



USAF COUNTERPROLIFERATION CENTER
CPC OUTREACH JOURNAL
MAXWELL AFB, ALABAMA

Issue No. 1017, 27 July 2012

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Daily Mail – U.K.

Iran Nuclear Facilities Hit by Cyber Attack that Plays AC/DC's Thunderstruck at Full Volume

25 July 2012

As far as malicious computer hacking is concerned, the most recent breach of security at Iran's nuclear facilities may not be very serious... unless you hate the music of Australian rock band AC/DC.

It has been alleged that unidentified computer hackers have forced workers at two of the country's controversial nuclear facilities to endure AC/DC's hit song Thunderstruck repeatedly - and at full volume - sometimes in the middle of the night.

Of course, there has been no confirmation of the attack from Iran - the evidence stems from a series of e-mails purporting to be from the Atomic Energy Organisation of Iran.

An unnamed Iranian scientist e-mailed Mikko Hypponen, chief research officer for Finnish Internet security firm F-Secure, saying that the facilities at Natanz and Fordo, near Qom, were hit by a worm.

Apart from disabling the automated network at both sites, the malware seemed to have an interesting side effect of blaring out AC/DC at any given moment.

When contacted by MailOnline, Mr Hypponen confirmed that he had received the e-mails and that he had been e-mailing the scientist about the incident over the weekend.

He sent a redacted copy of the e-mail, which said: 'I am writing you to inform you that our nuclear program has once again been compromised and attacked by a new worm with exploits which have shut down our automation network at Natanz and another facility Fordo near Qom.'

Another e-mail made reference to AC/DC's Thunderstruck being played 'on several workstations in the middle of the night with the volume maxed out'.

It's not the first time that the Iranian nuclear programme has been the target of malware.

The destructive Stuxnet worm has now affected around 60 per cent of computers in Iran, and is widely held responsible for wrecking the centrifuge at the Natanz nuclear facility.

Iran has confirmed that work has halted several times at the facility because of 'technical issues', and use of the centrifuge has dropped by 30 per cent.

Stuxnet was thought at first to be the work of Israeli intelligence agency Mossad, but experts have recently turned the finger of suspicion to point at the U.S.

Many experts believe that the future of warfare will heavily rely on a nation's ability to 'spike' their enemies' computer networks.

Recently the Chinese have been suspected over a series of non-threatening incidents - such as the hacking of a U.S. automated sewerage system, or effectively taking command of two Nasa satellites.

Using music as a weapon has long been a trait of the US military, in conflicts including the invasion of Panama in the 1990s.

Thunderstruck, released in 1990, is among AC/DC's most famous songs and said to be inspired by guitarist Angus Young's experience of being on a plane which was struck by lightning.

<http://www.dailymail.co.uk/news/article-2178781/Iran-nuclear-facilities-hit-cyber-attack-plays-AC-DCs-Thunderstruck-volume.html>

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United Press International (UPI)

Cyberattack Affects Iranian Nuke Sites

July 25, 2012

TEHRAN, July 25 (UPI) -- Iran Wednesday called on the United Nations to condemn organized cyberattacks in the wake of the latest attack on its nuclear program computers.

Ali Hakim Javadi, the head of Iran's Information Technology and Communications department, told reporters he raised the issue during a recent visit to Geneva, Switzerland, and called on the United Nations Communications Group to act to prevent cyberattacks, the state-run Islamic Republic News Agency said.

His statements came amid reports Iran's Atomic Energy Organization's computer systems were attacked by computer malware that affected computer systems at some of the country's nuclear facilities.

Leading researcher Mikko Hypponen of the Finnish security firm F-Secure said he recently received an e-mail from an Iranian scientist, informing him systems were hit compromised, the Australian daily The (Melbourne) Herald Sun said.

Hypponen who said he verified the e-mail was from Iran's Atomic Energy Organization, posted portions of the Iranian scientist's e-mail on his blog, the International Business Times said.

"I am writing to inform you that our nuclear program has once again be compromised and attacked by a new worm with exploits which have shut down our automatic network at Natanz and another facility Fordo near Qom," the scientist wrote.

"There was also some music playing randomly on several of the workstations during the middle of the night with the volume maxed out. I believe it was playing Thunderstruck by AC/DC."

http://www.upi.com/Top_News/World-News/2012/07/25/Cyberattack-affects-Iranian-nuke-sites/UPI-13841343216697/?spt=hs&or=tn

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Press TV – Iran

Wednesday, July 25, 2012

Iran to Give Crushing Response to US Cyber Attacks: Iran Official

A senior official of the Iranian Joint Chiefs of Staff's Cyber Headquarters says Iran will give a crushing response to more cyber attacks from the US against its civilian nuclear facilities.

The unnamed official made the remarks in reaction to recent rumors about the possibility of more cyber attacks from the US against Iran's nuclear facilities.

"US officials should prevent such hostile and naive remarks or brace for their consequences," he warned.

The official also advised the US statesmen to take Iran's "threat against threat" doctrine quite seriously because the Islamic Republic has high capacities and will give due response to acts of sedition.

Meanwhile, Iran's deputy minister for communications and information technology has called on the United Nations to condemn organized cyber attacks against world countries.

The UN and its Communications Commission should take a stance on and condemn the organized cyber attacks, Ali Hakim Javadi, who is also the head of the Information Technology Organization of Iran, said on Wednesday.



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Last month, Iran's Minister of Communications and Information Technology Reza Taqipour said Tehran has complained to international organizations about the 'state cyberterrorism' against the country.

Taqipour added that cyber attacks on Iran were sponsored by specific governments, and the computer virus Flame, for instance, was mainly sponsored by the Israeli regime and certain Western countries.

In June, a report published in the *Washington Post* said that the US and Israel have cooperated in creating the computer virus Flame to spy on Iran.

US National Security Agency, the CIA and Israel's military worked together to create the Flame virus, the American newspaper added.

In addition, the *New York Times* also revealed last month that US President Barack Obama secretly ordered a cyber attack with the Stuxnet computer virus against Iran to sabotage the country's nuclear energy program.

"From his first months in office, President Obama secretly ordered increasingly sophisticated attacks on the computer systems that run Iran's main nuclear enrichment facilities, significantly expanding America's first sustained use of cyber weapons," the report said.

<http://www.presstv.com/detail/2012/07/25/252715/iran-will-crush-us-cyber-attacks/>

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Pakistan Today – Pakistan

Defiant Iran Ups Uranium Enrichment

July 25, 2012

By Agence France-Presse (AFP)

Iran is defiantly forging on with its controversial nuclear activities by activating hundreds more uranium enrichment centrifuges, according to President Mahmoud Ahmadinejad.

"There are currently 11,000 centrifuges active in enrichment facilities" in Iran, he was quoted by state media as saying late on Tuesday in a meeting with supreme leader Ayatollah Ali Khamenei and senior regime officials.

That was more than the 10,000 centrifuges Iran was last said to have had operating, according to a May 25 report by the International Atomic Energy Agency (IAEA).

Ahmadinejad's reported comments did not give a more precise figure nor detail how many centrifuges were now working at each of Iran's two enrichment sites: Natanz and the heavily fortified underground bunker of Fordo.

Fordo has emerged as one of the most contentious points in fruitless negotiations between Iran and the P5+1 group of nations, which comprises the top UN Security Council powers the United States, Britain, France, Russia, and China, plus Germany.

The Security Council has demanded Iran suspend all uranium enrichment and has imposed four sets of sanctions to pressure it to comply. The IAEA, the UN's nuclear watchdog, has said it suspects there is a military dimension to Iran's nuclear programme.

The United States and the European Union have added their own sanctions on Iran, but the Islamic republic has defiantly said it would continue with its nuclear activities.

The IAEA report in May said there were 9,330 installed centrifuges in Natanz, of which 8,818 were being fed uranium hexafluoride gas to produce enriched uranium.

The Fordo facility, near the holy city of Qom, had 696 working centrifuges, the report said.

The enrichment activities have produced stockpiles of uranium enriched to purities of 3.5 percent and 19.75 percent.

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Iran says the former is to fuel its nuclear power reactor in the southern city of Bushehr, while the higher-grade uranium is to make medical isotopes for cancer patients in its Tehran research reactor.

Western powers, though, fear the 19.75-percent enriched uranium could, in just a few technical steps more, be processed into bomb-grade, 90-percent uranium.

Iran insists its nuclear programme is entirely peaceful, but has rebuffed repeated attempts by the IAEA to expand its ongoing surveillance and inspections, notably to include a suspect sprawling military facility in Parchin, outside Tehran.

<http://www.pakistantoday.com.pk/2012/07/25/news/foreign/defiant-iran-ups-uranium-enrichment/>

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United Press International (UPI)

Saudis 'Mull Buying Nukes from Pakistan'

King Abdallah of Saudi Arabia met Pakistan's prime minister, Raja Pervez Ashraf, in Jeddah a few days ago as Riyadh began sending its Special Forces to Pakistan for training.

July 25, 2012

RIYADH, Saudi Arabia, July 25 (UPI) -- King Abdallah of Saudi Arabia met Pakistani Prime Minister Raja Pervez Ashraf in Jeddah a few days ago as Riyadh began sending its Special Forces to Pakistan for training.

The Islamic countries, both dominated by the mainstream Sunni sect, have long had a particularly close relationship and these events heightened speculation Riyadh is trying to strike a secret deal with Islamabad to acquire nuclear weapons to counter Iran.

Abdallah's surprise July 19 appointment of Prince Bandar bin Sultan, the kingdom's ambassador in Washington in 1983-2005 and a veteran of its usually clandestine security policy, as his new intelligence chief may be part of murky mosaic linking Saudi Arabia and Pakistan.

Bandar played a key role in the clandestine arming of by the United States and Saudi Arabia, via Pakistan's intelligence service, of the Afghan mujahedin during the 1969-79 Soviet invasion.

Bandar's appointment as the head of Saudi Arabia's General Intelligence Presidency, its foreign intelligence service, was one of several critical security related command changes made in recent days.

These took place as the kingdom, the world's largest oil exporter, faces a swarm of regional challenges, the most prominent of which is nuclear wannabe Iran.

As the confrontation between the United States and Iran over Tehran nuclear program builds up in the Persian Gulf, Riyadh is increasingly looking eastward to longtime ally Pakistan, the only nuclear Muslim power, for support.

"As Iran becomes more dangerous and the United States becomes more reluctant to engage in military missions overseas, Pakistan and Saudi Arabia may find that renewed military and nuclear cooperation is the best way to secure their interests," observed Christopher Clary and Mara E. Karlin, former U.S. Defense Department policy advisers on South Asia and the Middle East.

Writing in *The American Interest*, they noted: "As the United States re-examines its military posture toward South Asia and the Middle East in the context of its withdrawals from Iraq and Afghanistan, it must explicitly consider the possibility of a Saudi-Pakistan nuclear bargain.

"The failure to take such a scenario seriously could promote its occurrence."

U.S. plans to effectively withdraw militarily from Afghanistan in mid-2013, as it did in Iraq last December, have intensified Pakistani concerns about Islamic jihadists.

This mirrors Saudi suspicions that after Iraq and Afghanistan it can no longer rely on the United States for protection.

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The Saudis too face a jihadist threat, particularly from al-Qaida in the Arabian Peninsula that's based in neighboring Yemen.

It's long been believed that the Saudis bankrolled Pakistan's nuclear program, in the 1970s and '80s and now wants some reciprocity in the shape of readymade nuclear weapons, paid for by massive financial aid for Islamabad.

Israel's Debkafile Web site, considered close to Israeli intelligence and which sometimes posts reports considered to be disinformation, claimed in December 2010 that Pakistan has set aside two nuclear weapons for Saudi Arabia.

These, it said, are believed to be stored at Pakistan's nuclear air base at Kamra in the north.

At least two giant Saudi transport planes sporting civilian colors and no insignia are parked permanently at Kamra with aircrews on standby," Debka reported.

"They will fly the nuclear weapons home upon receipt of a double-coded signal from King Abdallah and the director of General Intelligence," who now happens to be Prince Bandar, reported to be close to the monarch.

The Saudis have of late portrayed their high-tension rivalry with the Iranians as a new, menacing chapter in the 1,300-year-old struggle between Sunni and Shiite Islam.

"The stakes are enormous," says Bruce Reidel, a former counter-terrorism specialist with the CIA wrote in the German newsmagazine Der Spiegel.

"Pakistan has the fastest growing nuclear arsenal in the world. It will soon surpass the United Kingdom as the fifth-largest nuclear arsenal.

"It's the sixth-largest country in the world in terms of population. It will soon surpass Indonesia as the country with the largest Muslim population."

A leading Saudi royal, Prince Turki al-Faisal, who headed the GIP in 1977-2001, warned U.S. and British military chiefs meeting outside London June 8, 2011, that Tehran's acquisition of nuclear arms "would compel Saudi Arabia ... to pursue policies which could lead to untold and possibly dramatic consequences."

http://www.upi.com/Top_News/Special/2012/07/25/Saudis-mull-buying-nukes-from-Pakistan/UPI-94601343239152/?spt=hs&or=tn

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China Daily – China

Iran Says Recent Nuclear Talks with EU 'Positive'

July 26, 2012

(Xinhua)

TEHRAN - Iran's deputy nuclear negotiator Ali Baqeri has said that the recent nuclear talks with deputy head of the EU's foreign relations in the Turkish city of Istanbul were "positive", local media reported Thursday.

Baqeri met Helga Schmid, deputy to EU foreign policy chief Catherine Ashton, on Tuesday in an attempt to pave the way for another round of high-level international talks on Iran's nuclear program.

Baqeri said the negotiations were positive and in line with the agreements and negotiations in Moscow, Press TV said.

Tuesday's deputy-level negotiations were scheduled to follow the expert-level meeting, which was held on July 4 to prepare for future talks between Catherine Ashton and Iran's chief nuclear negotiator Saeed Jalili, Baqeri was quoted as saying.

In the meantime, both sides managed to move forward with the talks within good framework to reach agreements on continuing the work and future talks, he added without detailing on whether any agreements were reached.

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http://usa.chinadaily.com.cn/world/2012-07/26/content_15621355.htm

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Chosun Ilbo – South Korea
July 25, 2012

U.S. Unlikely to Yield Over Nuclear Deal with Korea

The White House point man for arms control on Monday expressed confidence that Korea and the U.S. will find a solution in talks to allow Korea to reprocess its own spent nuclear fuel rods.

Gary Samore made the remarks at a seminar hosted by the Korean Embassy in Washington. Korea has been urging the U.S. to revise a 1974 agreement on the peaceful use of nuclear energy that prohibits Seoul from reprocessing.

But Samore set his face against allowing Korea to enrich uranium as well, saying enriched uranium can be bought from other countries like the U.S. or France.

The U.S. has signed bilateral nuclear agreements with a number of countries including Korea, usually preventing them from running their own uranium enrichment program.

But Japan signed an agreement with the U.S. in 1955 allowing supply of nuclear reactors and enriched uranium for research purposes. It started reprocessing as far back as 1977, although it still needed consent from the U.S. on a case-by-case basis. When the agreement was amended in 1988, Japan became the only country without nuclear arms to have nearly full permission to enrich uranium and reprocess spent fuel.

India also won the right to reprocessing in its 2007 agreement with the U.S. India developed nuclear weapons without joining the Nuclear Non-Proliferation Treaty. It carried out nuclear tests in 1974 and 1998 but was exempt from stringent controls for strategic reasons, chiefly because the U.S. wanted to keep China in check and embrace a huge emerging market.

The Korean nuclear power industry is critical of what it says are the double standards employed by the U.S., which prevent one of its closest allies from uranium enrichment and reprocessing while Japan and India enjoy such exceptional rights.

http://english.chosun.com/site/data/html_dir/2012/07/25/2012072501417.html

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The Mainichi – Japan
July 25, 2012

N. Korea, Iran Vow to Boost Strategic Cooperation: Source

TOKYO (Kyodo) -- North Korea and Iran have agreed to strengthen cooperation in so-called "strategic projects" between the two countries, apparently including the development of nuclear and ballistic missiles, according to a diplomatic source familiar with bilateral relations. TOKYO (Kyodo) - North Korea and Iran have agreed to strengthen cooperation in so-called "strategic projects" between the two countries, apparently including the development of nuclear and ballistic missiles, according to a diplomatic source familiar with bilateral relations.

The agreement was struck in meetings between a three-member Iranian government delegation, including a senior official of the Supreme National Security Council, and North Korean officials in April in Pyongyang, the source told Kyodo News. The agreement was struck in meetings between a three-member Iranian government delegation, including a senior official of the Supreme National Security Council, and North Korean officials in April in Pyongyang, the source told Kyodo News.

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The move suggests North Korea's leadership under Kim Jong Un, who took power after his father and longtime ruler Kim Jong Il died in December, seeks to bolster ties with Iran as the two countries' isolation from the international community over their nuclear programs deepens. The move suggests North Korea's leadership under Kim Jong Un, who took power after his father and longtime ruler Kim Jong Il died in December, seeks to bolster ties with Iran as the two countries' isolation from the international community over their nuclear programs deepens.

Separately, a group of more than 10 Iranian engineers engaged in Tehran's ballistic missile development visited North Korea around the same time and watched a failed rocket launch from a launch site in Tongchang-ri in the country's northwest on April 13, the source said. Separately, a group of more than 10 Iranian engineers engaged in Tehran's ballistic missile development visited North Korea around the same time and watched a failed rocket launch from a launch site in Tongchang-ri in the country's northwest on April 13, the source said.

A third country had been monitoring bilateral contacts since obtaining intelligence that Saeed Jalili, Iran's chief nuclear negotiator and secretary of the Supreme National Security Council, urged President Mahmoud Ahmadinejad to send a delegation to Pyongyang at an early time in the wake of Kim Jong Il's death, according to the source. A third country had been monitoring bilateral contacts since obtaining intelligence that Saeed Jalili, Iran's chief nuclear negotiator and secretary of the Supreme National Security Council, urged President Mahmoud Ahmadinejad to send a delegation to Pyongyang at an early time in the wake of Kim Jong Il's death, according to the source.

Iran had asked North Korea to arrange for the delegation to meet with seven senior officials of the Korean People's Army and the Workers' Party of Korea during the April visit, the source said. Iran had asked North Korea to arrange for the delegation to meet with seven senior officials of the Korean People's Army and the Workers' Party of Korea during the April visit, the source said.

The delegation met with Kim Yong Chol, head of the Reconnaissance General Bureau, an intelligence organization involved in North Korea's conventional arms trade, and Ju Kyu Chang, a member of the party's Central Military Commission who handles munitions affairs, among others. The delegation met with Kim Yong Chol, head of the Reconnaissance General Bureau, an intelligence organization involved in North Korea's conventional arms trade, and Ju Kyu Chang, a member of the party's Central Military Commission who handles munitions affairs, among others.

It was not immediately known what the "strategic projects" between the two countries involve, but the source said he has "no doubt" they include those in the nuclear and missile fields. It was not immediately known what the "strategic projects" between the two countries involve, but the source said he has "no doubt" they include those in the nuclear and missile fields.

The projects had been stalled since the health of Kim Jong Il, who suffered a stroke in August 2008, deteriorated in the last years of his life. The projects had been stalled since the health of Kim Jong Il, who suffered a stroke in August 2008, deteriorated in the last years of his life.

As for North Korea's failed attempt to launch what it claims was a rocket carrying a satellite, which other countries saw as a covert test of missile technology, Pyongyang did not explain the reason for the failure to the visiting Iranian engineers, the source said. As for North Korea's failed attempt to launch what it claims was a rocket carrying a satellite, which other countries saw as a covert test of missile technology, Pyongyang did not explain the reason for the failure to the visiting Iranian engineers, the source said.

It is known that the two countries have been cooperating in ballistic missile development. They have also pushed ahead with uranium enrichment, which could pave the way for creating atomic bombs. It is known that the two countries have been cooperating in ballistic missile development. They have also pushed ahead with uranium enrichment, which could pave the way for creating atomic bombs.

A UN report published in June pointed out a similarity between the rocket North Korea launched in April and a rocket Iran used to send a satellite onto the orbit. A UN report published in June pointed out a similarity between the rocket North Korea launched in April and a rocket Iran used to send a satellite onto the orbit.



In a sign of closer ties, an Iranian delegation led by Deputy Foreign Minister Seyed Abbas Araghchi visited North Korea from July 16 to 18 and held separate talks with No. 2 leader Kim Yong Nam, president of the Presidium of the Supreme People's Assembly, the North's parliament, and Foreign Minister Pak Ui Chun.

Araghchi told Kim Yong Nam that the two countries "are standing on the common front against imperialism and hegemony," and "expressed belief that the friendly and cooperative relations between the two countries would grow stronger in the future," the North's official Korean Central News Agency reported July 17. Araghchi told Kim Yong Nam that the two countries "are standing on the common front against imperialism and hegemony," and "expressed belief that the friendly and cooperative relations between the two countries would grow stronger in the future," the North's official Korean Central News Agency reported July 17.

<http://mainichi.jp/english/english/newsselect/news/20120725p2g00m0in063000c.html>

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Voice of America (VOA) News

July 25, 2012

Report: North Korea Finalizes Power Transition

By Steve Herman

SEOUL — A just-released independent, non-government report on North Korea concludes the transfer of power to Kim Jong Un is already complete. And, the report by the International Crisis Group predicts prospects for reform in the impoverished country are dim and the young leader could well be around for decades, with a growing nuclear arsenal.

The International Crisis Group in a report released Wednesday says despite this month's removal of a top military figure, there are no clear signs of any conspiracy to overthrow North Korea's new, young leader.

In recent days, South Korean and other media reports have quoted unnamed sources suggesting a power struggle may be underway in Pyongyang.

One report claims there was a gun battle amid the removal of vice marshal Ri Yong Ho. And, a Seoul newspaper *Dong-A Ilbo* says Ri, who was also chief of the army's general staff, was ousted after being heard on a wiretap criticizing Kim's plan to open the reclusive country.

The lead author of the ICG report, senior analyst Daniel Pinkston says that Kim's father invested considerable effort to ensure his son would assume power securely.

"Kim Jong Un has a firm grip on power despite the purging of vice marshal Ri Yong Ho very recently. And, I believe the barrier to any collection action against Kim Jong Un and the Kim family regime is formidable. And, we don't see any significant policy changes in the near future," he said.

Senior political and military officials in Pyongyang are believed to be overseeing lucrative businesses in the state-controlled economy. Pinkston says some are earning "excessive and extensive profits" and Kim needs to walk a fine line between extending opportunities to a new coalition of supporters, while keeping some on board from his father's generation.

"You can imagine the fights or infighting over property rights and access to resources. And, that very well could have happened with Ri Yong Ho. Maybe Kim Jong Un and Ri had argued over resources or how they were going to be allocated or what kind of businesses Ri might have been operating in," he said. "Or, he might have gotten greedy and tried to skim off extra funds."

Pinkston and other analysts note speculation about disagreement on policy direction or even an outright power struggle, but no concrete evidence has emerged.



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Some analysts counsel caution about reaching conclusions, including on whether North Korea is poised to reform, amid a dearth of first-hand information.

The ICG report concludes "reform prospects are dim." Pinkston says the scant evidence that has emerged from Pyongyang does not back up assertions such change is beginning.

"Simple change does not mean reform. Reform, in my view, means changing governance, changing the institutions, relying more upon markets for resource allocation. It means moving more towards the rule of law, empowering enterprises and people so that they can act in the market and engage in entrepreneurial activities. We don't see any of that going on in North Korea yet," he said.

One Western intelligence source tells VOA there are no indications of fundamental change, but interesting events are taking place in Pyongyang on nearly a "day-to-day basis." These include shuffling of high-ranking personnel and moves to further bolster the image of the inexperienced supreme leader, as well as renewed harsh criticism of South Korea's president.

One major concern in the intelligence community is whether Pyongyang is focused on internal matters or will again try to create an external crisis - such as a military provocation, a missile test cloaked as a satellite launch or even another underground nuclear detonation - to bolster Kim Jong Un.

"If the leadership - and Kim Jong Un in particular - perceives those around him as viewing him as being weak and he feels the need to demonstrate some kind of power, military prowess, then they could try to engage in some kind of military provocation. And, they might do that if they believe it could influence the presidential election here in South Korea in a way that would favor them," Pinkston said.

South Koreans go to the polls in December to replace President Lee Myung-bak who is limited to a single five-year term. Seoul has no diplomatic ties with Pyongyang.

North Korea has firmly been in the grip of one family since Kim Il Sung, the current leader's grandfather, was installed by Russia in 1945.

The ICG report says, without the resources to sustain a conventional arms race, the current leader, believed to be 29 years old, will need to rely on nuclear weapons and other asymmetric capabilities for the security of his country.

North Korea has carried out two atomic tests and analysts say it has a long-term program to build an intercontinental ballistic missile capable of carrying a nuclear warhead.

<http://www.voanews.com/content/reports-sees-north-korea-power-transition-as-finalized/1444726.html>

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Economic Times – India

India Currently Has 80 to 100 Nuclear Warheads: US Experts

By Press Trust of India (PTI)

July 24, 2012

WASHINGTON: India is not converting all its weapons-grade plutonium into war heads, two top American nuclear scientists have claimed, estimating that it currently has 80 to 100 nuclear warheads for its emerging Triad of air-, land-, and sea-based nuclear-capable delivery vehicles.

India is estimated to have produced approximately 520 kilograms of weapons-grade plutonium, sufficient for 100 to 130 atomic warheads; however, not all of the material has been converted into warheads, Director of the Nuclear Information Project Hans Kristensen and senior fellow for Nuclear Policy Robert S Norris wrote in the Bulletin of the Atomic Scientists.

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Based on available information, Kristensen and Norris estimate that India currently has 80 to 100 nuclear warheads for its emerging Triad of air-, land-, and sea-based nuclear-capable delivery vehicles.

"It will need more warheads to arm the new missiles it is currently developing," they claimed.

"In addition to the Dhruva plutonium production reactor near Mumbai, India plans to construct a second reactor near Visakhapatnam, on the east coast. India is building an unsafeguarded prototype fast-breeder reactor at the Indira Gandhi Centre for Atomic Research near Kalpakkam, which will significantly increase India's plutonium production capacity once it becomes operational," they wrote.

They said India's drive to develop a nuclear triad proceeds apace, with New Delhi developing or deploying several weapon systems to realize its goal of achieving offensive nuclear forces on land, at sea, and in the air.

"India took a significant step forward with the successful test-launch of the Agni V ballistic missile on April 19, 2012. With a range reportedly greater than 5,000 kilometers, the Agni V can reach any target in China; however, the missile needs more testing and is still several years away from operational deployment," they said.

Nevertheless, the Agni V introduces a new dynamic to the already complex triangular security relationship among India, Pakistan, and China; a week after India's April test-launch, Pakistan (somewhat predictably) responded by test-firing its nuclear capable Shaheen-1A medium-range ballistic missile.

http://articles.economictimes.indiatimes.com/2012-07-24/news/32827973_1_nuclear-warheads-india-plans-plutonium-production

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Hurriyet Daily News – Turkey

Turkey Begins Work on ICBM

July 24, 2012

ISTANBUL: The Turkish Armed Forces have begun working on a project to develop an intercontinental ballistic missile (ICBM), broadcaster NTV reported on its website today.

A decision to launch the project was made in a July 17 meeting of the Defense Industry Executive Board, headed by Prime Minister Recep Tayyip Erdoğan and Chief of General Staff Gen. Necdet Özel. Erdoğan had previously requested that the military develop missiles with a 2,500-kilometer range.

The board decided to form a satellite launch center that would have a two-fold effect on Turkey's aerospace and military endeavors. First, the center will enable Turkey to place its own satellites in orbit, and second, the center will allow the Turkish military to launch missiles that can navigate outside of the Earth's atmosphere. Attaining an ICBM launch capability is reportedly the chief aim of the satellite launch center.

The Turkish Defense Ministry, the Defense Industry Undersecretariat and the Scientific and Research Council of Turkey (TÜBİTAK), have been jointly working on the project for some time.

The report said Ankara could cooperate with an undisclosed Eastern European country to develop the satellite launch center.

The ICBM project, meanwhile, has sought to improve on the SOM cruise missile developed by TÜBİTAK. The SOM cruise missile has a current range of 300 kilometers. The range would first be increased to 1,500 and later to 2,500 kilometers within the project, according to the report.

The report did not elaborate on whether the SOM's planned 2,500-kilometer range would be increased even further or whether its increased range would be utilized to develop an ICBM separately, as missiles with ranges under 5,500 kilometers are not considered "intercontinental."

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The countries known to currently have ICBMs in their military arsenal are Russia, the United States, the United Kingdom, France, China and India.

<http://www.hurriyetdailynews.com/turkey-begins-work-on-icbm-.aspx?pageID=238&nID=26211&NewsCatID=338>

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Sun Sentinel – Ft. Lauderdale, FL

Russia Tells Syria Chemical Arms Threat is Unacceptable

By Reuters

July 25, 2012

MOSCOW (Reuters) - Russia said on Wednesday it had clearly told the Syrian government it was unacceptable to threaten to use chemical weapons, after Damascus warned it might do so if faced with foreign intervention.

In a meeting with Syria's ambassador to Moscow, Deputy Foreign Minister Mikhail Bogdanov "laid out in an extremely clear form Russia's position on the inadmissibility of any threats of the use of chemical weapons", the ministry said.

Syrian Foreign Ministry spokesman Jihad Makdissi said on Monday the country had chemical weapons, adding it would not use them against rebels but might do so against forces from outside Syria.

Bogdanov repeated a call Russia made on Tuesday for Syria to abide by a 1925 international protocol barring the use of poison gases in warfare. Russia says Syria signed the protocol in 1925.

Earlier on Wednesday, state-owned news agency Itar-Tass quoted another Russian deputy foreign minister, Gennady Gatilov, as saying Moscow had received firm assurances from Damascus that the security of the chemical arsenal was "fully safeguarded".

Russia vehemently opposes any foreign military intervention in Syria, but the nuclear-armed former Cold War superpower sees itself as one of the top guarantors, with the United States, of the security of weapons of mass destruction.

The sharp statement on Wednesday echoed what diplomats say has been firm but private Russian advice to the Syrian government to end speculation that it might use chemical weapons.

It appeared intended to distance Russia from the government of President Bashar al-Assad, whom Moscow has protected from tougher global action over 16 months of bloodshed by vetoing Security Council resolutions.

Analysts say revelations about Syria's chemical weapons will not prompt Russia to shift its stance on Syria, dropping its opposition to foreign intervention or its insistence that Assad's exit must not be a precondition for a political process.

Writing by Steve Gutterman; editing by Andrew Roche.

http://www.sun-sentinel.com/news/nationworld/sns-rt-us-syria-crisis-russia-chemicalbre86o0zj-20120725_0_2534624.story

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RIA Novosti – Russian Information Agency

Russian Press – Behind the Headlines

26 July 2012

Kommersant

Pentagon Withdraws Missile Defense Invitation from Russia

Washington is continuing to try to break the deadlock in missile defense talks with Moscow. The United States invited Russian representatives to attend tests of elements of its missile defense system on Kwajalein Atoll. The move was

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designed to persuade Moscow that the U.S. system was not targeted against Russia. But the plan failed to come off. While Moscow was considering the invitation, the Pentagon changed its mind and decided against sharing “sensitive information” with Russia. Meanwhile, the U.S. Congress made it clear that no such invitations will be issued in the future.

The invitation was made verbally, a source in the Russian Defense Ministry said. Moscow, however, was in no hurry to accept it. To begin with, according to the source, no supporting letter was received in Moscow and secondly, “the Russian side does not see much point in such trips.” “It’s clear why the Americans are calling us. They want to show they are cooperating with us,” the source explained to Kommersant. “But in reality it’s nothing of the kind – their laws forbid them to share telemetric data with us. Going to watch a rocket lift-off through binoculars is pointless.”

Similar reasons were behind the Russian military’s refusal in spring to accept an official invitation to Colorado Springs to visit the Missile Defense Agency headquarters, and attend radar and anti-missile tests on the Hawaiian Islands in May.

Meanwhile, while Moscow was considering the invitation to Kwajalein, it was withdrawn at the insistence of the Pentagon, or rather the Missile Defense Agency, which has been increasingly critical of the State Department for being overly open to the Russians.

A source in the Foreign Ministry admitted that “progress on missile defense is stalling,” but added that “Russia is not to blame.” “We proposed developing a joint missile defense system with the United States, but they refused,” the diplomat said. “We asked for written guarantees that their system would not be targeted on Russia, which they failed to provide. “Even if we attend tests and are given convincing information that the U.S. system is not upsetting the strategic balance, without legally binding safeguards this is worthless to us.”

Diplomats and the military in both countries also point to domestic factors to explain the deadlock: Russia’s presidential election was held in March and the U.S. electorate will go to the polls in fall. At a meeting in March, Barack Obama told Dmitry Medvedev that he would have “more flexibility” after the elections.

But this may not happen. Last week, the House of Representatives adopted an amendment to U.S. budget estimates for 2013, prohibiting the passing of classified information on anti-missile technology to Russia. This means that even if Barack Obama is re-elected, he is unlikely to make any real concessions to Moscow.

RIA Novosti is not responsible for the content of outside sources.

<http://en.rian.ru/papers/20120726/174789680.html>

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RT (Formerly “Russia Today”) – Russia

Putin Pushes Nuclear, Space Defense Reform

26 July 2012

President Putin has said Russia is not planning to enter a new arms race, but urged senior officials to develop the nuclear arsenal further, along with Russia’s own air and space defenses, so that no one in the world doubts their effectiveness.

Putin was speaking at a special meeting on the state weapon program that took place in the southern Russian city of Sochi on Thursday.

“We are not going to enter the arms race, but no one should have any doubts in the reliability and effectiveness of our nuclear potential, as well as the means of air and space defense,” Putin told the meeting.



The president pointed out that all nations that possess nuclear weapons and means of air and space attack are currently investing in their development and perfection. They are actively developing the guidance systems and boosting the effectiveness of their observation and reconnaissance systems.

Putin again stressed that the nuclear forces were playing a key role in Russia's national security.

"The nuclear weapons remain the most important guarantee of Russia's sovereignty and territorial integrity, and play a key role in maintaining the regional balance and stability," he said.

As for the space and air defenses, Putin urged the military and weapons designers to keep the weapons constantly ready and to consider the potential enemy's plans for development of offensive weapons.

The president ordered that the share of modern weapons be increased to 75-85 per cent for the nuclear forces and to 70 per cent for the space and air defense by 2020. He reminded the officials that the government had allocated sufficient means for this purpose in the recently approved State Armament Program till 2020.

<http://rt.com/politics/re-armament-sets-defense-priority-100/>

[\(Return to Articles and Documents List\)](#)

RIA Novosti – Russian Information Agency

Russia to Lay Down Fourth Borei Class Sub July 30

26 July 2012

Russia's fourth Borei class (Project 955A) ballistic missile submarine will be officially laid down at a ceremony on July 30, Russian Navy Commander Vice-Admiral Viktor Chirkov said on Thursday.

The Borei class is set to become the mainstay of the Russian Navy's strategic nuclear deterrent fleet, replacing the ageing Project 941 (NATO Typhoon class) and Project 667 class (Delta-3 and Delta-4) boats.

"The official ceremony for laying down the Borei-class boat, named Knyaz Vladimir, will be held on Monday July 30," Chirkov said.

Three other Borei class boats are at various stages of development at the Sevmaash shipyard on the Kola peninsula. Yury Dolgoruky is currently undergoing sea trials, whilst Alexander Nevsky and Vladimir Monomakh are under construction.

The Borei class will be armed with the Bulava ballistic missile, which is also in the final stage of development and due to enter service on Yury Dolgoruky later this year.

MOSCOW, July 26 (RIA Novosti)

http://en.rian.ru/military_news/20120726/174785532.html

[\(Return to Articles and Documents List\)](#)

Herald Scotland – Scotland, U.K.

Tuesday, July 24, 2012

Alarm about Lack of a Plan for Trident if UK Breaks Up

THE lack of a contingency plan for Britain's Trident nuclear arsenal if Scotland votes for independence is causing alarm within the UK Government, with one senior source decrying the gap in forward planning as nonsensical.

By Michael Settle, UK Political Editor

The Coalition source also told The Herald the cost of relocating the nuclear deterrent to England would cost as much as the plan to replace it with a new generation of submarines, some £25 billion.



A mantra for the Coalition has been that prudent planning is an important part of good government, yet when it comes to preparing for the possibility of the biggest constitutional change of all – a break-up of the United Kingdom – and the consequences for Britain's nuclear deterrent, ministers insist there are no specific contingency plans in place.

In June, Nick Harvey, the Armed Forces Minister, appeared before the Commons Scottish Affairs Committee. He was asked by Alan Reid, the Liberal Democrat MP for Argyll and Bute, what contingency planning the Ministry of Defence had undertaken, given the SNP Government had made clear it would want Trident to be removed from Scottish waters as promptly as possible should Scots vote for independence.

Mr Harvey replied: "The UK Government are not making plans for independence - and hence we are not making plans to move the nuclear deterrent or indeed the submarines from HM Naval Base Clyde.

"In the course of our normal work we have all sorts of con-tingency arrangements in place but we have not had any discussion of the sort that you are alluding to, certainly with either the SNP or the Scottish Government."

The senior UK Government source denounced such a lack of contingency planning. He said: "It's a nonsense. Given this will, in the event of a yes vote, be the biggest single item up for negotiation, then there has to be some planning in place but, remarkably, there isn't."

The source explained the lack of contingency planning would mean that, in the event of a yes vote, Alex Salmond and his ministers would have the UK Government over a barrel when it came to post-independence negotiations between the two governments – the suggestion being that the First Minister could set the highest possible price for delaying the removal of Trident from Scotland.

Last week, Mr Salmond made clear his bargaining position when he declared: "The nuclear weapons concerned are not Scotland's nuclear weapons. If they are regarded as an asset, which I would find difficult to regard them as, then I am quite certain we can trade that asset for something more useful."

During the same June session of the Scottish Affairs Committee hearing, MPs were told by Mr Harvey that the costs of relocating Trident and replicating the complex safety infrastructure south of the Border would be "gargantuan".

He explained: "The costs would be absolutely immense. I would have thought relocation would be just about the least favoured option that it would be possible to conjecture. In the context of that pan-governmental negotiation - if a future independent Scottish Government were to insist upon the nuclear deterrent being relocated out of Faslane, the impact of that on that pan-governmental discussion would be very substantial indeed."

<http://www.heraldscotland.com/politics/referendum-news/alarm-about-lack-of-a-plan-for-trident-if-uk-breaks-up.18231986>

[\(Return to Articles and Documents List\)](#)

Chicago Tribune

Worker Charged in Maine Nuclear Submarine Fire

July 23, 2012

By Ros Krasny, Reuters

BOSTON (Reuters) - A 24-year-old civilian worker was arrested and charged on Monday with setting the fire on a U.S. nuclear submarine at Maine's Portsmouth Naval Shipyard in May that caused an estimated \$400 million in damage.

Casey James Fury started the blaze on the USS Miami "to get out of work," a Navy investigator said.

Fury, a painter and sandblaster, was charged in federal court in Portland, Maine, with arson for the May 23 blaze. The Miami was in the shipyard in Kittery, Maine, for repairs and retrofitting.

Authorities also charged Fury, of Portsmouth, New Hampshire, with setting a second, smaller fire at the shipyard in June, in the dry dock cradle on which the Miami rests.



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If convicted on either charge Fury could face life in prison.

Charges came after an investigation by the Naval Criminal Investigative Service. They state that Fury admitted, following a lie-detector test, to using a cigarette lighter to ignite a vacuum cleaner and a pile of rags in a stateroom about the Miami.

"The reason he set the fire was in order to get out of work," said NCIS special agent Jeremy Gauthier.

He added that Fury told investigators he was taking a variety of medications for anxiety, depression, allergies and insomnia at the time of the first incident.

Fury also said he was anxious about a text conversation with his former girlfriend and wanted to leave work when he set the second blaze.

The fire on the Miami, a Los Angeles Class attack submarine, took about 12 hours to extinguish. Seven firefighters sustained minor injuries.

The vessel's nuclear propulsion plant had been shut down for more than two months during the repairs, and remained in safe and stable condition throughout the event. There were no weapons on board.

The Navy has yet to determine if it will repair the \$900 million Miami or scrap it.

Editing by Mohammad Zargham

http://articles.chicagotribune.com/2012-07-23/news/sns-rt-us-usa-submarine-fire-arrestbre86m1cl-20120723_1_uss-miami-nuclear-propulsion-plant-nuclear-submarine

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Air Force Times.com

Donley: New Bunker-Busting Bomb Ready to Use

By Jeff Schogol - Staff writer

Wednesday, July 25, 2012

The Air Force's 30,000-pound behemoth bunker buster is ready to be used if needed, Air Force Secretary Michael Donley said Wednesday.

The Massive Ordnance Penetrator, or MOP, is designed to destroy deeply buried bunkers that protect chemical, biological and nuclear weapons, but Defense Secretary Leon Panetta told the Wall Street Journal earlier this year that the bomb needed more development to be able to take out Iranian bunkers.

Since then, Syria has disintegrated into full civil war, making the U.S. government worried about the Syrian regime's stockpile of chemical weapons.

"The Syrian regime needs to protect these weapons," Defense Department spokesman George Little said Tuesday. "And I think I've been very clear, as have others in the U.S. government, that it would be unacceptable not to secure them."

After speaking at the Capitol Hill Club in Washington on Wednesday, Donley was asked if the MOP was available to be used. He was not asked where it might be used.

"If it needed to go today, we would be ready to do that," he said. "We continue to do testing on the bomb to refine its capabilities, and that is ongoing. We also have the capability to go with existing configuration today."

<http://www.airforcetimes.com/news/2012/07/airforce-donley-MOP-072512/>

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Defense News.com

Pentagon More Than Doubles Cost Estimate for B61 Nuclear Bomb

July 25, 2012

By KATE BRANNEN

According to a new estimate from the Pentagon, the life-extension program for the B61 nuclear bomb will now cost roughly \$10 billion, two-and-a-half times the original cost proposed.

Sen. Diane Feinstein, D-Calif., who chairs the Senate Appropriations energy and water development subcommittee, said she was briefed on the bomb's new estimate July 23.

Variants of the B61 bomb have been in the U.S. nuclear weapon inventory since the late 1960s. The latest life-extension program is aimed at updating the bomb to make it safer to keep in the nuclear stockpile for years to come.

The \$10 billion cost estimate comes from DoD's Cost Assessment and Program Evaluation (CAPE) office, which is responsible for conducting independent cost studies of weapon programs. Its analysis of the program's cost is \$2 billion more than a new estimate from the National Nuclear Security Administration (NNSA), Feinstein said.

Revising its previous estimates, NNSA now says the program will cost \$8 billion, which is "double the cost of the original" \$4 billion estimate, Feinstein told reporters after a July 25 subcommittee hearing.

CAPE and NNSA "had some disagreements on assumptions," a staffer for Feinstein said.

The escalating cost of the B61 nuclear bomb is just the latest example at NNSA of costs climbing well above what was originally proposed.

For example, cost estimates for a new plutonium laboratory, known as the Chemistry and Metallurgy Research Replacement (CMRR) facility, have grown from \$600 million to \$6 billion.

These programs seem unable to stay within their original budget confines, with costs going up exponentially, Feinstein said. "We have to find a way to stop this from happening and that's what we are now trying to do."

She said she has asked the NNSA to provide regular reports to keep the subcommittee updated on any problems that may be driving costs up. The subcommittee would like NNSA to solve problems more quickly "before they are just left and allowed to continue to grow," Feinstein said.

Testifying before the subcommittee, retired Marine Corps Gen. James Cartwright, former vice chairman of the Joint Chiefs of Staff, said, "We have to get our arms around how to cost these life-extension programs, because we're going to do them for the next 50 years."

While the stated goal of the United States is to reduce its nuclear weapons stockpile to zero, that's unlikely to happen during that timeframe, Cartwright said.

"We have to find a way to understand what it costs; what the implications of a large inventory are versus a small inventory; and do a good business case," Cartwright said.

Cartwright, along with Thomas Pickering, the former undersecretary for political affairs at the State Department, appeared before the subcommittee to discuss a recent report, which they conducted along with other U.S. officials, that recommends reducing today's roughly 5,000 nuclear weapons to 900.

"This would represent a steep (80 percent) reduction from the current U.S. arsenal, but it would not be a small force, nor a humble force designed for minimal deterrence," Cartwright said in his written testimony.

Such reductions should not be made unilaterally, but through a negotiated agreement with Russia, Cartwright said.

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The report from Global Zero, a group committed to eventually eliminating nuclear weapons, also recommends the United States move from a nuclear triad to a dyad, eliminating land-based intercontinental ballistic missiles (ICBMs) from the U.S. inventory.

Under today's nuclear triad, the United States can use bomber aircraft, submarines or ICBMs to deliver nuclear weapons. Because ICBMs have to fly over Russia and China no matter what their intended target is, they are unsuitable except for the most unlikely scenario: a large-scale nuclear war with Russia, according to Cartwright.

Under Global Zero's proposal, 720 of the 900 remaining nuclear weapons would be allocated to ballistic-missile submarines. Today, the Navy maintains 12 such submarines, but the Global Zero report recommends reducing that number to 10.

The remaining 180 nuclear weapons would be provided to the Air Force's B-2 bomber fleet.

These reductions would save \$100 billion to \$120 billion over the first 10 years in cost avoidance, Cartwright said.

Keith Payne, who oversaw nuclear weapons policy at the Pentagon from 2002 to 2003, disagreed with the Global Zero report. The United States needs more flexible options than this reduced strategic force would allow, he said.

Keeping only 900 nuclear weapons in its inventory would leave the United States vulnerable to its opponents, he told lawmakers.

<http://www.defensenews.com/article/20120725/DEFREG02/307250004/Pentagon-More-Than-Doubles-Cost-Estimate-B61-Nuclear-Bomb?odyssey=nav|head>

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Defpro.news
July 26, 2012

U.S., Poland Work on SM-3 Interceptors Deployment - Pentagon

WASHINGTON | Washington and Warsaw keep closely discussing the deployment of a U.S. new-generation ballistic missile defense interceptor site in Poland by 2018, Pentagon spokesman George Little said, according to RIA Novosti.

U.S. Defense Secretary Leon Panetta met on Wednesday with his Polish counterpart Tomasz Siemoniak to discuss besides other issues the deployment of the U.S. missile shield elements in Europe.

"Panetta thanked Siemoniak for Poland's leadership on NATO Ballistic Missile Defense [BMD]. Poland was the first nation to establish a BMD agreement with the United States... The two nations are working closely together to establish an SM-3 ballistic missile interceptor site in Poland by 2018," Little said in a statement.

The Standard Missile-3 (SM-3) Block IB is designed to intercept and destroy short to intermediate-range ballistic missile threats and is an essential component of an anti-missile system the United States is building in and around Europe.

Moscow has long opposed the deployment of U.S. missile defenses near its borders, arguing they would be a security threat and could destroy the strategic balance of forces in Europe.

The United States scrapped plans in September of 2010 for an anti-ballistic-missile defense system in the Czech Republic and Poland. Moscow welcomed the move, and Russia's then-President Dmitry Medvedev said later that Russia would drop plans to deploy Iskander-M tactical missiles in its Kaliningrad Region, which borders NATO members Poland and Lithuania.

Last year, however, U.S. Secretary of State Hillary Clinton announced Washington's plans to deploy missile defenses and Air Force units in Poland.

Russia and NATO agreed to cooperate on the so called Euro missile defense system at the Lisbon summit. NATO insists there should be two independent systems that exchange information, while Russia favors a joint system. (RIA Novosti)



<http://www.defpro.com/news/details/37902/?SID=b9347f61e89b811cd8207ae30be237e0>

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The Hill
DEFCON Hill Blog

Al Qaeda's Africa Cell is Group's Strongest, General Says

By Carlo Muñoz
July 26, 2012

While the United States' counterterror campaign against al Qaeda's Yemen affiliate has dominated the headlines in recent months, the group's Africa cell has quietly emerged as the group's strongest and best funded faction, according to a top U.S. general.

The combination of lucrative kidnapping-for-ransom operations, a steady flow of arms and recruits stemming from the Libya uprising and numerous failed attempts by U.S. regional allies to dismantle al Qaeda's Africa cell — known as al Qaeda in the Islamic Magreb (AQIM) — have led to the group's rise to power within the terror organization.

"The international community ... missed an opportunity to deal with AQIM when they were weak. Now the situation is much more difficult," Gen. Carter Ham, head of Africa Command, told reporters in Senegal on Thursday.

The group already has begun to exert its newfound strength by capturing and holding wide swaths of territory in the northern section of the West African nation of Mali, according to Reuters.

"We believe the most dominant organization is AQIM. We think they are al Qaeda's best funded, wealthiest affiliate," the four-star general told the news organization.

Exploiting recent political turmoil in the country, including a successful coup in March, AQIM and other radical Islamic factions were able to turn the northern region of Mali into a "terrorist haven", Ham said.

AQIM and other terror groups on the continent have begun to consolidate their forces and expand beyond the localized-type threat each individual group posed to those partner nations.

Al Shabab, the East African faction of al Qaeda, has been carrying out terrorist attacks against African Union forces in and around Somalia since the 1990s. AQIM has been operating mainly in Western Africa since the early 2000's.

Those al Qaeda affiliates recently combined forces with the African-based Islamic fundamentalists group Boko Haram to expand its attacks against government targets along Africa's eastern shores.

Since the Mali coup, the United States has terminated assistance to the country, removed its Peace Corps volunteers and imposed travel sanctions on some 60 people linked to the coup.

However, the State Department has emphatically ruled out any possible U.S. intervention to oust AQIM and others from northern Mali and reunify the country.

That said, the Pentagon is going on the offensive on the continent, but with a strategy based less on bullets and bombs and more on supporting African partner nations' efforts — known as indirect action missions — to quell AQIM and other groups.

"Indirect action engagements are likely to become even more important going forward, as budgets become tighter and the imperative to operate jointly is matched by the growing requirement to work with partners," Jacqueline Davis, executive vice president at the Institute for Foreign Policy Analysis, told House defense lawmakers in July.

Those indirect operations would likely fall to the two major special operations task forces on the continent, known as Joint Special Operations Task Force-Trans Sahara and Joint Special Operations Task Force-Horn of Africa.



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The task forces in country are under the command of Special Operations Command-Africa, which is the special forces wing of Africa Command headquartered in Germany.

<http://thehill.com/blogs/defcon-hill/operations/240621-al-qaedas-africa-cell-is-groups-strongest-general-says>

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Huffington Post
OPINION/Blog

Defense Hawk Says Cut the Nuclear Arsenal

By Benjamin Loehrke
July 24, 2012

A leading defense hawk took to the floor of the House of Representatives to argue that greater security in the 21st century means spending less on nuclear weapons. This could signal a turning point as leaders in Congress see the strategic and fiscal realities behind why the U.S. should reduce its nuclear arsenal.

Rep. Norman Dicks (D-WA) is a steadfast supporter of national defense. He is the Ranking Member of the House Appropriations Committee and has served on the Subcommittee on Defense for 34 years. He speaks forcefully -- both in style and substance. Last week, he stood on the House floor to oppose a proposal on nuclear weapons.

Republicans in the House offered, and later passed, an amendment to the Defense Appropriations Bill that would block reductions to the nuclear arsenal -- including those agreed to under the New START Treaty. Rep. Dicks opposed the proposal, arguing that New START has clear security benefits and should not be undercut.

But, once on the floor of the House, he opposed more than the proposal. He opposed the idea behind it. He said:

"We simply don't need, and we can't afford to have and continue to produce all of these nuclear weapons that will, more than likely, never be used. They are a good deterrent and they have been an effective deterrent. Thank God for that. But the Cold War is over, and we are in a position today where we must reduce the size of our nuclear weapons force."

Rep. Michael Turner (R-OH), who sponsored the amendment, disagreed. He responded, "While we stand on this floor and speak with the freedoms that we have, our nuclear deterrent keeps us safe. Abandoning our nuclear deterrent would not make us safe."

The two congressmen sparred briefly in a fascinating discussion. Rep. Dicks was given the last word:

"You don't need thousands of these weapons. A couple hundred, frankly, could take out Iran and almost any country you can imagine. So, again, we can't afford to do everything. We are in an era where we're dealing with terrorists, and we need to have special forces that can be utilized. We need to have these very effective drones. We need to look at the threats that are out there today and equip our military accordingly."

This statement recognizes two realities. First, in order to control the national debt, the defense budget is going to come down. As it does, Congress will need to make smarter investments and cut excessive programs. Second, the U.S. nuclear arsenal has plenty of excess.

Leading experts and military officials agree that the United States would be more secure with fewer nuclear weapons. A new report chaired by Gen. James Cartwright, former Vice Chairman of the Joint Chiefs of Staff, argues that the U.S. could reduce its arsenal to 900 total nuclear weapons.

As former Secretary of State Colin Powell said about the U.S. nuclear arsenal, "We have every incentive to reduce the number. These are expensive. They take away from soldier pay." He added, "They take away from lots of things. There is no incentive to keep more than you believe you need for the security of the nation."

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Rep. Dicks understands this. To have a capable military on an affordable budget, excessive or outdated programs must be cut. His solution is that nukes should be on the chopping block.

It's strong advice. It would help strengthen the military against today's threats by shedding the nuclear excesses of the Cold War.

And if defense hawks are ready to make this argument, others in Congress are sure to follow.

Benjamin Loehrke is a Senior Policy Analyst for the Ploughshares Fund

http://www.huffingtonpost.com/benjamin-loehrke/defense-hawk-says-cut-the_b_1695255.html

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Foreign Policy

OPINION/Passport Blog

Wither the Nuclear Triad? Maybe not.

By John Reed

Wednesday, July 25, 2012

The Pentagon needs to keep all three legs of the nuclear triad in light of its shrinking inventory of nuclear weapons and the rise in numbers of nuclear weapons around the globe, the U.S. Air Force's top civilian official said this morning.

"I think, as, our nuclear force structure potentially gets smaller in the context of **START**, it's all the more important that we maintain a balanced triad going forward," said Air Force Secretary Michael Donley during a July 25 breakfast on Capitol Hill. "In the context of rising nuclear capabilities elsewhere in the world, it's even more important that we have the flexibility across land and air-based and sea-based legs of the triad. We have flexibility of basing those, in targeting methods and other aspects of this mission that give us confidence that we can continue to deter potential nuclear ambitions of others and that we have the flexibility to respond if necessary through various means."

While the Air Force waits for the Pentagon to decide whether or not to continue with the triad -- which has consisted of the air service's land-based nuclear bombers and intercontinental ballistic missiles and the Navy's submarine-launched ballistic missiles since the early 1960s -- it has developed a program to keep its 450 Minuteman III ICBMs, which were first deployed in 1970, in service until 2030.

Donley's comments come just two weeks after Air Force Gen. Robert Kehler, chief of U.S. Strategic Command, said the triad may not always be the best arrangement for nuclear deterrent. "My view today is that the triad continues to serve us well. It may not be true in the future, but it continues to serve us well," said Kehler, who is in charge of the nation's nuclear forces, on July 12.

Speaking of weapons designed to deter nations from developing weapons of mass destruction, Donley also said the Air Force's stash of 30,000-pound Massive Ordnance Penetrator super bunker busters is ready for use even though the new weapons are being upgraded to give them even more penetrating power. "If it needed to go today, we could do that," said Donley. "We continue to do testing on the MOP to refine its capabilities but we also the capability to go with the existing capability." The MOP, which entered service in late 2011, is designed to smash through up to 32 stories of concrete after being launched from the B-2 stealth bomber. Earlier this year, the Air Force decided to upgrade the bombs to allow them to reach the most deeply buried targets, such as Iran's sensitive nuclear facilities.

http://blog.foreignpolicy.com/posts/2012/07/25/wither_the_nuclear_triad_maybe_not

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The Australian – Australia

OPINION/Op-Ed

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Complex Web of Terror and Nukes Magnifies Threats

By Greg Sheridan, Foreign Editor, *The Australian*
July 26, 2012

If you ask any authoritative American to list his country's greatest security threats, as I have done repeatedly in the US over the past couple of weeks, you get some mix of the following four issues.

One is China's massive military build-up and the long-term question of how it will behave in the Asia-Pacific.

Another is the simultaneous expansion of Pakistan's nuclear arsenal, the increase of jihadi extremism there and the decrepit nature of Pakistani institutions.

Then there is Iran's burgeoning nuclear technology program and its continuing, indeed increasing, support of international terrorism, especially through Lebanese militia outfit Hezbollah.

And finally there is the ongoing threat of international jihadi terrorism.

I'm tempted to add the separate issue of nuclear weapons proliferation, but that is virtually co-terminous with Iran and Pakistan.

The interaction of these threats is very complex. With the exception of China, each magnifies the others and makes them more difficult to deal with.

Take the terrorist murder of five Israeli tourists in Bulgaria last week. This was not only an horrific act of murder. It also has strategic consequences. Israel's Prime Minister, Benjamin Netanyahu, declared this week that Israeli intelligence has evidence that Hezbollah, backed by Iran, carried out the murders.

Washington itself has extensive evidence of Iranian sponsorship of terrorism. At least nine serious terrorist actions or attempted actions are attributed to Iran this year alone. By the way, we should be aware that Hezbollah has established a significant infrastructure in Southeast Asia.

The most bizarre recent Iranian plot was the attempt to use a Mexican drugs cartel to assassinate the Saudi ambassador in Washington. Amateurish as this plot seemed in some ways, the most senior US figures are adamant that this was a serious Iranian operation.

On the Bulgarian operation, the Americans are not confirming the Israeli allegation, but nor are they contradicting it.

The Iranians are formally denying involvement in the plot but at the same time implying that their actions are in retaliation for attacks, some cyber and some physical, on their nuclear program and the scientists who work on it.

There is of course no moral equivalence here. Iran's nuclear weapons program is in breach of its international agreements. Given its insane, millenarian rhetoric, and its murderous behaviour, this nuclear program is a profound danger to many nations.

Iran's acts of homicidal terrorism can have no justification.

But they do have strategic consequences. One of these is to convince the Israelis, and to a lesser extent the Americans, that a nuclear-armed Iran is absolutely unacceptable. This means it is likelier that Israel or the US will attack Iran's nuclear program. And such an attack, which may be necessary, will have wildly unpredictable consequences.

This is part of the very difficult nexus of terrorism and traditional strategic issues. A nuclear-armed Iran is a threat in at least four distinct ways.

Iran might decide to use such weapons. It might threaten, explicitly or implicitly, to use them and thereby gain great geo-strategic power. Or its mere possession of nuclear weapons may lead to a "cascade" of other Middle Eastern powers acquiring nukes for themselves, with all the dangers that would bring. And finally, a nuclear Iran might pass nuclear material to terrorists.

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But the calculus is infinitely complex, for a strike on Iran's nuclear program may not work definitively, and may have its own disastrous consequences.

From the very first, one of the most difficult aspects of dealing with terrorism was that all the other, pre-9/11 geo-strategic issues - the rise of China and the like - still had to be dealt with, while containing terrorism demanded a serious, continuing effort.

Barack Obama has done well on terrorism. This has partly been technical and partly a matter of unpredicted political resolve. The technical aspect is the extraordinary development of drone technology. This has allowed the Americans to destroy most of al-Qa'ida's leadership in Afghanistan and Pakistan, and some parts of Africa. This is exceptionally important in part because it is al-Qa'ida that, more than any other terrorist group, has demonstrated a serious desire to get hold of nuclear material.

The surprising political dimension has been Obama's willingness to use lethal force. In many ways Obama makes George W. Bush look like a sissy. Most Washington insiders, not to mention the general public, have been seriously surprised by this aspect of Obama's presidency.

Al-Qa'ida central is for the moment on the ropes. Its most serious offshoots now are in Yemen and in parts of Africa. The Americans have had considerable tactical, almost surgical, success against the leadership of many of these groups as well.

The Obama camp makes a perfectly plausible case that it has got the balance pretty right here. It has decimated al-Qa'ida's leadership but it has not got involved in ground wars in Yemen, or Africa. Nor has it gone into the tribal areas of Pakistan with a heavy, ground military force.

But this very success conceals two disturbing realities about terrorism. Although al-Qa'ida central is on the ropes, its ideas and recruitment continue apace. Al-Qa'ida in the Islamic Maghreb, al-Shabaab and many other groups continue the al-Qa'ida vision. The central organisation would regenerate if the Americans released the pressure. That means there needs to be a continuing military effort against terrorists, as well as all the various political efforts.

And the long-term trend line in several areas is pretty bad. Pakistan continues to see a growth in jihadi outfits, even as the population is weary of jihadis. There is complicity from parts of the Pakistani military, but almost more disturbing are signs that Pakistan is losing control of some of the terror groups it created or succoured.

And Pakistan has many more than a hundred nuclear weapons. It is increasing its nuclear arsenal, and moving it around in irresponsible ways, in part because it is scared the Americans may one day decide to try to destroy or impound this arsenal. So Pakistan is making that option completely impossible. Yet there is nowhere on earth that terrorists are likelier to come by some nuclear material than Pakistan.

This indeed is the strongest real argument for the US to keep a residual force of perhaps 15,000 in Afghanistan, not so much for the welfare of the blighted Afghans as to have a base for drone operations, and where necessary special forces operations for contingencies that may emerge in Pakistan.

This all requires sustained, high-level American effort. The more successful US forces are tactically the more the public, and even many influential commentators are inclined to conclude that the terrorist threat has gone away or was always exaggerated.

It hasn't and it wasn't. But the other threats are all there, too.

It's a dangerous world.

<http://www.theaustralian.com.au/news/opinion/complex-web-of-terror-and-nukes-magnifies-threats/story-e6frg76f-1226435137981>

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Eurasia Review – Spain
OPINION/Op-Ed

Nuclear Pakistan: Defence Vs Energy Development – OpEd

July 26, 2012

By Ikram Ullah Khan

Currently there is a debate in various public forums regarding Pakistan as a nuclear power, and the country's inability to generate electricity to fulfill its domestic needs. In addition to this, the question is being asked of why is Pakistan continuously investing in its nuclear weapons program (missiles tests), rather than investing in the development sector.

Ironically, a number of Pakistani people have been influenced with this debate and are raising questions even about the very existence of Pakistan, and especially about the country's nuclear capability. The reason behind this emerging perception is that, in these days, the nation is suffering with "load shedding", the worst energy crisis ever in the history of Pakistan and country's rapidly declining economy.

The problem with these questions, however, is that this is not how the issue should be discussed. If someone is suffering with a severe headache, he will not raise the question about the very purpose of his head. He knows that with some appropriate treatment he will get rid of his troublesome headache and will continue to use the head for his survival and success. Similarly, Pakistan with appropriate planning can overcome this growing energy crisis, and then it can continue its journey of peace, prosperity and stability with its nuclear deterrence.

We must be clear that nuclear weapons are here to maintain peace and stability between Pakistan and India. Pakistan was forced to run its nuclear weapon program due to India's nuclear weapon program and its hegemonic ambition. Pakistan has long said that its nuclear weapon program is security driven. While on other hand Indian nuclear weapon program is not security driven, rather it is based on its regional and global aspirations.

The security threats still exist for Pakistan, but due to its credible nuclear deterrence Pakistan is capable of crushing such threats or plans. In the recent past, the tragedy, which many historians remember as the "Fall of Dhaka", carries some lessons for us to be learnt. If India could intervene at that time, then it is quite possible it could intervene in Balochistan. Now the nuclear capability of Pakistan deters India from perusing any kind of intervention because of the fear of perceived consequences.

It is Pakistan's credible nuclear deterrence capability that effectively neutralizes any ill intent of its opponent against its integrity and sovereignty. It is evident that after the December 13, 2001 terrorists attack on Indian Parliament, India mobilized its armed forces to attack on Pakistan, but refrained from doing so as it realized that any such irrational action would lead to a nuclear war. The same was the case after Mumbai attacks on November 26, 2008 – the nuclear deterrence prevailed and it prevented the likelihood of an all out nuclear war in South Asia.

It is our national responsibility that we should strengthen our strategic institutions with our moral support, rather unnecessarily criticizing the sincere efforts of our strategic community. Learn by heart: the stronger is our the national defense, the stronger would be the national development and, vice versa, the stronger is our national development, the stronger will be that of the national defense.

Nuclear weapons prohibit the leaders to take any irrational steps, even a minor one, which can lead towards nuclear war. The Cuban Missile crisis 1962 was the occasion when a war was imminent between USSR and the USA. It was only the credible threat of nuclear use that directed the political leadership of both superpowers to defuse the crisis with political means.

This is the reason why Pakistan cannot remain oblivious to any nuclear development inside India. It is India that is heavily investing in its nuclear weapon program and Pakistan is only responding to it, to keep the nuclear deterrence stable at all levels. Pakistan, if in any case, remains unable to establish the credibility of its nuclear deterrence with continuous progress in Research & Development of its nuclear weapon program then its mainland will no longer be

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safe for its inhabitants. The doctrine of minimum credible deterrence has been designed in accordance with the economic conditions of Pakistan and to maintain the strategic stability in South Asia.

The nukes are peace-keepers, not evil and their role is only to keep humans the on right path. These are the weapons of restraint, which certainly impose an environment of peace, stability and development without the threat of war.

The politico-military leadership of India and Pakistan is well aware of the consequences of a nuclear war. A nuclear war only can bring destruction and devastation for both nations. So no one will cross the certain red lines and even no one would drag in the situation, where opponent have no choice, except to unleash the devastating forces as lost resolve. The role of nuclear weapons is more significant in the South Asian security environment, where India enjoys conventional superiority and has aspirations to become a regional hegemonic power.

History explains this phenomenon as well. In the past whenever a nation developed and transformed itself into an economic and military power, it went to the endless journey of expansion; to take hold of entire world, no matter if this powerful nation had to kill millions of people. The possible explanation of this awful fact would be that the nation wanted to keep the secure defense and momentum of development of its motherland. This offensive/defensive military strategy played a decisive role for nation to become regional as well as global power. In this context, a unique correlation exists in power, defense, development and destruction.

Interestingly mankind has always fought, even when there were not small kinetic arms, and has been able to even kill millions of people by sword, arrow and spear. History is full of such barbaric battles in which millions of people lost their lives. In this part of the world, genocide is a well known reality. Halku Khan's invasion of Baghdad in 1258, in which 1.6 million people were killed only in Baghdad, is a good example in this context.

As societies developed and modernized the use of gun powder and gun was started in conventional wars, the death toll increased. The millions of people were killed in two world wars (World War 1 & II) through conventional means.

It is a historical fact that the WW II ended only after the U.S nuclear attacks on Hiroshima and Nagasaki. It is true these nuclear attacks were not justified, but on the other hand via the result of this tragic incident the world learned the lesson that there should not be the use of nukes in the future, under any circumstances. So it is since August 9, 1945 that there has been no major hot war between nuclear weapons states.

The possession of nuclear weapon capability is also more akin to Islamic values. Islam emphasizes its followers that "ready your strength to the utmost of your power". It is verity that a nation will not adopt the decision to impose war on its enemy if it perceives that the enemy is sturdily capable to retaliate in full manner. In this case both sides will engage themselves in a peace process to resolve their disputes and will refrain from intervening in their respective domestic domain.

Beyond this, nuclear weapon capability was never an obstacle in the socio-economic development of P5 nuclear weapons states, namely U.S, Russia, UK, France and China. Neither, it is an obstacle in the socio-economic development of Pakistan. It is Pakistan's minimum credible deterrence which accentuates to avoid unnecessary arms race in the region.

Pakistan has become stronger in defense and its political leadership is also trying, according to its capability, to better Pakistan's development. But if in any case it proves ineffective this then does not mean that nuclear weapons are the cause of our economic decline and social injustice.

Writer is a freelance columnist and has work as Research Fellow, at the South Asian Strategic Stability Institute (SASSI), Islamabad. Opinions expressed are the author's own.

<http://www.eurasiareview.com/26072012-nuclear-pakistan-defence-vs-energy-development-oped/>

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OPINION/The Naval Diplomat

India's Military Comes of Age: The BrahMos Missile

By James R. Holmes

July 27, 2012

Indians take pride in the BrahMos anti-ship cruise missile, or ASCM. I was taken aback some years ago when some Indian friends—gentle souls with little interest in military affairs—professed satisfaction at this successful venture into defense R&D. While that encounter induced some vertigo, it makes sense when you think about it. The Indian military has long been a consumer of hardware manufactured by others. By fielding the BrahMos, India in effect kicked in the door to an exclusive club of nations that design and produce high-tech defense articles.

Beyond simply augmenting the Indian Navy's (and Army's, and eventually Air Force's—of which more later) striking power, this lethal "bird" signifies that India is coming of age as a great power. Great powers operate aircraft carriers and nuclear submarines. They build their own military equipment. Seemingly workmanlike endeavors like weapons design and manufacturing present an aspirant to global leadership a kind of talisman. Indigenously built weapons embody intangibles like national honor and grandeur.

Here endeth the philosophizing. Jointly developed by India's Defense Research and Development Organization and Russia's Mashinostroyeniye Company, the BrahMos is a stealthy, supersonic missile designed to elude shipboard defenses like the Aegis combat system, a combined radar and fire-control system found on board American, Japanese, and South Korean destroyers and cruisers. (Spain and Norway operate the system as well, while the Royal Australian Navy is outfitting its next-generation warships with it.) Aegis has stood at the vanguard of fleet air defense since the early 1980s, when USS Ticonderoga, the U.S. Navy's first Aegis cruiser, stood out to sea. Getting past Aegis is an achievement.

Judging from the technical parameters, the Indian Navy has one-upped the U.S. Navy in this niche technology. On paper, the Indian ASCM appears superior to the AGM-84 Harpoon, long the U.S. Navy's workhorse anti-ship missile. It certainly outranges the Harpoon. The BrahMos can strike at targets 290 kilometers distant, more than double the advertised range" in excess of" 67 nautical miles (77 statute miles, or 124 kilometers) for the Harpoon. And with a top speed approaching Mach 3.0, the supersonic BrahMos far outstrips the subsonic Harpoon.

Speed kills. Helter-skelter speed compresses the time air defenders have to respond—and time is the critical determinant in the "detect-to-engage" sequence. It allows crews to attempt electronic countermeasures, loft surface-to-air missiles, launch decoys, or—as a last-gasp effort—engage an incoming missile with short-range guns. Shorter detect-to-engage time, then, means fewer rounds or countermeasures in the air to stop or deflect a hostile bird. But there's another, less obvious advantage to high speed. Velocity imparts kinetic energy to any moving body. Accordingly, one body inflicts more damage when it slams into another at higher speed. Breakneck velocity magnifies a missile's hitting power beyond the explosive power designed into its payload.

That a speedy, extended-range weapon like the BrahMos is crucial to naval warfare in this age of long-range anti-ship weaponry is obvious from the US Navy's 2009 decision to hurriedly develop a long range anti-ship missile, or LRASM, of its own. Otherwise U.S. surface action groups may not land the first blow in combat. And they may have to take a pounding for some time before hitting back. Even if fleets close on each other at top speed, it takes quite awhile for lumbering ships to cover the 166 kilometers separating the Harpoon's range from that of the BrahMos. Assuming the technology pans out, LRASM will even the terms of long-range engagements.

The Harpoon remains a good missile, that is, but American ships have to get fairly close to cut loose with Harpoon barrages. If the enemy outranges them, they have to beat back enemy missile attacks while closing to ASCM range. That increases their chances of incurring serious if not fatal damage before even taking offensive action. Admiral Horatio Nelson famously instructed Royal Navy commanders that "no Captain can do very wrong if he places his Ship alongside that of an Enemy." But Lord Nelson lived before the advent of accurate long-range fire. He never would have given such advice knowing his ships could be put out of action before getting alongside for close-range gunnery duels.



What about the quality of the BrahMos?

Any weapon is like a “black box” until it’s used in combat against real, thinking adversaries with the capacity to deploy countermeasures or strike back at the launch platform. So it’s hard to judge for sure.

If nothing else, Russian involvement in the program should give us pause. Westerners have long ridiculed Soviet-built hardware, but the Soviet Navy was asymmetric before asymmetric warfare was cool. Soviet weapons scientists and engineers displayed impressive ingenuity, fielding an imposing array of anti-ship missiles. Some remain in service today, bedeviling prospective opponents. For instance, Sovremenny-class guided-missile destroyers transferred to China’s navy sport SS-N-22 Sunburn ASCMs designed to evade or overpower Aegis-equipped destroyers and cruisers. With its high speed and capacity to make radical evasive maneuvers during its terminal phase of flight, the Sunburn kept American air defenders up nights during my time in uniform—and doubtless still does so today. To all appearances, the BrahMos is cast in the same mold.

There’s more to anti-ship missiles than surface vessels pounding away at one another from afar. For example, the BrahMos can be fired from mobile launchers—basically trucks—on land. (Submarine- and air-launched variants are reportedly in the works as well.) That raises a host of intriguing possibilities for the Indian military. It promises to let New Delhi influence events at sea from the shore, much as Chinese rocketeers do off the East Asian seaboard.

Think about Indian Ocean geography. South Asia’s maritime geography is less convoluted than East Asia’s, but India does possess some strategically placed features beyond the subcontinent—notably the Andaman and Nicobar island chains. The islands lie athwart the western approaches to the Strait of Malacca. They also lie within BrahMos range of one other, while nearby landmasses in Southeast Asia fall within range of the northernmost and southernmost islands. That means the Indian Army could emplace BrahMos batteries in the Andamans and Nicobars to threaten shipping passing through these archipelagoes.

That would project India’s military reach to Southeast Asia without leaving Indian soil. An extreme measure? Sure. But no more extreme than Japan’s thinking about how to close the straits through the home islands and the Ryukyus in wartime. Small wonder Chinese pundits liken the Andaman and Nicobar islands to a “metal chain” stretched across sea lanes vital to China’s economic development.

There are other possibilities. For example, the Indian Navy has “inducted”—that maddeningly vague term—its first nuclear-powered ballistic-missile submarine into the fleet while predicting the boat will be operational by the end of this year. But even if engineers have gotten the kinks out of the hull and its propulsion plant, INS Arihant will patrol the seas without working ballistic missiles to fire. As an interim measure, my friend Andrew Winner speculates (in our—finally!—forthcoming volume on nuclear strategy) that India will try to miniaturize a nuclear warhead sufficiently to fit on the BrahMos. The manufacturer is working on a missile variant that can be launched from torpedo tubes. If the technical details sort themselves out, that would give New Delhi an equivalent to the TLAM-N, the nuclear variant of the US Navy’s Tomahawk land-attack cruise missile.

While unsatisfactory over the long haul, a nuclear-tipped BrahMos would supply the third leg of a nuclear triad, letting the Indian Navy threaten sites in Pakistan as a deterrent. Because of the BrahMos’s short range relative to ballistic missiles, however, the Arihant and its sisters would have to cruise the South China Sea—or beyond—to menace targets in China. The implications of Indian submarines’ prowling the crowded, increasingly contested South China Sea are worth pondering. It remains to be seen whether Indian technical wizardry will render such a system workable if New Delhi decides to pursue one, or whether engineers perfect a sea-launched ballistic missile first.

The BrahMos program, then, is worth tracking—both as a yardstick for Indian scientific and technical progress and for its strategic and political implications. We live in interesting times. The Indian military’s new bird of preymakes them a little more interesting.

James Holmes is an associate professor of strategy at the U.S. Naval War College. The views voiced here are his alone.

<http://thediplomat.com/the-naval-diplomat/2012/07/27/indias-military-comes-of-age-the-brahmos-missile/>

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