

# USAF COUNTERPROLIFERATION CENTER CPC OUTREACH JOURNAL

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# Articles & Other Documents:

US Spy Chief to Brief Senators on Nuclear Treaty	<u>'China should be Stopped from Building N-Reactors for</u> <u>Pak'</u>
Envoys Argue Over `Slumbering' Geneva Nuke Talks Iran Says Nuclear States Must Observe Commitment in	Nuclear-Armed Pakistan Takes over as Chair of IAEA Board
Eradicating Atomic Arms Iran Nuclear Experts Race to Stop Spread of Stuxnet	Russia's Newest Nuclear Sub Completes Sea Trials
Computer Worm	Work on Sixth Russian CW Disposal Site Almost Done
Stuxnet Worm Rampaging Through Iran: IT Official	Chavez: Venezuela Studying Nuclear Energy Program
<u>'Computer Virus in Iran Actually Targeted Larger</u> <u>Nuclear Facility'</u>	Danger of Nuclear Weapons to Disappear only if They are Totally Banned: Cuban FM
Forensic Nuke ID Methods in Works	<u>Aliens Have Deactivated British and US Nuclear</u> <u>Missiles, Say US Military Pilots</u>
FACTBOX - North Korea's Heir Apparent Kim Jong-un	Zeal for Dream Drove Scientist in Secrets Case
North Korean Military Backs Succession of Kim Jong- un	It's The Bomb! Vintage Explosion Photos
N Korea's Kim Promotes Son to General	The Next Nuclear Arms Race
Denuclearization a Distant Dream	Power Struggles and Regency Unlikely in North Korea
<u>Vice FM Urges China to Press N. Korea to Give Up</u> <u>Nuclear Programs</u>	

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#### Breitbart.com US Spy Chief to Brief Senators on Nuclear Treaty

September 28, 2010 By Agence France-Presse (AFP)

US spy chief James Clapper will brief senators Wednesday on intelligence issues tied to a landmark nuclear treaty with Russia, amid worries about Moscow's compliance, aides said Tuesday.

Clapper, the US director of national intelligence, will head to the capitol in the early evening, one official said on condition of anonymity. Another confirmed that the briefing would occur without specifying a timeframe.

The US Senate is expected to vote on ratifying the new Strategic Arms Reduction Treaty (START) after November elections that are expected to deal a blow to President Barack Obama's Democratic allies in the congress.

The Senate Foreign Relations Committee endorsed the agreement in a 14-4 vote on September 16 even after one of the panel's Republican members, Senator James Risch, said the US intelligence community had shared "troubling" new information with lawmakers.

Lawmakers were tight-lipped about the details, but the top Republican on the Senate Intelligence Committee, Kit Bond, warned in a statement about "the treaty's lack of verification necessary to detect Russian cheating."

Asked whether there was anything new given longstanding allegations of Russian non-compliance, Risch told reporters: "You haven't seen the same stuff I've seen," but would not elaborate.

The treaty -- signed by Russian President Dmitry Medvedev and Obama at an elaborate ceremony in Prague in April -- restricts each nation to a maximum of 1,550 deployed warheads, a cut of about 30 percent from a limit set in 2002.

The agreement, a top Obama foreign policy initiative, replaces a previous accord that lapsed in December 2009 and also requires ratification by Russia's lower house, the Duma.

US Senate ratification requires 67 votes, Democrats control 59 seats, and just three Republicans on the foreign relations committee voted in favor of the accord, with four against.

Republicans have charged the accord could hamper US missile defense plans -- a charge denied by the Pentagon -- have concerns about Russian implementation, and want assurances about plans to modernize the existing US nuclear arsenal.

http://www.breitbart.com/article.php?id=CNG.29e5f9ae941bd52cd3e12c591e89ab19.3c1&show\_article=1

(Return to Articles and Documents List)

Seattle Times

# Envoys Argue Over 'Slumbering' Geneva Nuke Talks

The U.S. and others warned Friday of a possible ultimatum in Geneva: Either the Conference on Disarmament gets moving on a treaty to ban production of atomic bomb material, or big players will take their bargaining chips elsewhere.

By CHARLES J. HANLEY, AP Special Correspondent

UNITED NATIONS — The U.S. and others warned Friday of a possible ultimatum in Geneva: Either the Conference on Disarmament gets moving on a treaty to ban production of atomic bomb material, or big players will take their bargaining chips elsewhere.

The warning was aimed at Pakistan, the latest nation to block negotiation of a Fissile Material Cutoff Treaty at the 65-nation disarmament conference in that Swiss city, a diplomatic forum where just one delegation can prevent the required consensus.

"It strikes us as unwarranted for a single country to abuse the consensus principle and thereby frustrate everyone else's desire to resume disarmament efforts," said White House arms-control chief Gary Samore.

The U.S. itself until last year was blocking the same long-proposed treaty, and some countries Friday complained that Western nations also bear blame for the Geneva standoff.

They should not limit the disarmament body's focus to one treaty, but should also be negotiating pacts to prevent an arms race in outer space, to forswear nuclear attacks on non-nuclear states, and to ban nuclear weapons outright, said Egypt's U.N. Ambassador Maged Abdelaziz.

The conference should "agree by consensus on a balanced and comprehensive program of work," Abdelaziz said on behalf of the 118-nation Nonaligned Movement of mostly developing countries.

Samore, Abdelaziz and more than 60 other top envoys, including foreign ministers, spoke at a high-level meeting convened by U.N. Secretary-General Ban Ki-moon to rally support for action at the Geneva conference, which Samore said must be awakened "from its many years of slumber."

The Conference on Disarmament, the world's only multilateral forum for nuclear arms diplomacy, hasn't produced anything substantial since the 1996 nuclear test-ban treaty, a pact now on hold because key nations, including the U.S., have not ratified it.

The fear that terrorists might get hold of plutonium or highly enriched uranium - nuclear bomb-making material - has added to the push for a fissile-material treaty. Experts believe 2,500 tons of the stuff sit today in deployed or disused weapon warheads, in fuel stores for nuclear-powered Russian icebreakers and U.S. missile submarines, in research reactors and elsewhere.

The U.S. administration of President George W. Bush had opposed negotiating a cutoff pact, arguing it would not be verifiable because the inspection regime would be too objectionably intrusive.

President Barack Obama reversed that stand last year, and the Geneva conference finally agreed on an agenda. Pakistan allowed the process to move forward, but this year it blocked further work.

At this time only Pakistan and India - and possibly Israel and North Korea - produce fissile material for weapons. The major nuclear powers, with thousands of weapons stockpiled, have declared unilateral moratoriums on production.

Archrival India has more fissile material than Pakistan does, and a greater capacity to build warheads. The Islamabad government consequently wants a treaty that doesn't only cut off future production, but reduces current stocks of bomb material.

"It presents us with a clear and present danger," Pakistan's Geneva negotiator, Zamir Akram, has said of the cutoff idea.

The Pakistanis didn't speak at Friday's session, and spokesman Mian Jahangir Iqbal said the U.N. mission would have no comment.

The U.S., Australian, British and other speakers suggested the negotiation of a fissile material treaty might have to be shifted elsewhere, perhaps to the U.N. General Assembly, where it can be adopted by majority vote. Rejectionists would then become more internationally isolated.

"Mexico feels the time has come to issue an ultimatum," agreed Mexican U.N. Ambassador Claude Heller.

But Russia and China, influential voices as nuclear-weapon states, opposed the idea.

Disarmament expert Ray Acheson, of the advocacy group Reaching Critical Will, told The Associated Press it might prove "reasonable" to shift to the General Assembly, though unfortunate to exclude Pakistan. The best solution, Acheson argued, would be to leapfrog such intermediate problems by negotiating a treaty outlawing nuclear weapons.

Secretary-General Ban said he would ask his disarmament advisory group to study the issue.

http://seattletimes.nwsource.com/html/nationworld/2012983081\_apunundisarmamentjumpstart.html?syndication=rs

(Return to Articles and Documents List)

Tehran Times – Iran Sunday, September 26, 2010

# Iran Says Nuclear States Must Observe Commitment in Eradicating Atomic Arms

Tehran Times Political Desk

TEHRAN -- Foreign Minister Manuchehr Mottaki insisted on Tehran's position that the nuclear-armed states must honor their 40-year commitment for a total destruction of nuclear weapons.

Talking at the Conference on Disarmament in the UN headquarters in New York on Friday, Mottaki said that the main challenge facing the UN nuclear disarmament bodies is "that the nuclear states are not bound to their commitments."

He noted that some countries in the West show no real political will for abolishing nuclear weapons, although the UN disarmament bodies are capable enough in realizing this goal.

He went on to say that the abolishment of nuclear weapons is the only way to safeguard the human race.

Pointing to Iran's suggestion in 1974 for establishing a nuclear weapons-free zone in the Middle East, the top diplomat insisted that the Zionist regime must join the NPT and respect the IAEA safeguards.

Mottaki reiterated Tehran's position for banning the production, proliferation, and use of nuclear weapons and a total elimination of the existing atomic weapons by 2025

http://www.tehrantimes.com/Index\_view.asp?code=227348

(Return to Articles and Documents List)

#### London Guardian

# Iran Nuclear Experts Race to Stop Spread of Stuxnet Computer Worm

Iran believes virus spread from Russian laptops aims to shut down Bushehr nuclear plant By Peter Beaumont Sunday, 26 September 2010

Experts at Iran's nuclear agency are trying to disable a complex computer virus that has attacked the country's industrial sites and appears to be aimed at shutting down its Bushehr nuclear plant, which was due to go online next month.

According to the semi-official ISNA news agency, officials at Iran's nuclear agency have met to determine how to combat the computer worm, called Stuxnet, which can take over systems that control the inner workings of industrial plants.

The ISNA report said the virus had spread throughout Iran, but did not name the sites affected.

Computer security experts who have studied Stuxnet since it emerged two months ago believe it was designed specifically to attack the Siemens-designed working system of the Bushehr plant and appears to have infected the system via the laptops and USB drives of Russian technicians who had been working there.

Western experts say the worm's sophistication – and the fact that some 60% of computers infected appeared to be in Iran – pointed to a government-backed attack.

Although the worm has turned up in other countries since first appearing in July – including Indonesia and the US – the frequency of its appearance in Iran has suggested the country was the intended victim of the cyber-warfare attack, with some analysts speculating that Israel might be behind it.

The Russian-built nuclear plant will be internationally supervised, but world powers remain concerned that Iran wants to use its civil nuclear power programme as a cover for making weapons.

While there have been no reports of damage or disruption at any Iranian nuclear facilities, last Tuesday's meeting signalled a high level of concern about the worm among Iran's nuclear officials. The Stuxnet worm has surprised experts because it is the first one created to take over industrial control systems, rather than just steal or manipulate data.

http://www.guardian.co.uk/world/2010/sep/26/iran-stuxnet-worm-nuclear

(Return to Articles and Documents List)

#### Brisbane Times – Australia Stuxnet Worm Rampaging Through Iran: IT Official

September 27, 2010 By Agence France-Presse (AFP)

The Stuxnet worm is mutating and wreaking further havoc on computerised industrial equipment in Iran where about 30,000 IP addresses have already been infected, IRNA news agency reported on Monday.

"The attack is still ongoing and new versions of this virus are spreading," Hamid Alipour, deputy head of Iran's Information Technology Company, was quoted as saying by IRNA, Iran's official news agency.

Stuxnet, which was publicly identified in June, was tailored for Siemens supervisory control and data acquisition, or SCADA, systems commonly used to manage water supplies, oil rigs, power plants and other industrial facilities.

The self-replicating malware has been found lurking on Siemens systems mostly in India, Indonesia and Pakistan, but the heaviest infiltration appears to be in Iran, according to researchers.

The hackers, who enjoyed "huge investments" from a series of foreign countries or organisations, designed the worm to exploit five different security vulnerabilities, Alipour said while insisting that Stuxnet was not a "normal" worm.

He said his company had begun the cleanup process at Iran's "sensitive centres and organisations," the report said.

Analysts say Stuxnet may have been designed to target Iran's nuclear facilities. But Iranian officials have denied the Islamic republic's first nuclear plant at Bushehr was among the addresses penetrated by the worm.

"This virus has not caused any damage to the main systems of the Bushehr power plant," Bushehr project manager Mahmoud Jafari said on Sunday.

He, however, added the worm had infected some "personal computers of the plant's personnel."

Alipour, whose company is tasked with planning and developing networks in Iran, said personal computers were also being targeted by the malware.

"Although the main objective of the Stuxnet virus is to destroy industrial systems, its threat to home computer users is serious," Alipour said.

The worm is able to recognise a specific facility's control network and then destroy it, according to German computer security researcher Ralph Langner, who has been analysing the malicious software.

Langner said he suspected Stuxnet was targeting Bushehr nuclear power plant, where unspecified problems have been blamed for delays in getting the facility fully operational.

Iran's nuclear ambitions are at the heart of a conflict between Tehran and the West, which suspects the Islamic republic is seeking to develop atomic weapons under the cover of a civilian drive.

Tehran denies the allegation and has pressed on with its enrichment programme -- the most controversial aspect of its nuclear activities -- despite four sets of UN Security Council sanctions.

http://news.brisbanetimes.com.au/breaking-news-technology/stuxnet-worm-rampaging-through-iran-it-official-20100927-15ua0.html

(Return to Articles and Documents List)

Ha'aretz Daily – Israel September 28, 2010

## 'Computer Virus in Iran Actually Targeted Larger Nuclear Facility'

New analysis contradicts earlier assessments that Stuxnet worm was targeted at nuclear reactor in Bushehr. By Yossi Melman

Experts on Iran and computer security specialists yesterday voiced a growing conviction that the worm that has infected Iranian nuclear computers was meant to sabotage the uranium enrichment facility at Natanz - where the centrifuge operational capacity has dropped over the past year by 30 percent.

The new analysis, based on the characteristic behavior of the Stuxnet worm, contradicts earlier assessments that the target was the nuclear reactor at Bushehr. Iranian spokesmen, led by the director of the Bushehr facility, had confirmed that Bushehr's computers were infected by the virus. But the director added that while senior staffers' computers were affected, the damage to the reactor's functioning was very limited and would not delay its launch, set for next month.

The Bushehr reactor, however, is considered less of a security threat than Natanz by the intelligence communities in both Israel and the United States. Because intelligence analysts believe Iran would have enough material for at least two nuclear bombs if it enriched the uranium held at Natanz from 3.5 percent to 90 percent, every scenario for an Israeli or American attack on Iran's nuclear facilities has put Natanz high on the list of potential targets.

There have been reports in the past of other alleged efforts by Israel and the West to undermine the Iranian nuclear project, some of which also targeted Natanz. These efforts included infiltrating the purchasing networks Iran set up to acquire parts and material for the centrifuges at Natanz and selling damaged equipment to the Iranians. The equipment would then be installed on site and sabotage the centrifuges' work.

The centrifuge - a drum with rotors, an air pump, valves and pressure gauges - is an extremely sensitive system. Generally, 164 centrifuges are linked into a cascade, and several cascades are then linked together. But the

centrifuges need to operate in complete coordination to turn the uranium fluoride (UF6) they are fed into enriched uranium. Their sensitivity makes them particularly vulnerable to attacks, since damage to a single centrifuge can create a chain reaction that undermines the work of one or more entire cascades.

The International Atomic Energy Agency, whose inspectors regularly visit Natanz, has reported that of the more than 9,000 centrifuges installed on the site, less than 6,000 are operational. The agency did not provide an explanation of this 30 percent drop in capacity compared to a year ago, but experts speculated that the centrifuges were damaged by flawed equipment sold by Western intelligence agencies through straw companies.

The recent revelations about the Stuxnet worm might provide new insights into the problems encountered by the enrichment facility. German computer expert Frank Rieger wrote in Frankfurter Allgemeine Zeitung on Sunday that Wikileaks, a website specializing in information leaked from government agencies, reported in June on a mysterious accident at Natanz that paralyzed part of the facility. Rieger now thinks the Wikileaks report was connected to the Stuxnet worm. He noted that whoever developed the virus refined its programming to allow it to damage small, sensitive components like regulators, valves and pressure gauges, all of which are found in centrifuges.

The New York Times wrote yesterday that the worm was not particularly successful, as it has also spread to other countries, like India, Indonesia and the U.S. It then contradicted itself by saying that the architects of the virus may not have cared how far the worm spread so long as its prime objective, damaging Iran, was achieved.

The prevailing assessment over the past few days has been that Stuxnet was developed by a highly capable intelligence organization, with Israel's Military Intelligence Unit 8200 and the Mossad being named as suspects.

The alleged breakdown at Natanz last year coincides with the Israeli cabinet's decision to extend the tenure of Mossad chief Meir Dagan. The decision was explained at the time by Prime Minister Benjamin Netanyahu's satisfaction with Dagan's work.

But it should be noted that even if a foreign intelligence agency did manage to partially sabotage the centrifuges, Iran can make do with the centrifuges it has already to continue enriching the uranium in its possession - which is precisely what Tehran is doing now.

http://www.haaretz.com/print-edition/news/computer-virus-in-iran-actually-targeted-larger-nuclear-facility-1.316052

(Return to Articles and Documents List)

#### Japan Times – Japan Monday, September 27, 2010 Forensic Nuke ID Methods in Works

By Kyodo News

Japan will start developing nuclear forensic technologies next fiscal year so it can tell where nuclear materials originated and prevent trafficking and proliferation, government sources said.

Amid growing international concern over nuclear terrorism, the government is aiming to analyze the composition of uranium fuel and reprocessed plutonium in the country to develop technologies for determining where the uranium originated and when it was produced so it can create a database.

The science and technology ministry hopes to secure a budget of ¥200 million for fiscal 2011 starting in April.

http://search.japantimes.co.jp/cgi-bin/nn20100927b1.html

(Return to Articles and Documents List)

#### The Star – Malaysia Monday September 27, 2010 FACTBOX - North Korea's Heir Apparent Kim Jong-un

Reporting by Jack Kim and Jeremy Laurence

REUTERS - North Korean leader Kim Jong-il has convened a rare conference of the ruling Workers' Party in a move expected to signal the eventual succession of his third and youngest known son, Kim Jong-un.

Following are some facts about Kim Jong-un and speculation about his prospects:

BIRTH

Jong-un is thought to have been born on Jan. 8, 1984. His mother Ko Yong-hui, also written as Ko Young-hee, was an ethnic Korean born in Japan who went to the communist state and joined one of its premier dance troupes. Ko also gave birth to the North Korean leader's second son, Kim Jong-chol, in 1981. Ko, who died in 2004, probably from cancer, was either Kim Jong-il's official wife or mistress -- an issue that might weigh on Jong-un's legitimacy.

#### EARLY YEARS AND EDUCATION

Jong-un attended an international school in Switzerland, where he learned to speak English, German and French. He is believed to have graduated in 1998. He later returned to North Korea and studied military science at Kim Il-sung Military University between 2002 and 2006. There are few known photographs of him. He has generally been more elusive than his two elder brothers, who have been spotted travelling outside the North.

#### SPECULATION ON HIS CHARACTER

Kenji Fujimoto, who served as the personal chef for Kim Jong-il, wrote in a book that Jong-un bears the closest resemblance to his father among his three sons.

Jong-un is also reported to have a ruthless streak and the strongest leadership skills of the three. And, perhaps more importantly, he is thought to be his father's favourite, Fujimoto and other informed sources have been reported as saying.

South Korean media have speculated that Kim Jong-un may also suffer from diabetes, something that is thought to have long plagued his father.

#### **CULT OF PERSONALITY**

There is none for Jong-un, who has never been mentioned in the North's state media and is virtually unknown to the North's people. By contrast, "Dear Leader" Kim Jong-il was known for decades and lauded as a revolutionary hero by the North's propaganda machine well before he took over after his father and state founder "Great Leader" Kim II-sung died in 1994.

Behind the scenes, there have been moves to promote the young Kim. In 2006, badges with his face were reportedly distributed among senior North Korean officials. A year later he was reported to be working in one of the departments responsible for monitoring members of the party and military. Last year, South Korean media reported that Kim Jong-il appointed his youngest son to be his successor, but that remains unconfirmed. There have also been reports that songs praising the son are sung on special occasions, and he has been given the title of "Brilliant Comrade," much like his father, the "Dear Leader," and his grandfather, the "Great Leader."

#### PROSPECTS FOR CONTROL

Kim Jong-un will likely not be able to run the state on his own given his youth, inexperience and lack of recognition among North Koreans, analysts say.

Kim Jong-il promoted Jang Song-taek, his brother-in-law, to the powerful National Defence Commission, which many analysts took to be an attempt to establish a mechanism for the eventual transfer of power to Jong-un, with Jang as caretaker and kingmaker.

http://thestar.com.my/news/story.asp?file=/2010/9/27/worldupdates/2010-09-27T103154Z 01 NOOTR RTRMDNC 0 -517552-1&sec=Worldupdates

(Return to Articles and Documents List)

London Daily Telegraph – U.K.

## North Korean Military Backs Succession of Kim Jong-un

North Korea's powerful military has given its tacit backing to the dynastic succession plans of Kim Jong-il after electing his youngest son as a delegate to a historic ruling party meeting, it has been claimed. By Peter Foster in Beijing 27 September 2010

North Korea sources said that the army had elected Kim Jong-un, the youngest son of the North's ailing dictator, as a delegate to the meeting, that begins in the North Korean capital Pyongyang today (TUES), in a move that was being read as a signal of its approval.

"Kim Jong-un's election as a delegate is widely known among executives of the North Korean People's Army," the source said.

After the election, the party's central committee also put out an internal propaganda notice proclaiming Kim Jong-un to be Kim Jong-il's "sole successor", it was claimed in South Korea's largest newspaper the Chosun Ilbo.

North Korea's state media has provided no information about the details of the congress which is the first major meeting of the ruling Workers Party congress for 30 years. North Korea's propaganda machine has promised the outcome of the event will be "historic".

At the last such meeting, in 1980, the then 38-year-old Kim Jong-il was officially declared as his father's successor at the start of a 14-year apprenticeship that eventually saw him take over as leader following the death Kim Il-sung in 1994.

There has been feverish speculation in recent weeks that tomorrow's meeting will mark a similar rite of passage for Kim Jong-un, the Swiss-educated youngest son of the Kim dynasty who is still only in his mid-to-late 20s.

Although the conference remains shrouded in secrecy, experts have predicted that Kim Jong-un could follow directly in his father's footsteps and be elected to the party's central committee as the start of his own apprenticeship for the top job.

Analysts are also expecting further promotion for Kim Jong-un's uncle, Jang Song-taek, who has been tipped as a regent figure who will shepherd Kim Jnr though his early years in power after the death of his father who has been in poor health since suffering a stroke in 2008.

In Pyongyang yesterday there were signs that delegates from all over the country of 23 million were gearing up for the meeting, with the capital festooned with flags and placards announcing the meeting.

"Warm congratulations to the representatives meeting of the Workers' Party of Korea!" read one poster.

http://www.telegraph.co.uk/news/worldnews/asia/northkorea/8027885/North-Korean-military-backs-succession-of-Kim-Jong-un.html

(Return to Articles and Documents List)

Sydney Morning Herald - Australia

## N Korea's Kim Promotes Son to General

September 28, 2010

By The Associated Press

North Korea's Kim Jong II has made his elusive youngest son a four-star general in a major promotion seen as confirmation that he is likely to become the country's next leader.

The announcement on Tuesday appeared in state media hours before a historic Workers' Party meeting on Tuesday where Kim, 68 and apparently in deteriorating health, was expected to grant son Kim Jong Un and other family members top posts in plans to take the communist dynasty into a third generation.

The North Korean capital was in a festive mood, with banners and placards celebrating the meeting, the communist country's biggest political gathering in 30 years.

It was state media's first mention of Kim Jong Un, who has remained so well hidden from the outside world that not even his face or exact age can be confirmed.

He is believed to be 27 or 28, and is said to have been schooled in Switzerland and educated at Kim II Sung Military University in Pyongyang.

However, it is clear that "Kim Jong Un's promotion is the starting point for his formal succession to power," said Kim Yong-hyun, a North Korea expert at Seoul's Dongguk University.

"It's clearly the biggest news we've had from North Korea since the death of Kim Il Sung," said Peter Beck, a Council on Foreign Relations-Hitachi research fellow at Keio University in Tokyo.

"I think it clearly demonstrates that Kim Jong II is committed to maintaining control of the country within his family," he said.

The appointment also appears aimed at putting the son at the helm of his father's "songun", or military-first, policy.

He is expected to take up other top military jobs such as commander of the 1.2 million-member military, analyst Cheong Seong-chang of the private Sejong Institute think tank said.

The secrecy surrounding the succession process is typical of the communist country, and reminiscent of Kim Jong II's own rise to power.

Kim Jong II was 31 when he won the No 2 post in the ruling Workers' Party in 1973, an appointment seen as a key step in the path to succeeding his father, North Korea founder Kim II Sung.

The following year, Kim was formally tapped as the future leader but state media did not reveal that to the outside world until the landmark 1980 convention, the last big political meeting in North Korea.

He took over as leader in 1994 when his father died of heart failure in what was communism's first hereditary succession.

It's not known what kind of party position Kim Jong Un might be granted.

Some predict he'll win the same post his father took 37 years ago: party secretary authorised to supervise party members and appoint top party, government and military officials.

However, the younger Kim may not have the benefit of 20 years of training like his father.

Kim Jong II, said to be suffering from diabetes and a kidney ailment, reportedly had a stroke in August 2008, sparking fears about instability and a possible power struggle in the nuclear-armed country if he were to die without anointing a successor.

Kim has two other sons but the youngest is said to be his favourite.

However, with Kim Jong Un still in his 20s and politically inexperienced, Kim Jong II may tap his sister to oversee an eventually transfer of power, experts say.

Sister Kim Kyong Hui, 64, was among six people promoted to general along with Kim Jong Un, and her name was listed ahead of Kim Jong Un's in the Korean Central News Agency report.

"There is a possibility that she could play the role of a co-ordinator to make sure the power succession goes smoothly," analyst Cheong said.

She and her husband, Jang Song Thaek, appointed vice chairman of the all-powerful National Defence Commission in June, also are expected to win key political appointments that would allow them to act as advisers to the young Kim during his rise to power.

In a brief announcement on Tuesday, a North Korean newsreader said "crucial developments" were taking place at the political convention under way in Pyongyang and that Kim Jong II was re-elected to the party's top position of general secretary to delegates' cheers of "Hurrah".

"His re-election is an expression of absolute support and trust of all the party members, the servicepersons and the people in Kim Jong II," KCNA said, calling it a "historic" event.

The convention, initially set for early September, appears to have been delayed by several weeks amid speculation that Kim's health or damage from flooding and typhoons may have forced the postponement.

"This meeting of the delegates is an important occasion for further strengthening the solidarity of our army, our party, and our people, who are rallying behind the great General Kim Jong II," Kim Chang Gyong, an assistant professor at North Korea's Academy of Social Sciences, told broadcaster APTN.

http://news.smh.com.au/breaking-news-world/n-koreas-kim-promotes-son-to-general-20100928-15ucx.html

(Return to Articles and Documents List)

Daily NK - South Korea

# **Denuclearization a Distant Dream**

By Kim So Yeol September 28, 2010

Dean of the School of International Studies at the University of Beijing, Professor Wang Jisi asserted today, "In a situation where the incumbent political system and domestic and foreign policies of North Korea have not changed, the North Korean nuclear issue cannot be solved."

Professor Wang asserted in his speech at an event, "South Korea and China Peace Forum," held by the National Unification Advisory Council in Seoul today, "Fundamentally, the North Korean nuclear issue is the North Korean problem."

He analyzed, "In this situation, the possibility is almost zero that pushing through economic sanctions, military threats or pursuing diplomatic negotiations will make North Korea give up its nuclear weapons."

He added, "Even if the Six-Party Talks are resumed, the most optimistic result will only be a repeat of the same pattern as last year's tug-of-war."

Professor Wang also gave a pessimistic analysis of current denuclearization policy, saying, "North Korea's possession of nuclear weapons has become a fact; it is an irreversible situation."

Therefore, he pointed out, "The international community should definitely know that it is not a matter they can find the solution to in a few years. Meanwhile, it should never acknowledge the justification given for North Korea's possession of nuclear weapons."

However, he added, "The Six-Party Talks are the only channel through which they can approach North Korea directly. Consequently, the Six-Party Talks are the best of a bad lot."

He also reminded the audience of the stark differences between the South Korean stance and that of China on the North Korean nuclear issue.

He explained, "Chinese officials believe that the North's nuclear program is only aimed at the U.S. and its allies, not China, so it is not a military threat to them."

He noted, "In terms of military and political stability issues, China pays much more attention to issues of Taiwan, Tibet and Xinjiang. They don't treat the North's nuclear issue as a core one in Chinese diplomacy, even though it is important."

http://www.dailynk.com/english/read.php?cataId=nk00100&num=6843

(Return to Articles and Documents List)

Yonhap News – South Korea September 28, 2010 Vice FM Urges China to Press N. Korea to Give Up Nuclear Programs

SEOUL, Sept. 28 (Yonhap) -- A top South Korean diplomat urged China Tuesday to exercise pressure on North Korea to give up its atomic weapons programs, saying international nuclear talks cannot move forward unless Beijing uses its influence over Pyongyang.

"As long as China takes a laid-back attitude about North Korea's denuclearization, it will be difficult to expect progress even if the six-party talks resume," Seoul's Vice Foreign Minister Chun Yung-woo said in a speech at a security forum involving Korean and Chinese experts.

China is considered to have the most leverage over North Korea as Pyongyang's last-remaining major ally and a key provider of food and energy aid. But Beijing has been reluctant to exercise its influence over fears it could destabilize the impoverished neighbor.

"If China firms up its position to put denuclearization ahead of stability in the North and actively takes part in pressuring the North, there still remains the possibility of denuclearization," said Chun, a top nonproliferation expert who once served as Seoul's chief nuclear envoy.

Chun stressed, however, that if Beijing puts more importance on keeping stability in the North, it will not only make denuclearization efforts more difficult, but it will also do harm to the survival of the regime in Pyongyang.

China has long been under criticism for blunting international sanctions imposed on the North for its nuclear and missile tests by providing assistance to the destitute neighbor through the backdoor.

Beijing has also been a key provider of diplomatic support for Pyongyang and tried to block Seoul's efforts to get the U.N. Security Council to adopt a strongly worded condemnation of the North's deadly sinking of a South Korean warship in March.

Chun said that the Chinese-hosted six-party nuclear talks should not be a sanctuary for the North and the recalcitrant regime should not be allowed to use the negotiations to buy time to build greater nuclear arsenal.

The diplomat was referring to Pyongyang's practice of using its participation in the on-again-off-again nuclear talks to evade international sanctions and pressure and to win economic concessions for denuclearization pledges on which it later reneged.

The nuclear talks, which involve the two Koreas, China, Japan, Russia and the United States, have been stalled since the last session in late 2008.

In recent months, Pyongyang has been signaling its willingness to return to the negotiating table. But South Korea and the U.S. have urged the North to prove through action that it is serious about abandoning its nuclear ambitions.

http://english.yonhapnews.co.kr/national/2010/09/28/2/0301000000AEN20100928005400315F.HTML

(Return to Articles and Documents List)

Deccan Herald – India Press Trust of India Washington, September 25, 2010

# 'China should be Stopped from Building N-Reactors for Pak'

China should be stopped from going ahead with its move to transfer new atomic reactors to Pakistan which is "not a responsible nuclear power," a top American Congressman has said.

"Pakistan greatly damaged global security by allowing this rogue (nuclear scientist A Q Khan) free reign in that country. China's plan to build another two nuclear reactors in Pakistan violates Nuclear Suppliers' Group rules. It should be stopped," Congressman Ed Royce said at a Congressional hearing.

He recalled that years ago, he had raised the issue of the "ring magnets" that China was transferring to Pakistan "to develop a nuclear weapon, that was obviously what was intended on the part of Pakistan."

Royce, who is co-chair of the Congressional India Caucus, said at the hearing on nuclear cooperation and nonproliferation: "Now we know that China's irresponsibility in proliferation ... gave rise to the capability of Pakistan, which subsequently trumped China's irresponsibility with its own, because that knew no limits in terms of A Q Khan's ability to proliferate."

"So the fact that A Q Khan, supposedly Pakistan's most popular man, two weeks ago went on Pakistani television and spoke about his future as the nation's president that should be more than troubling to us in terms of Pakistan and the future. The government there just is not a responsible nuclear power. That needs to be addressed," Royce said. Participating in the Congressional hearing held by the House Committee on Foreign Affairs, several other US lawmakers also expressed concerns about the latest Chinee move to build two nuclear reactors to Pakistan.

"If China proceeds with the sale of the two new reactors to Pakistan, what is the likely impact on the Nuclear Suppliers Group? Should the US attempt to persuade the NSG to disapprove the sale? Should China be expelled from the NSG? What is the cost of doing nothing?" Congressman Joe Wilson asked.

Sharon Squassoni, director and senior fellow in the Centre for Strategic and International Studies Proliferation Prevention Programme, said that the NSG can essentially not disapprove a sale. "It is a voluntary gathering of nuclear suppliers. There's nothing that the Nuclear Suppliers Group can do as a body," she said, adding China should not be thrown out of the NSG.

"They are building nuclear power reactors like crazy domestically and they will be a major exporter. So I think we need to keep them in that group. There may be other ways outside of the nuclear realm that we can influence their actions, but I think those reactors are a done deal," she said.

Thomas Graham, former Special Representative to the US President on Arms Control, said: "It's difficult to see how a proposal like China's could be stopped within the NSG given the Indian precedent. "Perhaps the NSG can be persuaded that this exception for India is India-only and won't apply to any other country, most especially Pakistan," he said.

"But where does that leave China? My guess is they'd probably go ahead and sell them anyway. It's not a situation over which we have much control. The NSG is not quite the effective instrument it was, in my judgment, a few years ago, because of various developments," he said.

http://www.deccanherald.com/content/99467/china-should-stopped-building-n.html

(Return to Articles and Documents List)

Times of India – India September 27, 2010

## Nuclear-Armed Pakistan Takes over as Chair of IAEA Board

By Agence France-Presse (AFP)

VIENNA: Pakistan, which refuses to sign the nuclear Non-Proliferation Treaty and was home to a notorious nuclear smuggling ring, was named head of the UN nuclear watchdog's governing board on Monday.

At a special one-day meeting, the International Atomic Energy Agency's 35-member board of governors appointed "by acclamation" the head of Pakistan's Atomic Energy Commission, Ansar Parvez, as its chairman for the next 12 months, taking over from Malaysia.

The board of governors is the IAEA's most important policy-making body after the 151-nation general conference and meets five times a year.

Its rotating chair is appointed for a period of one year with the main task of presiding over debates and helping the board of governors reach consensus decisions.

Parvez said he saw no problem with the choice, even though Pakistan, like India and Israel, refuses to sign the NPT.

Pakistan has held the chair before and India has done so twice.

Some observers see Pakistan as a potential problem because it was home to a nuclear-smuggling ring run by scientist Abdul Qadeer Khan, the father of Pakistan's atomic bomb and a national hero.

Khan publicly confessed in 2004 that he shared atomic secrets with Iran, Libya and North Korea, although he later retracted his remarks.

There is also concern about the security of Pakistan's nuclear arsenal and stockpile of weapons-grade material, and the danger of it falling into the hands of Taliban and Al-Qaeda insurgents.

But speaking to reporters after his appointment, Parvez insisted that Pakistan was a "very law-abiding member" of the IAEA.

"We have been a member of the IAEA ever since it was created. All our civil installations are under IAEA" safeguards, he said.

In fact, given Pakistan's special position, "maybe we can try to mediate in some of the things which the IAEA has been dealing with for the last few years," Parvez argued.

He said that he had heard no objections to Pakistan's nomination inside the board room. Furthermore, it was the duty of the chair to remain neutral.

"This is just a routine change. This time it was the turn of MESA (Middle East and South Asia group) and they unanimously nominated Pakistan," Parvez said.

Western diplomats at the closed-door board meeting on Monday also said they had no particular problem with Pakistan taking over the chair.

http://timesofindia.indiatimes.com/world/pakistan/Nuclear-armed-Pakistan-takes-over-as-chair-of-IAEA-board/articleshow/6637556.cms

(Return to Articles and Documents List)

RIA Novosti - Russian Information Agency

#### **Russia's Newest Nuclear Sub Completes Sea Trials**

28 September 2010

Russia's newest strategic nuclear-powered submarine, the Borey class Yury Dolgoruky, has completed sea trials in the White Sea and returned to its base in northern Russia, the Sevmash shipyard said.

The trials were part of the manufacturer Sevmash's tests and the boat is now ready for final inspection by a state commission before it enters service with the Russian Navy.

"All the submarine's systems performed well, and the problems revealed during previous tests have been resolved," Sevmash said.

The Yury Dolgoruky is 170 meters (580 feet) long, has a hull diameter of 13 meters (42 feet), a crew of 107, including 55 officers, a maximum depth of 450 meters (about 1,500 feet) and a submerged speed of about 29 knots. It can carry up to 16 ballistic missiles and torpedoes.

Construction costs totaled some \$713 mln, including \$280 mln for research and development.

Three other Borey class nuclear submarines, the Alexander Nevsky, the Vladimir Monomakh, and Svyatitel Nikolai (St. Nicholas) are in different stages of completion. Russia is planning to build eight of these subs by 2015.

Fourth-generation Borey class nuclear-powered submarines are expected to constitute the core of Russia's modern strategic submarine fleet.

The submarine's entry into service could be delayed however by a series of setbacks in the development of the troubled Bulava submarine-launched ballistic missile (SLBM), which has officially suffered seven failures in 12 tests.

The future development of the Bulava has been questioned by some lawmakers and defense industry officials, who have suggested that all efforts should be focused on the existing Sineva SLBM.

But the Russian military has insisted that there is no alternative to the Bulava and pledged to continue testing the missile until it is ready to be put into service with the Navy.

MOSCOW, September 28 (RIA Novosti)

http://en.rian.ru/mlitary\_news/20100928/160742528.html

(Return to Articles and Documents List)

Global Security Newswire

## Work on Sixth Russian CW Disposal Site Almost Done

Tuesday, September 28, 2010

Construction of the sixth of seven planned Russian chemical weapons disarmament facilities is almost finished, ITAR-Tass reported yesterday (see *GSN*, Aug. 25).

"Air-delivered munitions and munitions with the organophosphorus agent are stored" at the Pochep depot in the Bryansk Region, said Col. Gen. Valery Kapashin, who leads the Federal Directorate for the Safe Storage and Destruction of Chemical Weapons. "The facility is practically ready, the installation of the equipment is being completed and the commissioning of hubs and units is under way in some departments."

Russian officials intend in mid-October to verify the working order of machinery at the Pochep plant with chemical weapons disposal work to begin after that, Kapashin said.

The international economic crisis resulted in roughly \$300 million in 2009 funding cuts to chemical disarmament efforts in Russia, the officer said.

Kapashin said work on the Kizner chemical disarmament plant in Urdmurtia would have been finished by now were it not for the funding shortfall.

"But we have enough money for next year and money has even been transferred to us for 2012," he said. "This will allow us to complete construction work at Kizner and on the second start-up complex at Pochep. We will also finish construction of the second phase (of a facility) in Shchuchye (Kurgan Region) and attempt to complete the creation of the most complex buildings at the Leonidovka facility in Penza Region and at the Maradykovsky facility in Kirov Region" (ITAR-Tass, Sept. 27).

The Pochep installation contains 7,498 metric tons of nerve agents, nearly 19 percent of the world's-largest stockpile of chemical warfare materials that once stood at 40,000 metric tons, United Press International reported.

Russia has eliminated more than 48 percent of the chemical agent arsenal and expects to complete work in 2015, three years past the deadline set by the Chemical Weapons Convention (see *GSN*, June 30). It allocated \$645 million for the effort this year, according to UPI (United Press International, Sept. 22).

http://www.globalsecuritynewswire.org/gsn/nw 20100928 9864.php

(Return to Articles and Documents List)

#### Seattle Times Chavez: Venezuela Studying Nuclear Energy Program

By The Associated Press Monday, September 27, 2010

CARACAS, Venezuela — Venezuelan President Hugo Chavez said Monday that his government is carrying out initial studies into starting a nuclear energy program.

Chavez brought up the issue during a news conference, saying the South American country needs an atomic energy program.

"We're taking on the project of nuclear energy for peaceful purposes, and they aren't going to stop us," Chavez said. "We need it and we're carrying out the first studies." Chavez is a close ally of Iran and has defended the Iranian nuclear program, saying he is sure Iran is not making atomic weapons in spite of U.S. and European suspicions.

He has mentioned plans for an atomic energy program previously. It remains unclear how quickly he intends to pursue the program.

Chavez brought up the issue while referring to the case of a physicist and his wife in New Mexico who are accused by U.S. authorities of offering to help develop a nuclear weapon in contacts with an undercover U.S. agent posing as a representative of the Venezuelan government.

"They detained some scientist professors, I think Argentines, and then I was ready to respond when I saw that a government spokesman came out there saying that no, no, there is no evidence," Chavez said.

The U.S. government is not alleging Venezuela or anyone working for it sought U.S. secrets in the case.

Chavez brought up the case as an example of some of the claims his leftist government has to contend with.

"They invent so many things," he said. "The fact they say there is no evidence doesn't mean they aren't going to find it tomorrow, or fabricate it ... that Venezuela is making an atomic bomb."

He called that idea preposterous, saying: "Who in Venezuela could take on a project of that type? Who? We aren't going to take it on."

http://seattletimes.nwsource.com/html/nationworld/2013013146\_apltvenezuelanuclearenergy.html?syndication=rss

(Return to Articles and Documents List)

#### Xinhua News – China Danger of Nuclear Weapons to Disappear only if They are Totally Banned: Cuban FM

By Xinhua News Agency September 28, 2010

UNITED NATIONS, September 27 (Xinhua) -- Cuban Foreign Minister Bruno Rodriguez Parrilla said here on Monday that the danger posed by nuclear weapons will not disappear until they are totally banned to be used.

"The serious danger posed by nuclear weapons will only disappear if they are totally eliminated and if there is a complete ban on their use," Parrilla said at the annual general debate of the 65th session of the UN General Assembly, which entered its fourth day here Monday.

"The manipulation surrounding non-proliferation based on double standards and political interests, the existence of a club of the privileged and the countries of the South denial of the right to a peaceful use of nuclear energy should cease," Cuban Foreign Minister Bruno Rodriguez Parrilla said

"Given the high lethal power and the continued development of conventional weapons, we will have to struggle also for complete and general disarmament," he said.

In order to move forward in these endeavors, the Non-Aligned Movement (NAM) submitted a proposal that has gone "unheeded," which contains a program of action that includes the creation of nuclear free zones.

"It is urgent to establish such zones in the Middle East, where Israel is the only country that opposes such initiative," said Parrilla.

"Achieving that will truly contribute to dissipate the threats of a conflict and nuclear proliferation and achieve a lasting peace in that region," he added.

http://news.xinhuanet.com/english2010/world/2010-09/28/c\_13532584.htm

(Return to Articles and Documents List)

London Daily Telegraph – U.K.

# Aliens Have Deactivated British and US Nuclear Missiles, Say US Military Pilots

Aliens have landed, infiltrated British nuclear missile sites and deactivated the weapons, according to US military pilots.

By Andy Bloxham

#### 27 September 2010

The beings have repeated their efforts in the US and have been active since 1948, the men said, and accused the respective governments of trying to keep the information secret.

The unlikely claims were compiled by six former US airmen and another member of the military who interviewed or researched the evidence of 120 ex-military personnel.

The information they have collected suggests that aliens could have landed on Earth as recently as seven years ago.

The men's aim is to press the two governments to recognise the long-standing extra-terrestrial visits as fact.

They are to be presented on Monday 27 September at a meeting in Washington.

One of the men, Capt Robert Salas, said: "The US Air Force is lying about the national security implications of unidentified aerial objects at nuclear bases and we can prove it."

He said said he witnessed such an event first-hand on March 16, 1967, at Malmstrom Air Force Base in Montana which housed Minuteman nuclear missiles.

Capt Salas continued: "I was on duty when an object came over and hovered directly over the site.

"The missiles shut down - 10 Minuteman missiles. And the same thing happened at another site a week later. There's a strong interest in our missiles by these objects, wherever they come from. I personally think they're not from planet Earth."

Others claim to have seen similar activity in the UK.

Col Charles Halt said he saw a UFO at the former military base RAF Bentwaters, near Ipswich, 30 years ago, during which he saw beams of light fired into the base then heard on the military radio that aliens had landed inside the nuclear storage area.

He said: "I believe that the security services of both the United States and the United Kingdom have attempted both then and now - to subvert the significance of what occurred at RAF Bentwaters by the use of well-practised methods of disinformation."

The site was then the base of the US 81st Tactical Fighter Wing.

Capt Bruce Fenstermacher, a former US Air Force officer, also claims he saw a cigar-shaped UFO hovering above a nuclear base in Wyoming in 1976.

http://www.telegraph.co.uk/news/newstopics/howaboutthat/ufo/8026971/Aliens-have-deactivated-British-and-US-nuclear-missiles-say-US-military-pilots.html

(Return to Articles and Documents List)

New York Times September 27, 2010 Zeal for Dream Drove Scientist in Secrets Case

By WILLIAM J. BROAD

Many people who know P. Leonardo Mascheroni describe him as a maverick and a technology zealot. Now, the Justice Department will try to prove that he is dangerous, too — a man willing to sell atomic secrets in exchange for a chance to realize his dream.

Dr. Mascheroni, 75, is a nuclear scientist who has spent the 22 years since he left the Los Alamos National Laboratory trying to sell Congress, the scientific community, journalists — anyone who would listen, really, including this reporter — on his plan to build a giant laser for the achievement of nuclear fusion.

His plan earned respect and high-level endorsements, but the government chose a different path. Rather than give up, Dr. Mascheroni redoubled his campaign, sending out lengthy technical documents from his home in New Mexico to try to coax Washington to finance his laser.

"You'd get these fat FedEx packages," said Steven Aftergood, a security expert at the Federation of American Scientists.

As he was snubbed by Congress and federal experts, Dr. Mascheroni, a naturalized citizen who was born in Argentina, grew increasingly frustrated and bitter. He became known in Washington for veiled threats to take his atomic expertise abroad unless the government backed his laser plan. He seemed to think that he could bully the federal establishment into big spending, according to people on the receiving end of his missives.

"He came at you like a force of nature," recalled Matthew G. McKinzie, a former Los Alamos researcher who is now at the Natural Resources Defense Council, a private group in Washington. "He and his coterie of followers at Los Alamos believed his approach could provide a source of limitless, clean energy for humanity."

A 22-count indictment against Dr. Mascheroni, made public on Sept. 17, quotes his wife, Marjorie, as saying that he would "make bombs" overseas "if they don't listen to him in Washington." She has been charged as a co-conspirator, and both of them have pleaded not guilty.

Dr. Mascheroni's world began to crumble last October, when federal agents raided his home in Los Alamos, hauling away his computers and hundreds of paper files. When reached by phone, he said at the time that he was suspected of treason.

Clearly rattled, Dr. Mascheroni declared his innocence. He defended his actions, including his interactions with the man who had represented himself as a Venezuelan contact but who Dr. Mascheroni by then suspected — correctly — was actually an informant for the Federal Bureau of Investigation.

"It was a way of getting attention in Congress" and trying to prompt hearings on Capitol Hill about the nation's fusion program, he said of his decision to talk with the would-be foreigner.

"I told them, 'If you don't have hearings, I'm going to leave,' " he said. "And they didn't have hearings."

Dr. Mascheroni conceded that the man had promised him a lot of money, but insisted that he wanted it simply "to make a big case. It was political leverage. That's the bottom line."

"If I were a real spy, I would have left the country a long time ago," he added.

Federal prosecutors have charged Dr. Mascheroni with trying to sell nuclear secrets to Venezuela as part of a complicated scheme to have that country bring his laser to life. According to the indictment, he negotiated the deal in 2008 and 2009 with the undercover F.B.I. agent, who paid him \$20,000 out of an overall promise of nearly \$800,000.

The laser that Dr. Mascheroni wants to build could provide — in theory — an unusual but potentially limitless source of energy for the world, and in particular for the United States, his adopted home.

In the October phone interview, Dr. Mascheroni drew parallels between his own idealism and that of J. Robert Oppenheimer, who led the Los Alamos team that built the world's first atom bomb but later tried to slow the arms race.

"I have to put my science at a higher level," he said, emphasizing that his responsibilities to the scientific truth extended beyond duties to care for his family. He suggested that he even might face a death sentence.

The couple have a son, who is a firefighter in Idaho, and a daughter, who is a lawyer in California. Mrs. Mascheroni lost her job at Los Alamos the day of the federal raid, and neither she nor her husband has agreed to an interview since they were indicted.

Dr. Mascheroni, who is known as Leo, was trained at a physicist at the University of California, Berkeley. At Los Alamos, he was exposed to information on nuclear arms and worked on teams that sought to make energy advances.

In 1988, after nine years at the weapons lab, he left and embarked on a personal crusade to achieve what had eluded thousands of other scientists: a controlled version of nuclear fusion, the violent process that powers the Sun, the stars and hydrogen bombs. His proposal — the use of a big laser — was considered among the most futuristic of the alternatives on the table.

Skeptical of federal plans for laser fusion, he promoted his own as cheaper, faster and far more likely to succeed. Its wavelength was much longer, and its blasts of concentrated light far easier to achieve. He dismissed resistance to his plan as an overzealous commitment to the status quo.

"It's a cultural thing," he told The New York Times in 1988. "They don't want to admit something different."

He won guarded approval. A Los Alamos panel led by Gregory H. Canavan, a respected senior scientist, found Dr. Mascheroni's idea worth exploring. The main attraction, the panel said, was that his laser system might prove to be as little as one-twentieth the cost of its rivals.

"It's very important for our country to have this option for the future," Dr. Mascheroni said in a 1989 interview. "The other approaches are not going to work."

After leaving the weapons lab, Dr. Mascheroni toiled on his pet project without pay, relying on his wife to provide most of the family's income. Her jobs at Los Alamos included technical writing and editing.

Dr. Mascheroni, meanwhile, persistently lobbied the Capitol for his laser plan. In 2003, for example, he wrote to Senator John McCain, Republican of Arizona, who had just become chairman of the Senate Commerce Committee. The letter was 319 pages long, and Dr. Mascheroni sent copies to relevant experts outside of Congress.

Despite his rebel status and impolitic ways, he was often taken seriously. He won the backing of a former Central Intelligence Agency director, R. James Woolsey, who helped him promote his vision. Ultimately, however, the nation chose a more elaborate laser path.

That did not stop Dr. Mascheroni. The indictment against him describes clandestine meetings, tape-recorded conversations, confidential places for the transfer of documents and a pattern of false statements from Dr. Mascheroni and his wife to federal authorities.

As part of the plot, prosecutors say, Dr. Mascheroni would build a laser for producing energy — as he had always wanted to — and would throw in a plan for Venezuela that "could deliver a nuclear bomb in 10 years."

Lawyers in the case say that a trial may not get started until the middle of next year. If found guilty, Dr. Mascheroni and his wife could face up to life in prison.

As Dr. Mascheroni sits in a halfway house in Albuquerque awaiting trial, the rival laser that he criticized for so many years now looms over a small California town. The size of a football stadium, the \$3.5 billion site is known as the National Ignition Facility. It is the world's most powerful assemblage of lasers, their concentrated light like a tiny star. The 192 lasers fire in unison on flecks of hydrogen fuel smaller than a match head.

Skeptics dismiss the facility as a colossal delusion that is squandering precious resources — \$140 million a year — at a time of economic hardship. But scientists at the Lawrence Livermore National Laboratory, its home, insist that the laser is making great progress toward its goal.

Hugh E. DeWitt, a California physicist and veteran of the Livermore lab, suggested that Dr. Mascheroni, in approaching a man he thought was a Venezuelan agent, was probably overselling his bomb skills in an last-ditch attempt to bring his laser to life.

"He was never particularly interested in nuclear weapons," recalled Dr. DeWitt, who attended Dr. Mascheroni's wedding. "His interest was in laser fusion."

But Dr. Mascheroni's fixation on the giant laser transformed him into "a gullible nut," one who readily stumbled into the F.B.I.'s trap, Dr. DeWitt said, adding: "He has dug his own grave."

http://www.nytimes.com/2010/09/28/science/28scientist.html?\_r=1

(Return to Articles and Documents List)

National Public Radio September 28, 2010

#### **It's The Bomb! Vintage Explosion Photos**

By Shannon Thomas Perich

You thought summer was hot! Try an A-bomb explosion. Recently, the Science section of *The New York Times* online featured images of various atomic bomb explosions. Among those images are photographs captured by Harold Edgerton's rapatronic camera in the early 1950s.

Edgerton is best known for his stop-motion photographs of bullets through apples, milk drops that create liquid white crowns, and other images revealing what the human eye cannot perceive. The U.S. government employed him and his company during World War II to track enemy movements by using nighttime photography.

After the war, EG & G, Inc. (Edgerton, Germeshausen and Grier Inc.) developed the rapatronic camera for the Atomic Energy Commission to record — specifically, in one take only — the beginning of nuclear explosions. Capturing the earliest moments of atomic explosions was exceptionally challenging, in part because of the extraordinary light intensity (an atomic explosion is about *a hundred times as bright as the sun*) and the ultra-short duration of the phenomena.

The dangers of shockwaves and radiation required the camera to be placed 7 miles from the detonation site on a tower some 75 feet in the air. Exposure time was *one-hundred-millionth of a second*. The exposure time was so small that no conventional mechanical shutter could be used. A magnetic field was created around two polarized lenses that were rotated, permitting light to pass through an optical system.

In the photographs of the explosions, look for tiny Joshua trees at the bottom of a few photographs to garner a sense of the enormity of the explosion that melted the sand and vaporized steel towers. Energy from the explosion can be

seen traveling down the detonation tower's guy-wires. Though the photographs were intended as scientific documentation, these images of extreme power and raw energy have the capacity to evoke horror and dread.

Shannon Thomas Perich is an associate curator of the Photographic History Collection at Smithsonian's National Museum of American History. Her regular contributions to The Picture Show are pulled from the Smithsonian's archives.

http://www.npr.org/blogs/pictureshow/2010/09/28/130183266/abomb

(Return to Articles and Documents List)

Wall Street Journal OPINION September 27, 2010

# The Next Nuclear Arms Race

China and India are raising the stakes by modernizing and deploying more forces along their shared border. By TIM SULLIVAN AND MICHAEL MAZZA

India and Pakistan are the two countries most likely to engage in nuclear war, or so goes the common wisdom. Yet if recent events are any indication, the world's most vigorous nuclear competition may well erupt between Asia's two giants: India and China.

Both countries already house significant and growing arsenals. China is estimated to have approximately 450 warheads; India, roughly 100. Though intensifying as of late, Sino-Indian nuclear competition has a long history: India's pursuit of a weapons program in the 1960s was triggered in part by China's initial nuclear tests, and the two have eyed one another's arsenals with mounting concern ever since. The competition intensified in 2007, when China began to upgrade missile facilities near Tibet, placing targets in northern India within range of its forces.

Yet the stakes have been raised yet again in recent months. Indian defense minister A.K. Antony announced last month that the military will soon incorporate into its arsenal a new intermediate-range missile, the Agni-III, which is capable of reaching all of China's major cities. Delhi is also reportedly considering redeploying survivable, medium-range Agni-IIs to its northeastern border. And just last month, India shifted a squadron of Su-30MKI fighters to a base just 150 kilometers from the disputed Sino-Indian border. An Indian Air Force official told Defense News these nuclear-armed planes could operate deep within China with midflight refueling.

For its part, China continues to enhance the quality, quantity and delivery systems of its nuclear forces. The Pentagon reported last month that the People's Liberation Army has replaced older, vulnerable ballistic missiles deployed in Western China with modern, survivable ones; this transition has taken place over the last four years. China's Hainan Island naval base houses new, nuclear-powered ballistic-missile submarines and affords those boats easy access to the Indian Ocean. China's military is also developing a new, longer range submarine-launched ballistic missile which will allow its subs to strike targets throughout India from the secure confines of the South China Sea.

No single event has stoked this rise in tensions. China, already concerned about India's growing strength and its desire to play a greater role in Asia, is even less enthused about the burgeoning strategic partnership between Delhi and Washington. While Beijing has learned to live with American forces on its eastern periphery, the possibility of an intimate U.S.-India military relationship has generated fears of encirclement. The ongoing Sino-Indian border dispute, as well as India's position astride China's key maritime shipping lanes, has made the prospect of a Washington-Delhi axis appear particularly troubling.

India likewise feels encircled by China's so-called "string of pearls"—a series of Chinese-built, ostensibly commercial port facilities in the Bay of Bengal, Indian Ocean and Arabian Sea. Beijing's military ties to Pakistan, interference in the Kashmir dispute and references to Arunachal Pradesh, an Indian state, as "Southern Tibet" have done little to reassure New Delhi of Chinese intentions. The rapid growth of China's conventional military might in recent years—between 2000 and 2009, China's military spending more than tripled—and the lack of clarity as to its intentions, has spurred India to pursue its own military modernization.

These shifts in India's and China's nuclear force postures thus represent only the latest and most serious efforts to constrain and convey dissatisfaction with the other's perceived regional ambitions. But they are more troubling than conventional redeployments.

First, these developments suggest that neither country has confidence in the other's "no first use" policy. India has good reason for concern: The number of missions attributed to China's deterrent—responding to nuclear attacks,

deterring conventional attacks against nuclear assets, providing Beijing freedom from nuclear coercion and otherwise "reinforcing China's great power status"—were enough to make the authors of the Pentagon's annual report on China's military power last year question the country's commitment to its "no first use" policy. India, for its part, relies on its nuclear forces to offset gaps and imbalances between its conventional military capabilities and those of China.

Second, there is a point at which efforts to enhance deterrence can foster an arms race. Any attempt on the part of China to increase its own defenses necessarily weakens, or is perceived to weaken, the security of India, thus spurring further defense build-ups; the opposite is true as well. Shifts in nuclear force posture can be particularly disruptive, and have been known to precipitate crises. Upon the discovery of Soviet efforts to deploy missiles to Cuba in 1962, for example, the U.S. responded militarily with a naval "quarantine" of the island, bringing Washington and Moscow as close as they have ever come to a nuclear war.

Finally, the redeployments of India's and China's nuclear forces suggest that there is deep-seated and growing discord between the two Asian giants. This is troubling news for a region whose future peace and prosperity depends heavily on continued comity between Delhi and Beijing. It is only a matter of time before the China-India military competition begins to affect neighboring states. China's nuclear force modernization, for instance, stands to threaten not only India, but also Korea, Japan and other U.S. partners in Asia. A dramatic defense buildup in India, meanwhile, will no doubt leave Pakistan feeling less secure.

Tensions are unlikely to ease any time soon. The two countries appear much closer to the brink of an all-out arms race than they do to any resolution of their differences. While each profits from the other's economic growth, it is that very growth—which finances military modernization and which is so dependent on potentially vulnerable overseas trade—that creates the conditions for heightened insecurity.

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(Return to Articles and Documents List)

Daily NK – South Korea ANALYSIS

# Power Struggles and Regency Unlikely in North Korea

By Kim Yong Hun September 28, 2010

While the succession to power of Kim Jong Eun is expected to occur during the Chosun Workers' Party Delegates' Conference, suggestions have appeared in the international media that a power struggle is happening within North Korea regarding the best way to reform.

A British daily, the Daily Telegraph cited a source on September 25th as saying that a fierce power struggle is currently taking place between Jang Sung Taek and a pro-reform group. Also, it added that Jang Sung Taek appears to be serving the role of Kim Jong Eun's regent until Kim Jong Eun gets more experience under his belt.

Newsweek, a U.S. weekly publication, also asserted on September 26th that Vice Chairman Jang Sung Taek is playing the role of regent behind Kim Jong Eun.

However, experts on North Korea point out that a power struggle is almost impossible under the totalitarian dictatorship of Kim Jong II, and the possibility of conflict between parties with differing opinions under double and triple surveillance is very low.

Particularly, experts criticize that a group with enough power to wage a power struggle within North Korea cannot be organized; they would be purged immediately. Therefore, rumors of a full-blooded power struggle are remote and show a lack of understanding about North Korea's reality.

However, experts also say that disagreement between officers regarding the level and style of reform and opening is feasible, but that such a process would take place against the rhetorical backdrop of maintaining the Kim Jong II system. So, such an event would be less significant.

Cho Myung Cheol, the head of the International Cooperation for Korean Unification team at Korea Institute for International Economic Policy, told The Daily NK today, "Under the sole dictatorship system of Kim Jong II, a power struggle with democratic characteristics is impossible. Establishing a group which does not agree with Kim Jong II's opinion is not allowed in North Korea."

He added, "There could be an argument between officials on the matter of whether reform and opening will create stresses in the system at the level of loyalty toward Kim Jong II; however, that would just be a controversy for the Kim Jong II system."

Oh Kyeong Sup, a researcher with the Sejong Institute, commented, "Kim Jong Il has complete control over high ranking officials, the Party, military, and politicians and has the power elite watched double and triple. Reunions and private gatherings are prohibited. For reformists and hardliners to confront each other is impossible in this situation."

Regarding the assertion that Jang Sung Taek is set to become the regent in the Kim Jong Eun succession system, experts agree that Jang Sung Taek may well be playing a key role in the successor establishment process but that the possibility of his being the number one is low.

Cho anticipated, "28-year old Kim Jong Eun will not want to share power with Jang Sung Taek. He will just assign more roles to Jang Sung Taek from the perspective of using his loyalty and ability during the succession establishment process."

Cheong Seong Chang, director of the Inter-Korean Relations studies program at the Sejong Institute, stated, "Jang Sung Taek did not seize the military, and therefore the possibility of regency is low. Kim Jong Eun has the power to issue instructions and Jang Sung Taek will play the role of supervising and administering those instructions."

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(Return to Articles and Documents List)