineers at one private security company and scientists at U.S. national laboratories have already begun using the database to design new port security scanners.

The new detectors will search cargo for the fingerprints using an electron accelerator, possibly coupled to lasers that produce a finely tuned gamma-ray beam, said Craig Wuest of the Global Security Principal Directorate at Lawrence Livermore National Laboratory (LLNL).

The design sounds complex, but in some ways it resembles medical scanning equipment and appears promising to pursue, he said.

Howell's "nuclear resonance fluorescence" approach is interesting because it uses a beam with lower-energy gamma rays and reduces the potential irradiation and contamination of cargo while providing "sufficient detection sensitivity," Wuest, who was not involved in the research, added.

One of Wuest's colleagues at LLNL, nuclear physicist Dennis McNabb, is more intrigued with Ahmed's and Weller's technique. Scientists are only just beginning to measure the fingerprints and background signatures from this neutron-scattering process, and because "the research is in progress, how to best use the data is still an open question," McNabb said.

He also explained that cargo scanners using the data from both teams could be ready for use at ports in about 10 years.

Still, some scientists question whether the emerging science and technology can mature fast enough to meet the real-world threats of terrorists and dirty bombs. For instance, Thomas Cochran, a physicist and senior scientist at the Natural Resources Defense Council, voiced "serious doubts" and said the government should focus instead on eliminating inventories of highly enriched uranium, improving port security, boosting intelligence efforts and training first responders.

Other experts disagree and are urging the government to accelerate research on new science and technologies that could significantly reduce the threat of nuclear weapons smuggling, which seems likely to persist into the next decade. McNabb, a proponent, said, "it takes time to develop new technologies" and suggests that the research may accelerate development in other areas of nuclear security.

The new information from HIGS could improve analysis of spent nuclear fuel rods, which are an environmental issue as well as a potential source of bomb materials, according to Duke physicist Anton Tonchev.

He works on the nuclear resonance fluorescence project with Howell and said the technique provides a nondestructive way to measure the quantities of plutonium and other nuclear materials that remain after the rods are removed from a nuclear reactor.

Currently, the spent fuel rods must be opened and tested to assess what materials remain in them. The process is expensive, but critical for the International Atomic Energy Agency to accurately calculate the amount of leftover fissile and nuclear materials. McNabb and Tonchev said that a new technique to distinguish the leftover U-235, U-238 and plutonium in the spent rods without opening them could substantially lower the costs to manage and account for nuclear waste to prevent nuclear proliferation by terrorists.

Regardless of how fast engineers turn the fingerprint data and new approaches into workable scanning and nuclear fuel devices, the Duke scientists said there is immediate value in compiling a robust database of both the neutron and nuclear resonance fluorescence fingerprints. Government officials at the DNDO concur and cite HIGS as the only facility with the ability to produce such a database, according to Ahmed.

Because of the demand, the physicists have recruited graduate and undergraduate students from Duke, University of North Carolina, North Carolina Agricultural and Technical State University, North Carolina Central University, James Madison University and George Washington University to help with the effort. They especially encourage students from historically black colleges and universities to participate, hoping the effort will help broaden the diversity of nuclear physicists working to identify new ways to curb the threat of future terror attacks.

<http://today.duke.edu/2011/04/portsecurity>

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The Diplomat – Japan
OPINION/Flashpoints - Blog

Pakistan's Misguided Nuclear Sign

April 26, 2011

By Manpreet Sethi

Pakistan's test-firing of the Hatf 9 missile was likely conducted with India in mind. It will only increase instability.

On April 19, Pakistan conducted a successful test-firing of the Hatf 9, a new short-range ballistic missile that's meant to be added to its fast expanding nuclear arsenal. A surface-to-surface, low-yield battlefield weapon, it's designed to inflict damage on mechanized forces such as armed brigades and divisions. This was the third such test-firing this year, following the testing of the Hatf 2 (range 180 kilometres) in March and the Hatf 7 or Babur (long-range cruise missile) in February.

It's no secret that since their nuclear tests in 1998, India and Pakistan have been engaged in operationalizing their nuclear deterrents. This has involved the creation of a stockpile of nuclear warheads, testing and deployment of missiles—especially those with greater reliability, range and accuracy—and the establishment of respective robust and survivable command and control systems.

Not surprisingly, the clearest evidence of these steps has been the periodic testing of missiles. Starting out with short-range (less than 200 kilometres) and liquid-fuelled missiles such as the Prithvi in the case of India, and the Hatf 1 and 2 in the case of Pakistan, both countries have developed and deployed longer range and solid-fuelled missiles as the mainstays of their deterrence. Variants of the Agni series for India and the Ghaznavi, Shaheen and the Ghauri for Pakistan are now considered as credible delivery vectors.

It had been speculated that with the deployment of longer ranges and solid-fuelled missiles, both countries would eventually cut their dependence on short-range ballistic missiles (SRBMs) given their geographic proximity and the awkward territorial disputes. The reality is that SRBMs tend to hinder strategic stability and typically add to the dangers of miscalculation or unauthorized launch, especially in times of crisis.

Better intelligence, surveillance and reconnaissance (ISR) capabilities would enable both sides to quickly pick up any signs of missiles being prepared, something that can be extremely dangerous in a crisis situation, especially since India-Pakistan relations are so severely affected by the role of proxy actors operating from (and many argue at the behest) of Pakistan. All this means that mutual acceptance of the removal of SRBMs from a nuclear role would likely be extremely conducive for bilateral strategic stability.

But back to the Hatf 9. What is it for? It has been claimed that the missile is meant as a response to the possibility of an Indian conventional attack through integrated battle groups of infantry and mechanized elements utilizing rapid thrusts into Pakistani territory. Indeed, with the latest test-firing of a missile of a range no more than 60 kilometres, Pakistan has signalled that it does perceive the SRBM as an important tool of coercive diplomacy and as a weapon for use against counterforce targets.

However, this view tends to ignore the fact that even such first-use of a nuclear weapon, however small its yield, would invoke a nuclear retaliation from the Indian side. Indeed, the Indian nuclear doctrine—premised on retaliation only after first-use by the adversary—is based around the retaliation being massive, irrespective of the yield or target chosen by the adversary.

The Hatf 9, then, will only add to crisis instability while being of little use for enhancing the credibility of Pakistan's deterrence. Nuclear weapons are extremely ill-suited for war-fighting, something that has been proven time and again.

Manpreet Sethi heads the project on Nuclear Security at the Centre for Air Power Studies (CAPS), New Delhi. Sethi lectures regularly at all training establishments of the Indian Armed Forces, including the National Defence College. She is author of Nuclear Strategy: India's March Towards Credible Deterrence (2009).

<http://the-diplomat.com/flashpoints-blog/2011/04/26/pakistan%E2%80%99s-misguided-nuclear-signal/>

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People's Daily Online – China
OPINION/Columnist

Possible, India Resumes Nuclear Test?

April 26, 2011

By Li Hongmei

In the international nuclear talks drama worked out by the U.S., it seems that only North Korea, who exits the Nuclear Non-Proliferation Treaty (NPT), and Iran, who is suspected to be violating the Treaty, are respectively cast in the roles of the No.1 and No.2 negative characters. But the fact is that behind the scene there exists a super antagonist in the US-produced nuclear soap opera, and it is India.

India has so far refused to sign the Nuclear Non-Proliferation Treaty (NPT), a document signed in 1970 restricting the number of nuclear superpowers to five countries only – China, the USA, the USSR, Great Britain, and France.

India was not listed among those states: the nation conducted a first nuclear test in 1974. The reason why India refused to sign the NPT is that it disagreed with the fact that only five large countries of the world use the NPT to monopolize the right for possessing nuclear arms.

India has long been desperately trying to step over the threshold of nuclear, and gain the international recognition of being a nuclear power. In the conditioning of India, equipped with nuclear weapons, it would boost confidence in dealing with its rivaling neighbor, Pakistan, and pluck up courage to counteract China whom it has long taken as "a slumbering threat" at its bedside.

India has never dropped its dream to overtake China, growing up to be a leading regional, and global power, now that it has self-measured to be the world's No.3 military power.

Given this, India stunned the world after it conducted nuclear tests in the Rajasthan desert in 1998, and the lid of India's nuclear issue has since lifted open.

The tests, a showcase of India's national strength, were reciprocated by its traditional rival, Pakistan, and dramatically raised the stakes in the stand-off over Kashmir, one of the world's longest-running feuds.

It was a move that was bitterly criticized internationally as well as within the country. Some in India argued that by going nuclear it had actually lost its conventional military edge over Pakistan. Others felt that the tests had opened the door to international, in particular, American intervention in Kashmir dispute, something which India has traditionally opposed.

But years later, it is still a moot point whether India lost more than it gained by going nuclear.

Increasingly, it appears that by self-claiming to have joined the nuclear club, India has forced the world to take it seriously. But, the 1998's "large step forward" to go nuclear has yet to make India feel more secure. Instead, the desperate move has indeed incurred the higher risk of being attacked upon India, and its national security would accordingly be downgraded.

Currently, the international situation seems delivering a pleasant message to India---if the sweeping unrest in the Middle East continues and the unpredictable war is prolonged in Libya, the world's attention and the US top concern will be shifted to the ongoing upheavals, neglecting the Sub-continent.

And perhaps, once the Middle East situation further exacerbates, the US would risk helping India become a nuclear-weapon state. Considering this, India is likely to resume its nuclear tests. For this, China and all the neighbors should sharpen their vigilance on India's every maneuver.

The articles in this column represent the author's views only. They do not represent opinions of People's Daily or People's Daily Online.

<http://english.peopledaily.com.cn/90002/96417/7362433.html>

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The Nation – Pakistan

OPINION

India Should Think Twice

By S.m. Hali

April 27, 2011

Pakistan has successfully conducted the first flight test of the newly developed Short Range Surface-to-Surface Multi Tube Ballistic Missile Hatf IX (Nasr), much to the chagrin of Indian defence planners, as is evident from the Indian Institute for Defence Studies and Analyses (IDSA) report titled Pakistan: Making Sense Of Nasr Ballistic Missile Test – Analysis. The IDSA report tries to nullify the analysis by the Pakistani experts. Undoubtedly, Nasr has been developed to add deterrence value to Pakistan's Strategic Weapons Development programme at shorter ranges. With a range of 60km, Nasr carries both tactical nuclear and high-explosive conventional warheads. It is powered by a high-thrust, single-stage solid-propellant rocket motor. Nasr's launch platform is a double-tube transporter erector launcher (TEL) capable of carrying two missiles with high accuracy and shoot-and-scoot attributes. This quick response system addresses the need to deter evolving threats. The test of Nasr is a very important milestone in consolidating Pakistan's strategic deterrence capability at all levels of the threat spectrum. This is a new and very significant development because this latest missile system is in the category of tactical nuclear weapons. It is a low yield battlefield deterrent, which is capable of deterring and inflicting punishment on mechanised forces comprising armoured brigades and divisions. This was made possible because of miniaturisations to smallest level and it forecloses the Indian army's options of Cold Start and proactive operations. The Indian military used to perceive gaps in the Pakistani side and was obsessed with finding space for limited war under the nuclear umbrella. Thus, it was amassing conventional weapons and had developed its Cold Start doctrine to be able to deal Pakistan a telling blow before it could retaliate with its nuclear weapons. India has been testing its Cold Start doctrine in various war games and military exercises, including the current corps level exercise "Vijayi Bhav", in the Rajasthan desert and, at the same time, has been browbeating Pakistan. However, Nasr or "help", which is also the title of one of the Quranic verses, will ably plug that gap and ensure that India is deterred from any such adventurism. With the development of Nasr, Indian planners will now think twice before considering options of limited war. Often the Indians start beating their chests and crying hoarse with their battle cries prematurely. In May 1998 too after conducting nuclear tests at Pokhran, the Indian defence planners and politicians were so convinced that Pakistan did not have nuclear weapons capability that they became ballistic with their threats and jingoism, forcing Pakistan's hand in crossing the nuclear threshold and coming out of the closet. Having learnt no lessons, ex-Army Chief General Deepak Kapoor had announced: "The time has come for teaching Pakistan a lesson." The General had been blinded by the so-called success of the Indian war games testing Cold Start, and thus he had broken into rhetoric. A few details of Nasr, gleaned from overt sources; it is akin to a guided artillery shell in the form of surface-to-surface missile (SSM). The Soviets had developed and used various types of such missiles, as a propellant and heavily fortified fixed installation target clearance weapon system in the battlefield. Nasr, however, can successfully target armoured and mechanised columns on the move with nearly pinpoint accuracy. Judging from the test flight video released, Nasr appears to follow a depressed trajectory, rather than typical ballistic trajectory that makes a lethal combination, when married to high manoeuvrability, high speed and short range; which will cause nightmares and throw a challenge to any anti-ballistic missile system. Comparing Nasr to the earlier versions of Hatf 1B and Hatf 1A, Nasr appears to be more stabilised in its flight. The use of terminal guidance enables the Nasr to be projected, as a quick response precision guided ballistic missile with extremely low circular error of probability (CEP) to take the heavily defended targets in a 60km radius. Its quick reaction time, low CEP, terminal guidance and lethal warhead make it far superior to a simple, unguided, multi-barrel rocket launcher system. The test fire and diameter of the warhead suggest that Pakistan has achieved the capability of deploying sub-kiloton yield tactical nuclear warhead appropriate for a sub-kiloton nuclear detonation, which if boosted with four to five gms of

tritium, could yield a 10 to 20 KT nuclear detonation. When produced in bulk, it will wreak havoc in any battlefield scenario, penetrating the fog of war and striking a telling blow upon any belligerent.

The writer is a political and defence analyst.

<http://nation.com.pk/pakistan-news-newspaper-daily-english-online/Opinions/Columns/27-Apr-2011/India-should-think-twice>

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Wall Street Journal

OPINION

April 28, 2011

Pakistan's Strategic Myopia

Its decision to field tactical nuclear weapons will only make the subcontinent more unstable.

By MICHAEL MAZZA

Pakistan is quietly making a mockery of recent diplomatic efforts to ease tensions with its arch rival, India. In response to New Delhi's contingency plans to retaliate with conventional arms following possible future terrorist attacks emanating from Pakistan, Islamabad is preparing to field tactical nuclear weapons. Over the long term, this makes a serious conflict with India more likely.

Last week, Pakistan test-fired a new, short-range, surface-to-surface ballistic missile. A military press release announced that this Nasr missile "carries nuclear warheads" and that it is intended to enhance deterrence "at shorter ranges." When it is operational, the 60-kilometer-range missile will provide Islamabad with the capacity to field tactical nuclear weapons for use against enemy battle formations.

Haris Kahn of the Pakistan Military Consortium, a U.S.-based think tank, explained to Defense News that the new missile "is a perfect answer to the Indian concept of Cold Start" and that "it establishes that tactical nuclear weapons will be deployed very close to its border with minimum reaction time to counter any armor or mechanized thrust by an enemy into its Pakistani territory."

"Cold Start" is a still-notional Indian military doctrine that would allow for Indian forces to quickly respond with conventional means to a Pakistan-based terrorist attack in India. The plan calls for the quick mobilization of forces and a wide but shallow thrust across the Pakistani border. The idea is to avoid threatening Islamabad and risking escalation; instead, India would ransom the swath of occupied territory for a serious effort by Pakistan to deal with terrorists operating from within its borders. Though India may still be as far as a decade away from fully implementing the military reforms required for "Cold Start," Pakistan is clearly worried about the prospect. In February 2010, army chief General Ashfaq Kayani warned that it could lead to a "sudden spiral escalation."

But Islamabad's decision to field tactical nuclear weapons is an irresponsible response to an as-yet unrealized limited conventional threat. Yes, it will make "Cold Start" a much more challenging proposition for India's military. Indeed, the doctrine might very well be dead on arrival—which is what Pakistan intends. Yet the unintended effect here is to make future violence on the subcontinent more likely. Islamabad will see little need to clamp down on terrorists operating from within its borders. India will then suffer from future attacks, leaving it anxious to retaliate one way or the other.

New Delhi is not going to blithely accept a situation where its preferred military response to a terrorist attack is undermined. Since Islamabad seems intent on unleashing its nuclear weapons in response to even a limited Indian retaliatory offensive, India will have to prepare for the possibility of a nuclear exchange. One logical outcome will be for India to devote more generous resources to its future missile defense shield. Another will be for India to deploy its own tactical nuclear weapons. While the Indian Army's 150-kilometer-range Prithvi-I missile is not believed to have a nuclear role at present, it is nuclear-capable and could be tasked to that mission.

Confident in its missile defenses, India will then be able to retaliate. But because tactical nuclear weapons, which are difficult to counter, will continue to negate the effectiveness of its ground forces—and thus the "Cold Start" option—India will likely need to rely on a wider air campaign aimed at bombing Pakistan into submission. Rather than a shallow incursion into its territory, Pakistan will be faced with air strikes against military targets (perhaps including infrastructure) throughout the country.

Such a campaign will be less effective than "Cold Start"—air campaigns tend to accomplish little on their own—and more escalatory. Assuming the Indian air force achieves air dominance, Pakistan's military response options will be limited. If the campaign does not quickly achieve the desired result, India, too, will be tempted to at least threaten the use of strategic weapons, confident that its own cities will be effectively defended from nuclear retaliation. In short, nuclear escalation, which India had hoped to avoid with "Cold Start," suddenly becomes more plausible.

Pakistan has every right to defend itself from a perceived threat of Indian aggression. But in this case, the proper defense does not require the Pakistani military to field new weapons and aim them at India. Only by cleaning up its own house—by denying terrorist groups a safe haven from which to operate—can Pakistan hope to ensure that the Indian military never puts "Cold Start" into action.

Yet Islamabad appears to suffer from strategic myopia and shows little interest in taking such action. Given Pakistan's generally aggressive nuclear doctrine (especially compared to India, which pledges "no first use" of its nukes) perhaps it is not surprising that it will instead rely on tactical nuclear weapons to defend against Indian aggression. Ironically, rather than enhancing deterrence, this decision makes a future, costlier conflict much more likely.

Viewed alongside reports this year that Pakistan's nuclear arsenal is sharply rising, the decision to field tactical weapons can only lead to intensified Indo-Pakistani nuclear competition. This has, for one, implications for Sino-Indian nuclear rivalry as well as for other potential nuclear-aspirant countries in the region.

But the larger victim here is peace between New Delhi and Islamabad. The bilateral relationship froze early last decade when both armies mobilized after fedayeen attacked India's Parliament in December 2001. It froze again following the Mumbai attack of November 2008 and the two sides have only recently agreed to resume peace talks. Yet Pakistan does not appear to take such talks seriously. Instead, its decision to deploy tactical nukes will take the subcontinent one step farther from stability.

Mr. Mazza is a senior research associate in foreign and defense policy at the American Enterprise Institute in Washington, DC.

<http://online.wsj.com/article/SB10001424052748704099704576288763180683774.html>

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RIA Novosti – Russian Information Agency

OPINION

Already Ratified, START is Still a Matter of Dispute to Russia and U.S.

29 April 2011

This story by Yuri Rubtsov, PhD (history), Strategic Culture Foundation expert, was published in International Affairs magazine.

Washington is interested in starting broad discussions with Moscow on further reduction of strategic nuclear arsenals. The announcement was made by Rose Gottemoeller, assistant secretary of state for arms control, as she spoke at the Naval Academy in Annapolis last week. In her speech she made it clear that the U.S. seeks cuts to nuclear weapons stockpiles and solid cooperation with Moscow on anti-missile defense.

First time when Moscow received such message from Washington was in 2001, when the U.S. quit the 1972 Anti-Ballistic Missile Treaty. However, as far as strategic security is concerned, Washington does not seem to be honest about its true intentions, and keeps telling Russia that its planned anti-missile shield in Europe poses no threat to Russia and is aimed against the so-called 'rogue states'. The U.S. is particularly interested in the reduction of Russian tactical nuclear weapons...

Rose Gottemoeller said that during NATO informal Foreign Ministerial meeting in Berlin last week the U.S. Secretary of State Hillary Clinton confirmed Washington's intention to remove all differences with Moscow concerning non-strategic nuclear weapons during the next round of talks on nuclear disarmament. The U.S. will cooperate with NATO to "reduce the number of US non-strategic nuclear weapons in Europe" provided that Russia agrees to cut its non-strategic nuclear stockpiles and relocate them from NATO's borders. The first step, as Washington sees it, would be to exchange data on the number of non-strategic weapons and their locations.

The U.S. claims that it equally approaches to the reduction of tactical nuclear weapons (TNW) and strategic nuclear weapons. But there is a big difference between these types of weapons and thus approaches should be different as well. Like it was in Soviet times, Russia's TNW – due to their technical characteristics- pose no threat to the U.S. territories, while the foremost placement of American TNW in Europe is the same thing as if Russia's security was under threat coming from the strategic weapons.

TNW ceased to be a universal means of defense shortly after John Kennedy's Flexible Response doctrine came out. Then Washington started using TNW as strategic nuclear weapons and means of deterrence against the Soviet Union and its allies.

When the Cold War was over the U.S. formally abolished the doctrine but still did not seem to have an intention to remove its tactical stockpiles – about 200 B-61 free-fall bombs- from Belgium, Italy, Germany, the Netherlands and Turkey. However, they call on Moscow to remove its TNW from NATO's borders.

In response, Russia came up with an adequate proposal asking the US to keep its TNW on its territory.

As we see, the U.S. turns a blind eye on the fact that Russia's TNW are posing no threat to the its security, while that of the U.S. are a matter of concern to Moscow. Washington wants to exchange data, but for what purpose? Apparently, to get access to information that cannot be available to the public.

The question is why the U.S. is so interested in Russian TNW. Barack Obama's 'a world without nuclear weapons' program first saw the light of the day in 2009. President Barack Obama's top national security aide Tom Donilon commented on the issue in an article released by "The Financial Times" last Sunday: "We must address the issue of Russia's tactical nuclear weapons, which have never been subject to numerical limits." But Mr. Donilon seems to have forgotten that the U.S. TNWs have never been counted either. As he writes vaguely about the U.S. intention "to reduce the role and number of US tactical nuclear weapons", the author appears to have a clear understanding of which reciprocal measures Russia should take "to reduce its own tactical forces, and also to relocate these away from Nato's borders."

Evidently, Russian strategic nuclear stockpiles is what the U.S. forces are most concerned about. The head of the department of defense and strategic studies at the Missouri State University, Keith Payne, wrote about the issue in National Review. It turned out that most critics of the strategic arms reduction treaty (START) did not like a survey provided by the Russian side which says that the U.S. has to reduce much more of its stockpiles, while Russia will hardly make any at all. Actually, most of Russian missiles have their warranty term expiring long before the treaty itself gets invalid. But what does it have to do with commitments taken by the two countries? The problem is that Washington thinks there is a difference in the way the reduction will be implemented.

Speaking before the Senate on November 18, 2010, Vice Chairman of the Senate Intelligence Committee, Kit Bond, said that the treaty 'forces the U.S. to reduce its nuclear stockpiles unilaterally', thus giving Russia a chance to get stronger. Keith Payne shares this opinion. The parity principle which is one of the treaty's milestones (though the drawbacks of the documents were widely discussed before) and that was set by U.S. senators is no longer recognized. Their main aim is to make Russia continuously reduce its stockpiles and warheads even if there is no such requirement in the treaty.

That is why Russia should try to observe all limits that were agreed in the treaty but possess enough nuclear weapons needed to ensure national security.

Experts say that Russia needs no less than 1500 warheads to provide an adequate response in case of attack, while in the middle of last year it had 605 missiles with 2,667 warheads. Amid U.S. plans to deploy an anti-missile shield in Europe, Russia also needs TNW to react to potential threats.

Trying to begin a new round of consultations with Russia, the U.S. pursues the same goal- to weaken Russia's nuclear capacity.

But for Moscow this would be quite a risky thing to do, and Russian authorities seem to be aware of this. Before the START was ratified, Russian Foreign Minister Sergei Lavrov said that nowadays there cannot be only one approach to the problem of international security and strategic weapons. Non-nuclear weapons, as well as space arms race- this also should be taken into consideration when the two countries are discussing their steps towards disarmament.

In view of this, resuming talks on the issue would mean making a step backward.

(Views expressed in this article reflect the author's opinion and do not necessarily reflect those of RIA Novosti news agency. RIA Novosti does not vouch for facts and quotes mentioned in the story)

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