A Sourcebook on Allegations of Cooperation between Myanmar (Burma) and North Korea on Nuclear Projects

Version of 2014-09-22

Building 1 site, 2004-04-13

Building 1, 2005-10-22

Building 2, Imagery date unknown

Building 2, 2009-11-25

Additional material for this sourcebook would be welcome. Please send it to thomsona@flash.net
The items in the main section of this sourcebook are arranged in chronological order; supplementary material in Appendix A is arranged in inverse chronological order.

Because of the alleged North Korean connection, the sourcebook on the Israeli strike against an alleged nuclear reactor in Syria, http://www.fas.org/man/eprint/syria.pdf, should be consulted.
1. (S/NF) An expatriate businessman XXXXXXXXXXXX recently volunteered to an Embassy Officer that he had heard rumors that a nuclear reactor was being built near Minbu, in central Magway Division on the Irawaddy River. The businessman added that he personally had seen a “massive” barge containing large-sized rebar being unloaded on a trip to the area. After asking local residents about the rebar’s purpose, he was told that similar size barge shipments were arriving almost weekly and that the rebar was to be used in the construction of unnamed/unidentified factories. In the opinion of the businessman, the quantities involved as well as the diameter of the rebar suggested a project larger than “factories.” Along these lines, the businessman noted that there was a new airport near Minbu with a landing strip that, based on its length and thickness, seemed excessive, adding that “you could land the space shuttle on it.”

2. (S/NF) Comment: Rumors of construction of a nuclear facility in/near Magway Division date back to 2002 and generally refer to alleged Government of Burma (GOB) and Russian cooperation on a nuclear research reactor project. Similar rumors, sans the “Russia” angle, have been circulating with greater frequency within diplomatic and expatriate circles since a November 2003 Far Eastern Economic Review (FEER) article which described signs of growing military ties between North Korea and Burma. While we have no direct evidence of this alleged cooperation, rumors of ongoing construction of a nuclear reactor are surprisingly consistent and observations of activity such as that described above appear to be increasing, as are alleged sightings of North Korean “technicians” inside Burma.

Martinez
Friday, 27 August 2004, 08:08
SECRET SECTION 01 OF 02 RANGOON 001100
SIPDIS
EO 12958 DECL: 08/26/2014
TAGS PARM, PINR, PREL, KNNP, BM, KN
SUBJECT: ALLEGED NORTH KOREAN INVOLVEMENT IN MISSILE ASSEMBLY AND UNDERGROUND FACILITY CONSTRUCTION IN BURMA
Classified By: CDA, A.I. RON MCMULLEN FOR REASON 1.5 (A/C).

1. (S) SUMMARY: North Korean workers are reportedly assembling “SAM missiles” and constructing an underground facility at a Burmese military site in Magway Division, about 315 miles NNW of Rangoon, according to XXXXXXXXXXXX. This unsolicited account should not be taken as authoritative, but it tracks with other information garnered and reported via XXXXXXXXXXXX. End Summary.

2. (S) XXXXXXXXXXXX

3. (S) XXXXXXXXXXXX some 300 North Koreans are working at a secret construction site west of Mimbu, Magway Division, in the foothills of the Arakan Yoma mountains. (Comment: the number of North Koreans supposedly working at this site strikes us as improbably high. End comment.) The XXXXXXXXXXXX claims he has personally seen some of them, although he also reported they are forbidden from leaving the construction site and that he and other “outsiders” are prohibited from entering. The XXXXXXXXXXXX was confident that XXXXXXXXXXXX had the ability to distinguish North Koreans from others, such as Chinese, who might be working in the area. The exact coordinates of the camouflaged site are not known, but it is reportedly in the vicinity of 20,00 N, 94,25 E. [See Appendix C of this sourcebook.]

4. (S) The North Koreans are said to be assembling “SAM missiles” of unknown origin. XXXXXXXXXXXX the North Koreans, aided by Burmese workers, are constructing a concrete-reinforced underground facility that is “500 feet from the top of the cave to the top of the hill above.” He added that the North Koreans are “blowing concrete” into the excavated underground facility.

5. (S) The XXXXXXXXXXXX is supposedly engaged in constructing buildings for 20 Burmese army battalions that will be posted near the site. Of these, two battalions are to be infantry; the other 18 will be “artillery,” according to this account.

6. (S) XXXXXXXXXXXX

7. (S) COMMENT: The XXXXXXXXXXXX second-hand account of North Korean involvement with missile assembly and military construction in Magway Division generally tracks with other information Embassy Rangoon and others have reported in various channels. Again, the number 300 is much higher than our best estimates of North Koreans in Burma, and exactly how the XXXXXXXXXXXX allegedly came to see some of them personally remains unclear. Many details provided XXXXXXXXXXXX match those provided by other, seemingly unrelated, sources.

8. (S) COMMENT CONTINUED: We cannot, and readers should not, consider this report alone to be definitive proof or evidence of sizable North Korean military involvement with the Burmese regime. The XXXXXXXXXXXX description made no reference at all to nuclear weapons or technology, or to surface-to-surface missiles, ballistic or otherwise. XXXXXXXXXXXX This account is perhaps best considered alongside other information of various origins indicating the Burmese and North Koreans are up to something; something of a covert military or military-industrial nature. Exactly what, and on what scale, remains to be determined. Post will continue to monitor these developments and report as warranted.

McMullen
Is Myanmar going nuclear with North Korea's help?
By DENIS D. GRAY
The Associated Press
Tuesday, July 21, 2009 12:43 PM

BANGKOK -- The recent aborted voyage of a North Korean ship, photographs of massive tunnels and a secret meeting have raised concern that one of the world's poorest nations may be aspiring to join the nuclear club - with help from its friends in Pyongyang.

No one expects military-run Myanmar, also known as Burma, to obtain an atomic bomb anytime soon, but experts are closely watching the Southeast Asian nation.

"There's suspicion that something is going on, and increasingly that cooperation with North Korea may have a nuclear undercurrent. We are very much looking into it," says David Albright, president of the Institute for Science and International Security, a Washington, D.C. think tank.

The issue is expected to be discussed, at least on the sidelines, at this week's ASEAN Regional Forum, a major security conference hosted by Thailand. U.S. Secretary of State Hillary Rodham Clinton, along with representatives from North Korea and Myanmar, will attend.

In the Thai capital Bangkok on Tuesday, Clinton did not refer explicitly to a nuclear connection but highlighted the military relationship between Myanmar and North Korea.

"We know there are also growing concerns about military cooperation between North Korea and Burma which we take very seriously," Clinton said.

Later, a senior administration official said Washington was concerned about the possibility that North Korea could be cooperating with Myanmar on a nuclear weapons program, but he added U.S. intelligence information on this was incomplete. The official spoke on condition of anonymity because of the sensitive nature of the matter.

Another administration official, speaking under the same ground rules, said one reason for concern on the nuclear front is the evidence that North Korea helped Syria clandestinely build a nuclear reactor, which was destroyed in an airstrike in 2007 by the Israeli air force.

International unease escalated recently when a North Korean freighter, the Kang Nam I, headed toward Myanmar with undisclosed cargo. Shadowed by the U.S. Navy, it reversed course and returned home earlier this month.

It is still not clear what was aboard. U.S. and South Korean officials suspected artillery and other non-nuclear arms, but one South Korean intelligence expert, citing satellite imagery, says the ship's mission appeared to be related to a Myanmar nuclear program and also carried Scud-type missiles.

The expert, speaking on condition of anonymity because of the sensitivity of the issue, said North Korea is helping Myanmar set up uranium and nuclear-related facilities, echoing similar reports that have long circulated in Myanmar's exile community and media.

Meanwhile, Japanese police arrested a North Korean and two Japanese nationals last month for allegedly trying to export a magnetic measuring device to Myanmar that could be used to develop missiles.

And a recent report from Washington-based Radio Free Asia and Myanmar exile media said senior Myanmar military officers made a secret visit late last year to North Korea, where an agreement was concluded for greatly expanding cooperation to modernize Myanmar's military, including the construction of underground installations. The military pact report has yet to be confirmed.
In June, photographs, video and reports showed as many as 800 tunnels, some of them vast, dug in Myanmar with North Korean assistance under an operation code-named "Tortoise Shells." The photos were reportedly taken between 2003 and 2006.

Thailand-based author Bertil Lintner is convinced of the authenticity of the photos, which he was the first to obtain. However, the purpose of the tunnel networks, many near the remote capital of Naypyitaw, remains unknown.

"There is no doubt that the Burmese generals would like to have a bomb so that they could challenge the Americans and the rest of the world," says Lintner, who has written books on both Myanmar and North Korea. "But they must be decades away from acquiring anything that would even remotely resemble an atomic bomb."

North Korea's nuclear program has given it leverage and allowed the impoverished country to receive international aid in return for steps toward dismantling its nuclear capabilities. Myanmar, also a poor nation, may also be seeking such a negotiating tool.

David Mathieson of the New York-based Human Rights Watch, who monitors developments in Myanmar, says while there's no firm evidence the generals are pursuing a nuclear weapons capability, "a swirl of circumstantial trends indicates something in the nuclear field is going on that definitely warrants closer scrutiny by the international community."

Albright says some of the suspicion stems from North Korea's nuclear cooperation with Syria, which now possesses a reactor. Syria had first approached the Russians, just as Myanmar did earlier, but both countries were rejected, so the Syrians turned to Pyongyang - a step Myanmar may also be taking.

Since the early 2000s, dissidents and defectors from Myanmar have talked of a "nuclear battalion," an atomic "Ayelar Project" working out of a disguised flour mill and two Pakistani scientists who fled to Myanmar following the Sept. 11 attacks providing assistance. They gave no detailed evidence.

Now a spokesman for the self-styled Myanmar government-in-exile, the National Coalition Government of the Union of Burma, says according to people working with the dissident movement inside the Myanmar army, there are two heavily guarded buildings under construction "to hold nuclear reactors" in central Myanmar.

Villagers in the area have been displaced, said spokesman Zinn Lin.

Andrew Selth of Australia's Griffith University, who has monitored Myanmar's possible nuclear moves for a decade, says none of these reports has been substantiated and calls the issue an "information black hole."

He also says Western governments are cautious in their assessments, remembering the intelligence blunders regarding suspected weapons of mass destruction in Saddam Hussein's Iraq.

A U.S. State Department official, speaking on customary rules of anonymity, said he would not comment on intelligence-related matters such as nuclear proliferation.

In 2007, Russia signed an agreement to establish a nuclear studies center in Myanmar, build a 10-megawatt nuclear research reactor for peaceful purposes, and train several hundred technicians in its operation.

However, Russia's atomic agency Rosatom told The Associated Press recently that "there has been no movement whatsoever on this agreement with Burma ever since."

Even earlier, before the military seized power, Myanmar sought to develop nuclear energy, sending physicists to the United States and Britain for studies in the 1950s. The military government established a Department of Atomic Energy in 2001 under U Thaung, a known proponent of nuclear technology who heads the Ministry of Science and Technology.
Myanmar is a party to the Nuclear Nonproliferation Treaty, and under a safeguard agreement with the International Atomic Energy Agency, it is obligated to let the U.N. watchdog know at least six months in advance of operating a nuclear facility, agency spokesman Ayhan Evrensel said.

Evrensel said the Vienna-based IAEA has asked Myanmar to sign a so-called "additional protocol" that would allow agency experts to carry out unannounced inspections and lead to a broader flow of information about Myanmar's nuclear activities.

The regime has remained silent on whatever its plans may be. A Myanmar government spokesman did not respond to an e-mail asking about Russian and North Korean involvement in nuclear development.

In a rare comment from inside Myanmar, Chan Tun, former ambassador to North Korea turned democracy activist, told the Thailand-based Irrawaddy magazine, "To put it plainly: Burma wants to get the technology to develop a nuclear bomb.

"However, I have to say that it is childish of the Burmese generals to dream about acquiring nuclear technology since they can't even provide regular electricity in Burma," the Myanmar exile publication quoted him last month as saying.

Some experts think the generals may be bluffing.

"I would think that it's quite possible Yangon would like to scare other countries or may feel that talking about developing nuclear technologies will give them more bargaining clout," said Cristina-Astrid Hansell at the California-based James Martin Center for Nonproliferation Studies. "This is not unreasonable, given the payoffs North Korea has gotten for its nuclear program."

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Associated Press writers Kwang-tae Kim in Seoul, Pauline Jelinek and Matt Lee in Washington, Caroline Stauffer in Bangkok, George Jahn and William Kole in Vienna and Nataliya Vasilyeva in Moscow contributed to this report.
Hillary Clinton today expressed concern over military links between North Korea and Burma, after evidence emerged that the Burmese junta may be trying to acquire nuclear technology from Pyongyang.

Experts said there is no proof of a Burmese nuclear programme but pointed to worrying signs. The Burmese military has been doing business with a North Korean company that specialises in nuclear technology. The junta has also made suspicious purchases of sophisticated dual-use equipment. A North Korean ship suspected of heading to Burma with an unknown cargo turned back after being shadowed by American warships earlier this month. Finally, reports have emerged of a secret visit by senior Burmese officials to North Korea late last year.

"We know that there are also growing concerns about military co-operation between North Korea and Burma, which we take very seriously," Clinton, the US secretary of state, told journalists in Bangkok. "It would be destabilising for the region. It would pose a direct threat to Burma's neighbours."

David Albright, the head of the Washington-based Institute for Science and International Security, which specialises in monitoring nuclear proliferation, said: "There's no hard evidence, just suspicions right now. We're watching it."

Albright said one of the principal causes of suspicion was the link between the Burmese military and a North Korean firm, Namchongang Trading Corp (NCG), which is under UN and US sanctions for its role in trading in nuclear technology. NCG set up an office in Damascus, and western officials have alleged the company channelled equipment and materials towards the construction of a nuclear reactor in Syria which was destroyed by an Israeli air raid in September 2007. NCG's chief executive is Yun Ho-jin, a nuclear expert who was once North Korea's delegate to the International Atomic Energy Agency.

Albright said Burma had also attempted to acquire suspicious technology. "This is hi-tech equipment, capable of making very high precision components. It has other end uses, but it's hard to see why else Burma would be buying it," he said.

Last month, Japan arrested one North Korean and two Japanese businessmen for attempting to export a magnetometer (a device for measuring magnetic fields) to Burma. Magnetometers can be used in archaeology and geophysics, but they are also a critical component in missile guidance systems.

Two years ago, the Burmese junta made an overt attempt to begin a nuclear programme. It signed an agreement with Russian atomic agency Rosatom for the construction of a 10-megawatt research reactor, but the deal stalled, possibly as a result of diplomatic pressure on Moscow. US officials fear Burma may have decided to pursue a covert route through Pyongyang.

Earlier this month, a North Korean freighter, the Kang Nam I, which had made previous trips to Burma, was shadowed at sea by the US navy until it reversed course. It remains unclear what its freight was, and US officials were reluctant to board it, fearing it might be an empty decoy designed to embarrass Washington.

The Associated Press today quoted a South Korean intelligence expert as saying satellite images suggested the Kang Nam I was carrying equipment for a nuclear programme and Scud-type missiles.

Recent reports in Burmese exile media have spoken of a military pact late last year between the two countries, including the construction of underground installations, but the existence of such a pact has yet to be publicly confirmed.
QUESTION: What do you think is the biggest threat to peace in the region at this moment?

SECRETARY CLINTON: Well, the threat that I always worry about first and foremost is the proliferation of nuclear weapons and weapons of mass destruction. Obviously, we’re very concerned about North Korea and recent reports about perhaps their dealings with what we call Burma, and the –

QUESTION: You refuse to call it Myanmar.

SECRETARY CLINTON: We do. We do. We would like to see a democracy make decisions about the future of a country, and that hasn’t yet come to pass. So we are very strongly in favor of putting pressure on that government, trying to make it clear that the future doesn’t lie with those who would try to oppress their people and limit the opportunities to a very small ruling group. That is not in the interest of the people of Burma or people anywhere.

So we worry about the transfer of nuclear technology and other dangerous weapons.

QUESTION: From North Korea, you mean.

SECRETARY CLINTON: We do, from North Korea, yes.

QUESTION: To Burma?

SECRETARY CLINTON: To Burma, yes.

QUESTION: So you’re concerned about the tie – the closer ties between North Korea and Burma?

SECRETARY CLINTON: Yes, yes.

QUESTION: How serious are you focusing on that?

SECRETARY CLINTON: Well, we’re going to explore that in Phuket, in talking to all the other foreign ministers who are there. We want to try to focus attention by countries that have a direct relationship or share a border, as Thailand does, so that there can be a united front against that ever happening. I’m not saying it is happening, but we want to be prepared to try to stand against it.
QUESTION: North Korea is the main focus of your talks this time. How serious is North Korea’s threat to United States?

SECRETARY CLINTON: It’s not a serious threat to the United States. At this time, its weapons capacity and technological progress is not a threat to us. But it is a threat to other of our allies if it continues, and it is a threat to further destabilization in East Asia, and particularly Northeast Asia.

We’ll be talking about many important issues here at the ASEAN meeting. I’m very proud that we will – I will be signing, on behalf of my country, the Treaty of Amnesty and Cooperation. Of course, the work of ASEAN is just beginning to explore other areas. There was the first ever joint exercise in the Philippines to try to do better on disaster assistance.

So we have a full agenda. But of course, the behavior and provocative actions of the North Koreans raise issues, because, for example, if North Korea pursues this nuclear program, other countries are going to feel, out of their own self-defense, a necessity that they must also. That produces a chain reaction. It’s one of the reasons why in another part of the world we’re very concerned about Iran. If Iran acquires a nuclear weapon then other countries in the Middle East are going to think, well, they have to have one too. And pretty soon, you have so many nuclear weapons, and not just in the hands of states, but also non-state actors. And North Korea has been a notorious proliferator of nuclear technology. We know that.

So we want to continue to put the pressure. And I must say, I’m very gratified that we’ve had a united front in Asia coming together in the United Nations, passing a Security Council resolution with real teeth to try to go after all of the different institutions and individuals that are part of the proliferation network within North Korea and that supports it outside.

So I think we’re making progress in creating a very strong response to North Korea.
Burma’s nuclear secrets

August 1, 2009

Is Burma preparing to build a nuclear arsenal? Two years of interviews with defectors have persuaded two Australian investigators, Desmond Ball and Phil Thornton, there is more to the claim than global scepticism suggests.

A FEW years back, a paranoid military regime packed up Burma’s capital and shifted it north a few hundred kilometres. Rangoon, it seems, simply wasn’t safe enough any more. The generals’ new home was to be known as the Abode of Kings; more commonly as Naypyidaw. A city rose from the tropical plains with shiny buildings and slick roadways – a strange priority in a country suffering chronic poverty and a health system at the bottom of world rankings.

Now, a fresh question hangs over the goals of Burmese rulers. Could this junta’s priorities be so skewed as to embark upon construction of a nuclear arsenal? And might it have reached out for help to another paranoid regime, North Korea?

Desmond Ball and Phil Thornton are convinced this is a genuine threat. They have spent two years on the Burmese border, interviewing defectors who claim to know the regime’s plans.

The testimony of two Burmese men in particular has caused Ball and Thornton to confront their own deep scepticism about the claims.

Their might seem an unlikely collaboration – Ball, a professor of strategic studies at ANU with a deep interest in nuclear technology, and Thornton, a freelance journalist based in Thailand. But their report on the two defectors’ claims adds to mounting – albeit sketchy – evidence that Burma may be chasing the bomb.

There have been hints Burma aspires to a nuclear program. What is uncertain is the extent and intent. Rumours have swirled around refugee circles outside Burma about secret military installations, tunnels dug into the mountains to hide nuclear facilities, the establishment of a “nuclear battalion” in the army and work done by foreign scientists. But one defector – known as Moe Jo to protect his identity – gives the claims added weight. He warned of the regime having a handful of bombs ready by 2020.

Moe Jo escaped Burmese army service and fled to Thailand. Ball and Thornton met with him in dingy rooms and safehouses. “His hands shook and he worried about what price his family would have to pay for his actions,” they write. “Before rejecting his country’s nuclear plans, Moe Jo was an officer with 10 years’ exemplary army service. A former graduate of Burma’s prestigious Defence Services Academy, he specialised in computer science.”

Moe Joe said the regime sent him to Moscow in 2003 to study engineering. He was in a second batch of trainees to be sent to Russia as part of effort to eventually train 1000 personnel to run Burma’s nuclear program.

Before leaving, he was told he would be assigned to a special nuclear battalion.

“You don’t need 1000 people in the fuel cycle or to run a nuclear reactor,” said Moe Joe. “It’s obvious there is much more going on.”
We knew Russia agreed in principle to sell Burma a small nuclear plant – a light water reactor – and to train about 300 Burmese scientists to run the site. The stated reason is for research purposes, specifically to produce medical isotopes.

In dispute is whether the Russian reactor would be large enough to be diverted to produce enriched uranium or plutonium for a nuclear weapon. Usually a heavy water reactor is needed to achieve this, but perhaps not with North Korean help. Ball and Thornton write: “As North Korea has shown with their [light water] reactor, it may be slow and more complex, but it is capable.”

Moe Jo alleged a second, secret reactor of about the same size as the Russian plant had been built at complex called Naung Laing. He said that the army planned a plutonium reprocessing system there and that Russian experts were on site to show how it was done. Part of the Burmese army’s nuclear battalion was stationed in a local village to work on a weapon. He said that an operations area was buried in the nearby Setkhaya Mountains, a set-up including engineers, artillery and communications to act as command and control centre for the nuclear weapons program.

“In the event that the testimonies of the defectors are proved, the alleged ‘secret’ reactor could be capable of being operational and producing a bomb a year, every year, after 2014,” write Ball and Thornton.

Claims of this type have stirred serious official concerns. The US Secretary of State, Hillary Clinton, journeyed to Thailand for a regional security meeting last month and directly raised the issue. “We know that there are also growing concerns about military co-operation between North Korea and Burma, which we take very seriously,” she said.

The unease escalated when a North Korean freighter, the Kang Nam I, steamed towards Burma last month carrying undisclosed cargo. A South Korean intelligence expert, quoted anonymously, claimed satellite imagery showed the ship was part of clandestine nuclear transfer and also carried long-range missiles. Shadowed by the US Navy, the vessel eventually turned around and returned home.

Japanese police also recently caught a North Korean and two Japanese nationals allegedly trying to export a magnetic measuring device to Burma that could be used to develop missiles.

But it was what Clinton said during a television interview in Bangkok the next day that raised most eyebrows. For the first time, a senior White House official openly speculated on the prospect of nuclear co-operation between Burma and North Korea.

Clinton: “We worry about the transfer of nuclear technology and other dangerous weapons.”

Question: “From North Korea, you mean?”

Clinton: “We do, from North Korea, yes.”

Q: “To Burma?”

Clinton: “To Burma, yes.”

Q: “So you’re concerned about the tie – the closer ties between North Korea and Burma?”

Clinton: “Yes, yes.”
But there are many doubts over how far Burma’s military regime has advanced its nuclear aspiration. Ball and Thornton say a regional security officer told them the Naung Laing operation was a decoy to distract people from the true site of the reactor.

“Before it was a heavily guarded ‘no go-zone’. Now you can drive right up to the buildings. Villagers are allowed to grow crops again.” The security officer said the Russian-supplied reactor was located in the Myaing area.

To add to the confusion, there are doubts over the existence of the Russian reactor. “I’m sure the Russian reactor has not been built already,” says Mark Fitzpatrick, a senior fellow at the International Institute for Strategic Studies and a Burma watcher over most of the past decade. He will soon have a book published on nuclear plans across South-East Asia.

He sees “nothing alarming” in the prospective Russian deal – Russia is a signatory to the nuclear non-proliferation treaty which governs the export of civilian nuclear technology – and doubts Moscow would hide a reactor. Nor has the International Atomic Energy Agency raised questions about Burma’s nuclear ambitions.

But Fitzpatrick is sceptical about the stated reasons offered by Burma’s rulers to explain their interest in nuclear technology, whether for research or power generation.

“The most logical explanation for this interest in research is a prestige factor,” he says. Burma wants to demonstrate a level of technology expertise and perhaps also deliberately raise doubts over its nuclear capability. Having the bomb, after all, is a power military deterrent against foreign attack.”

Of the defectors’ claims, he says: “I’ve heard these reports and I pay attention to them, and they shouldn’t be dismissed out of hand.” North Korea is willing to sell anything to anyone, he says, and points to recent evidence that Pyongyang secretly sold a nuclear reactor to Syria.

Ball and Thornton add to the mystery by reporting the testimony of another defector they call Tin Min. He claimed to have worked as a bookkeeper for a tycoon closely linked to the Burmese military regime, whose company had supposedly organised nuclear contracts with Russia and North Korea. The deal with North Korea on nuclear co-operation supposedly dates back nine years, covering construction and maintenance of nuclear facilities.

“Tin Min spoke excellent English and presented his reports to us with a touch of self-importance,” write Ball and Thornton. “Tin Min had good reason to know what it was like to feel important; before defecting, he had scaled the heights of his country’s high society and had reaped the benefits of that position.”

Tin Min dismissed the regime’s rationale for requiring nuclear technology. “They say it’s to produce medical isotopes for health purposes in hospitals. How many hospitals in Burma have nuclear science? Burma can barely get electricity up and running. It’s a nonsense.”

He claimed his boss once told him of the regime’s nuclear dreams. “They’re aware they cannot compete with Thailand with conventional weapons. They want to play power like North Korea. They hope to combine the nuclear and air defence missiles.” He said the nuclear program was known as UF6 Project and was run by the senior general Maung Aye. Ball and Thornton conclude the nuclear co-operation is based on a trade of locally refined uranium from Burma to North Korea in return for technological expertise.

Tin Min claimed his boss controlled much of the shipping in and out of Burma and could organise the transport of equipment to nuclear sites from the port at Rangoon. “He arranges for army trucks to pick up the containers of equipment from the North Korean boats that arrive in Rangoon and transport them at night by highway to the river or direct to the sites.”
He also claimed to have paid a construction company in about 2004 to build a tunnel in a mountain at Naung Laing wide enough for two large trucks to pass each other.

But his story cannot be further tested. Tin Min died late last year.

There are obvious dangers of relying on the testimony of “defectors”. The people giving evidence may have ulterior motives, as Ball and Thornton recognise, and the regime is not shy at disseminating false information.

Andrew Selth from Griffith University, a former senior intelligence analyst and an experienced Burma watcher, remains suspicious. “Understandably,” he recently wrote for the Lowy Institute, “foreign officials looking at these matters are being very cautious. No one wants a repetition of the mistakes which preceded the last Iraq war, either in underestimating a country’s capabilities, or by giving too much credibility to a few untested intelligence sources.

“There has always been a lot of smoke surrounding Burma’s nuclear ambitions. Over the past year or so, the amount of smoke has increased, but still no one seems to know whether or not it hides a real fire.”

Concern is not going away, however. The most recent edition of US Foreign Policy magazine compared claims surrounding Burma’s nuclear program to 1950s leaks about Israel having a secret nuclear site in the desert. Similar doubts held for claims about India and Pakistan. All three countries have since tested the bomb.

Ball and Thornton are convinced the world must face up to some uncomfortable possibilities. “According to all the milestones identified by the defectors, Burma’s nuclear program is on schedule. It is feasible and achievable. Unfortunately, it is not as bizarre or ridiculous as many people would like to think. Burma’s regional neighbours need to watch carefully.”

Additional reporting by Daniel Flitton
Burma's nuclear secrets
Sydney Morning Herald
01 Aug 2009

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Revealed: Burma’s nuclear bombshell

Hamish McDonald Asia-Pacific Editor
August 1, 2009 - 12:15AM

BURMA’s isolated military junta is building a secret nuclear reactor and plutonium extraction facilities with North Korean help, with the aim of acquiring its first nuclear bomb in five years, according to evidence from key defectors revealed in an exclusive Herald report today.

The secret complex, much of it in caves tunneled into a mountain at Naung Laing in northern Burma, runs parallel to a civilian reactor being built at another site by Russia that both the Russians and Burmese say will be put under international safeguards.

Two defectors were extensively interviewed separately over the past two years in Thailand by the Australian National University strategic expert Desmond Ball and a Thai-based Irish-Australian journalist, Phil Thornton, who has followed Burma for years.

One was an officer with a secret nuclear battalion in the Burmese army who was sent to Moscow for two years’ training; the other was a former executive of the leading regime business partner, Htoo Trading, who handled nuclear contracts with Russia and North Korea.
Their detailed testimony brings into sharp focus the hints emerging recently from other defector accounts and sightings of North Korean delegations that the Burmese junta, under growing pressure to democratise, is seeking a deterrent to any foreign “regime change”.

Their story will ring alarm bells across Asia. “The evidence is preliminary and needs to be verified, but this is something that would completely change the regional security status quo,” said Thitin Pongsudhirak, the head of Thailand’s Institute of Security and International Studies, yesterday.

“It would move Myanmar [Burma] from not just being a pariah state, but a rogue state – that is, one that jeopardises the security and wellbeing of its immediate neighbours.”

Washington is increasingly concerned that Burma is the main nuclear proliferation threat from North Korea, after Israel destroyed in September 2007 a reactor the North Koreans were apparently building in Syria.

Professor Ball said another Moscow-trained Burmese army defector was picked up by US intelligence agencies early last year. Some weeks later, Burma protested to Thailand about overflights by unmanned surveillance drones that were apparently launched across Thai territory by US agencies. These would have yielded low-level photographs and air samples, in addition to satellite imagery.

At a meeting with Asian leaders, including some from Burma and North Korea, in Thailand last week, the US Secretary of State, Hillary Clinton, and other foreign ministers won promises from the Burmese they would adhere to United Nations sanctions on North Korean nuclear and missile exports.

China and other Asian nations had recently helped persuade Rangoon to turn back a North Korean freighter, the Nam Kam 1, that was being shadowed by US warships on its way to Burma with an unknown cargo. A month ago, Japanese police arrested a North Korean and two Japanese for allegedly trying to export illegally to Burma a magnetic measuring device that could be used to develop missiles.

Professor Ball, who has studied the Burmese military for several years, said the evidence from two well-placed sources demanded closer study: “All we can say is these two guys never met up with each other, never knew of each other’s existence, and yet they both tell the same story basically.

“If it was just the Russian reactor, under full International Atomic Energy Agency supervision, which the Russians keep insisting is their policy and the Burmese may have agreed to with that reactor, then the likelihood of them being able to do something with it in terms of producing fissionable fuel and designing a bomb would be zero.

“I’d be more worried about a meltdown like Chernobyl … It’s the North Korean element which adds the danger to it.”

North Korea’s interest could be a combination of securing a supply of uranium from Burma’s proven reserves, earning hard currency, and keeping its plutonium extraction skills alive in case it agrees to fully dismantle its own Yongbyon nuclear complex. “Do they want another source of fissionable plutonium 239 to supplement what they get from their Yongbyon reactor?” Professor Ball said.
NAUNG-LAING.—A circle in the Maymyo township and subdivision of Mandalay district, including two villages, Naung-laing and Ywa-thit.

There are some fine pine trees, imported from the pine-forest on Sawbwa taung on the crest of the opposite range of hills, near the pagoda precincts.

The village is eight miles east by a little north of Maymyo and is separated from Sawbwa taung by the valley of the Nalin chaung. The villagers are Shan with a sprinkling of Danus.
8 miles ENE of Myamyo. The two villages are presumably Nuang Laing and Ywa-thit. A new large building is on the eastern side of the image.
Detail showing new large building, access road and possible power line
Closer view of new large building in imagery of 2005-10-22. Using the Google Earth ruler, the building seems to be in plan a square about 80 meters on a side.
Burma is building a secret nuclear reactor and plutonium facilities with the help of North Korea and aims to have a nuclear bomb in five years, according to a two-year investigative report.

The investigation, conducted by regional security expert Dr Desmond Ball and Mae Sot-based journalist Phil Thornton, is based on radio intercepts and interviews with two defectors close to the clandestine operation codenamed "The UF6" project.

One of the defectors, identified as "Moe Jo", was a former military officer sent to Russia as part of Burma's "nuclear battalion" programme to train 1,000 people. The other, "Tin Min", worked as a bookkeeper for a businessman close to the junta.

According to the report, published in full in today's edition of Spectrum, Burma has 10 uranium mines, two uranium refineries and two nuclear reactor sites.
The Myaing civil reactor site is located in Magwe in the lower central part of the country. The second "secret", or military, site was built inside the smallest of three mountains by North Koreans at Naung Laing and houses a 10-megawatt light-water research reactor. Tin Min said Burma's rationale for having a nuclear programme was nonsense.

"They say it's to produce medical isotopes for health purposes in hospitals. How many hospitals in Burma have nuclear science? Burma can barely get electricity up and running. It's nonsense," he said.

US Secretary of State Hillary Clinton recently voiced concerns North Korea was transferring weapons and nuclear technology to Burma.

Uranium deposits from the mines have been sent to Russia and Iran for evaluation and both processing plants are close to the Irrawaddy River, one near the Tha Pa Na Military Science and Technology Development Centre and the other near the Thabike Kyin township.

Access to the river allows the regime to use barges to transport the heavy ore rather than rely on inadequate roads.

Tin Min claims that a businessman, Tay Za, a close associate of Burmese leader General Than Shwe, told him the regime had nuclear dreams and was serious about the programme. "They're aware they cannot compete with Thailand with conventional weapons. They want to play nuclear poker like North Korea. They hope to combine nuclear and air defence missiles," he said.

Thitinan Pongsudhirak, the head of the Institute of Security and International Studies, said while the evidence was preliminary and needed to be justified it is "something that would completely change the regional security status quo".

"It would move Burma from not just being a pariah state, but a rogue state, one that jeopardises the security and wellbeing of its neighbours," he said.

While Burma has key parts of the nuclear fuel cycle in place, it needs a plutonium processing plant to produce enough weapons-grade Plutonium-239 to produce a bomb.

Moe Jo said Russian experts were already "teaching plutonium reprocessing" at the site.
Burma's nuclear bomb alive and ticking
Published: 2/08/2009 at 12:00 AM

Talk to regional security authorities or their embassy staff about Burma having a nuclear programme and it usually generates two responses - total disbelief or horror. Strategic defence studies expert Professor Desmond Ball and journalist Phil Thornton spent two years investigating rumours, speculation, misinformation and the small truths that all help to conceal the Burmese military regime's nuclear ambitions from serious examination.

Our own starting position was one of deep skepticism, but the testimonies from two defectors forced us to consider the uncomfortable possibilities of a Burma with nuclear capability.

In June 2007, we began separate interviews with two Burmese defectors in what would become the first in a series of clandestine meetings in dingy rooms and safe-houses that would continue until early July 2009. We first interviewed Moe Jo*, a Burmese army defector, on the Thai-Burma border. Moe Jo had recently crossed the border into Thailand and was still in the initial stage of fright brought on by his flight from the army and loss of community support. His hands shook and he worried about what price his family would have to pay for his actions.

Before rejecting his country's nuclear plans Moe Jo was an officer with 10 years of exemplary army service and a former graduate of Burma's prestigious Defence Services Academy.

In 2003 Moe Jo was selected by the regime to spend two years studying at Moscow's Engineering Physics Institute in the Faculty of Experimental and Theoretical Physics. He says he was sent to Moscow to study engineering and did not know he would end up in the nuclear project. He was in the second batch of 75 trainees sent to Russia as part of Burma's nuclear programme to train 1,000.

We also held a series of interviews in 2008 with a civilian, Tin Min*, who before defecting, worked as a bookkeeper for Tay Za, a business tycoon and close associate of senior Burmese army generals, including General Than Swe. Tay Za's company, Htoo Trading Company, organised the nuclear contracts with Russia and North Korea. Tin Min spoke excellent English and presented his reports to us with a touch of self-importance. Tin Min had good reason to know what it was like to feel important. Before defecting, he had scaled the heights of his country's high-society and had reaped the benefits of that position. Tin Min insisted Burma's rationale for having a nuclear programme was nonsense.

"They [regime] say it's to produce medical isotopes for health purposes in hospitals. How many hospitals in Burma have nuclear science? Burma can barely get electricity up and running. It's a nonsense."

Considering the World Health Organisation ranks Burma's health system as the second worst out of 192 countries and the regime spends more than 40% of its budget on the military and less than 3% on health and education, it is unlikely Burma is developing and investing in a nuclear reactor for health reasons.
NUCLEAR REACTIONS

What the defectors told us, and access to transcripts of Burmese Army communications, helped us straighten out much of the confusion and speculation on the public record. It has been widely reported that a nuclear reactor has been built at eight or nine different sites in Burma.

The defectors' detailed and adamant testimonies, coupled with the radio transcripts, contradict this - they say Burma has no more than two reactors, one located at Myaing and the other at Naung Laing.

But not everyone in the region agrees about the extent or the purpose of the Naung Laing operation. A senior regional security officer with extensive up-to-date inside information about the area disagrees.

"Before it was a heavily guarded 'no-go zone'. Now you can drive right up to the buildings. Villagers are allowed to grow crops again. Even though the signs say; 'Military Science and Technology Ministry' and there are soldiers, the level of security has been drastically reduced. I think it's now a decoy site, to distract people away from the Myaing area."

The Myaing reactor is located in Magwe division and is known as the "Nyaungone Project". It is part of the MOU signed with Russia's atomic energy agency Rosatom (the Russian Federal Atomic Energy Agency) in May 2007 to build a 10-megawatt light-water reactor using 20 % enriched Uranium-235, nuclear waste treatment and burial facilities, an activation analysis laboratory, medical isotope production laboratory and to train 300 specialists for the nuclear centre.

At the time, a US State Department deputy spokesman, Tom Casey, was reported as saying that the US "wouldn't like to see a project like this move forward" until Burma has an adequate nuclear regulatory and security infrastructure in place.

The second "secret" or military reactor site that the defectors provided a large amount of detailed information about is built inside the smallest of three mountains by North Koreans at Naung Laing. Both the defectors agreed the underground mountain facilities house another 10-megawatt light-water research reactor.

Cooperation between North Korea and the Burmese regime on nuclear matters began in earnest in September 2000 when a MOU was signed by Burma's Lieutenant General Thein Hla and North Korea's Major General Kim Chan Su. Four more detailed contracts were signed in 2001-02.

The "official" agreements between the two countries covered nuclear related activities at two sites and involved North Korea's assistance to help with installing, maintaining, training and supplying equipment at the uranium refining and enrichment plant at Thabike Kyin. At the second reactor site at Naung Laing the North Koreans agreed to help with the construction of an underground facility and a nuclear reactor. Tin Min's old boss Tay Za paid a construction company in 2004-05 to build a tunnel wide enough for two 10-wheel trucks to pass each other. Moe Jo said the regime had taken steps to defend their reactors by installing air defence radar, one to be "deployed" at the airbase at Pyin Oo Lwin and the other at the reactor site.

In recent months as North Korea struts its nuclear capacity it has forged closer ties with the Burmese regime by selling arms and missile technology to them.
The defectors told us that the Burmese army has been building since 2002 a nuclear research and engineering centre in the vicinity of Naung Laing village, south east of Pyin Oo Lwin in Mandalay Division. Pyin Oo Lwin is also home to the Defence Services Academy, Moe Jo's old alumni. Moe Jo said he was told that after he returned from Moscow he would be assigned to a special nuclear battalion at one of the nuclear sites in Burma.

"After I came back from Russia I was assigned to develop a system to fire 155 howitzers. But first I had to do three months training, run by [North] Korean technicians, on using artillery missile systems."

BURMA'S URANIUM DEPOSITS

Uranium mining takes place at at least 10 locations in Burma. Burma's Ministry of Energy has identified five areas with confirmed deposits of low-grade uranium. Ore samples have reportedly been sent to Russia and Iran for evaluation. At Taundwingyi, next to one of the uranium sites identified by the Ministry of Energy, the North Koreans have built a large underground bunker. In addition to these sites, high resolution imagery published by GoogleEarth in 2007 shows what many believe is a uranium mine and related refinery at Myit Nge Chaung, about 23km from Mandalay.

In April 2009, it was reported that reactor-grade uranium for Burma's nuclear programme was being mined near Lashio in northern Shan State.

According to radio transcripts, Russian uranium prospectors made three exploration missions to Tenasserim Division in southern Burma in 2004-05. The Russian explorers' movements were tracked as they flew from Rangoon on July 8, 2004, to Myeik and their subsequent prospecting around the area of Theindaw from July 18 to October 5, 2004.

REFINING AND PROCESSING PLANTS

Burma has at least two uranium refining and processing plants in operation for crushing, grinding, cleaning and milling (refining) the uranium ore into "yellowcake" (U308), a concentrate of uranium oxides in powder form. Yellow cake is later converted to uranium hexafluoride (UF6) for enrichment to provide fuel for reactors or fissile material for nuclear weapons. Tin Min claims that businessman Tay Za told him the regime has nuclear dreams, and they are serious.

"They're aware they cannot compete with Thailand with conventional weapons. They [the regime] want to play nuclear poker like North Korea. They hope to combine the nuclear and air defence missiles. Tay Za told me the nuclear programme is known as the 'UF6 Project' and is the responsibility of General Maung Aye."

Both processing plants are close to the Irrawaddy River, one is seven kilometres from the river and is near the Tha Pa Na Military Science and Technology Development Center and the other plant is near the Thabike Kyin township.

Being close to the river allows the regime to use barges to transport the heavy ore rather than rely on the inadequate roads.

Tin Min says as Tay Za controls much of the shipping in and out of Burma it is easy for him to organise getting the equipment to the nuclear sites from Rangoon.
"He arranges for army trucks to pick up the containers of equipment from the North Korean boats that arrive in Rangoon and transport them at night by highway to the river or direct to the sites."

Moe Jo estimated that there were more than five North Koreans working at the Thabike Kyin plant. He said Russian cleaning machines were used to "wash" the ore and that Burma has provided yellowcake to both North Korea and Iran.

GoogleEarth imagery published in 2007 shows a facility with what looks like four giant "thickening tanks" in which the uranium bearing solution is separated from the ground ore before being converted to yellowcake.

HAS BURMA THE CAPACITY TO PRODUCE A NUCLEAR WEAPON?

The essence of Moe Jo and Tin Win's testimonies is that Burma has key parts of the nuclear fuel cycle already in place. **Moe Jo told us that the army "planned" to build a plutonium reprocessing plant at Naung Laing**, and that Russian experts were already "teaching plutonium reprocessing" at the site.

A "nuclear battalion" was established by the regime in 2000 to work on the "weaponisation" aspects of the nuclear programme. **It is based near the village of Taungdaw**, just west of the Naung Laing complex. The operations component is in another underground complex in the nearby Setkhya Mountains. It includes engineering, artillery and communications on operational aspects of weapons design, delivery capability and a command and control centre.

Moe Jo says by 2012, Burma will have 1,000 people trained, access to uranium, is refining yellowcake and has two light water reactors.

"You don't need 1,000 people in the fuel cycle or to run a nuclear reactor. It's obvious there is much more going on."

These reactors are not as efficient in producing fissionable plutonium as heavy-water reactors, but as North Korea has shown with their reactor, it may be slow and more complex, but it is capable. For Burma to be able to extract plutonium from the spent fuel rods and to separate plutonium-239 from plutonium-240 it needs to construct a plutonium reprocessing plant so it can produce seven to eight kilograms of weapon-grade Plutonium-239 a year, enough for one bomb a year.

In the event that the testimonies of the defectors are proved, the alleged "secret" reactor could be capable of being operational and producing one bomb a year, every year, after 2014.

A Burmese nuclear weapons programme would require external support, going beyond rudimentary Russian training and North Korean assistance with the current uranium refining capabilities and reactor operations. But North Korea taking on a greater role in helping Burma get its bomb cannot be rule out. They would be more than interested in providing limited amounts of fissionable plutonium in return for yellowcake.

It would be in North Korea's military interest, and in line with their nuclear posturing, to construct a secret plutonium reprocessing plant in Burma, complementing the secret reactor, in exchange for access to the fissionable product. The defectors talked explicitly of the regime meeting their nuclear programme objectives by having a "handful of bombs ready by 2020".
According to all the milestones identified by the defectors, Burma's nuclear programme is on schedule.

It is feasible and achievable. Unfortunately, it is not as bizarre or ridiculous as many people would like to think. Burma's regional neighbours need to watch carefully, especially for signs of a reprocessing plant. If the regime starts building that then the only explanation is that they plan to build a bomb.

A Burma with nuclear capability is a worry, if the regime's response to last year's Cyclone Nargis is a benchmark.

Their response was to treat it as a national security threat, by banning journalists, ignoring offers of outside help for weeks, while leaving their people to die in their thousands. The region cannot expect any more from the regime if there is any sort of nuclear accident.

* Not their real names

* Professor Desmond Ball works at the Australian National University's Defence Studies Centre. He is the author of more than 40 books on nuclear strategy, Australian defence, and security in the Asia-Pacific. He has served as the co-chair of the Council for Security Cooperation in the Asia-Pacific.

* Phil Thornton is the author of Restless Souls: rebels, refugee, medics misfits on the Thai Burma border.
Big Odd Myanmar Box
posted Monday August 3, 2009 under by jeffrey

Over the past couple of days, I’ve been emailing with a couple of colleagues about this very odd building in Myanmar (nee Burma). Staring at that big box was the main reason I tweeted that “This Burma-NORK nuclear link has me worried.”

Allen Thomson, Bruno Tertrais and some folks at VERTIC all found it too — working from the recent story in the Sydney Morning Herald and an older story originally published by an opposition group. We’d been quietly discussing what the thing might be.

Now, no one wanted to go declare the vaguely suspicious looking building to be something suspicious in particular — but since ISIS has found it too (the damn thing is visible from 4,000 feet) and published a nice analysis, I don’t suppose there is any harm in crowdsourcing it.

ISIS describes what I am calling the BOB (let’s leave the M out for now) as an “anomalous building” — noting that they cannot “ascribe [it] with obvious nuclear industrial characteristics.”

It’s big and tall. It is also nestled into the mountains and revetted. There seems to be a power transmission line running in (or out of it). It is several clicks from an obvious water source.

Still, someone has been very interested in it — in addition to this 2005 image, Digital Globe has happy snaps from 2008 and 2009 centered right on it.

What do you all think?
Selected Comments

1. The obvious thing is to match up its dimensions with the Syrian Box-on-the Euphrates.
   — Cheryl Rofer · Aug 3, 04:43 PM ·

2. It is much, much bigger — 80 meters on each side.
   — Jeffrey Lewis · Aug 3, 04:56 PM ·

3. I tried my hand at finding “Naung Laing” earlier today, and although I wasn’t entirely successful it seems that the box is a ways off from there.

   The framing of the building, with the auxiliary structures at a respectable distance and the white sort of courtyard has the feeling of a palace to me, although that certainly is a big ol’ powerline leading up to the site, not sure if that’s over the top for feeding a non-industrial building.
   — Anders Widebrant · Aug 3, 05:09 PM ·

4. You can follow the power lines all the way through the city and to the air strip and the iron mill to the south west of the building.
   — gilbert · Aug 3, 05:11 PM ·

5. 82 meters by 84 meters. Almost square but not quite, although the difference could be distortion in the imagery.
   — Sean O'Connor · Aug 3, 05:18 PM ·

6. Sydney Morning Herald sez defectors said it was made with Nork help, and that there is a Russian reactor nearby?

   Da?

   Where is the Russian civil reactor?
   — FSB · Aug 3, 06:01 PM ·
7.

Nimby applies in Mynamar as much as it does on Long Island. State Peace and Development Council chief General Than Shwe has a mansion in between Anikasan Airport and Pyin Oo Lwin, not more than a 6 klicks from the “box”. Built by Htoo Trading’s construction arm, aka what Tay Za does with his spare time when not running guns. It’s highly unlikely the honourable Than Shwe would wish to live in the proximate neighborhood of a nuclear reactor.

As to the purpose of the “box”, Mynamar is undergoing a major government sponsored construction boom. Since they’ve moved their capital from Rangoon to Nay pyi daw, they’ve been investing heavily in the Mandalay – Pyin Oo Lwin corridor; industrial infrastructure, technical schools, silicon villages, take your pick.

— Azr@el · Aug 3, 06:15 PM ·

8.

An olympic swimming complex?

— MK · Aug 3, 06:34 PM ·

9.

Does anyone have coordinates for the alleged underground facility mentioned in the Ball and Thorton article?

— Gump · Aug 3, 08:21 PM ·

10.

@FSB: According to the Grey AP article, “In 2007, Russia signed an agreement to […] build a 10-megawatt nuclear research reactor for peaceful purposes. […] However, Russia’s atomic agency Rosatom told The Associated Press recently that ‘there has been no movement whatsoever on this agreement with Burma ever since’.” There are no existing research reactors in Myanmar per the IAEA's RRDB. As for a clandestine reactor, Mark Fitzpatrick expresses doubts in the SMH article, and I cannot imagine the Russians desperate enough to risk such exposure or the Burmese able to pay enough to have it done quickly & quietly.

@MK: Though it may seem like a cavity (with some nice swimming lanes, no less), it is actually a blue roof.

Certainly to me the most interesting characteristic is the revetment mentioned in the post; seems like a significant investment in this particular structure.1 It obfuscates the shape, side detail and dimensions of the building and also provides a fortifying element. Judging from the shadows, the roof cannot be all that taller than the top of the ramp, leaving most of any building encased or beneath ground. Also, the ramp doesn’t seem designed to handle much traffic (ie, multiple trucks/loads to or from the facility), but that could be my misjudging the scale.

1. Maybe not in a command economy, but it is still quite peculiar.

— Derek · Aug 3, 10:58 PM ·
11.

I don’t see any sort of serious perimeter security – there are a couple of guard towers, but it’s in a jungle, and in hills, and they don’t have an outer fence perimeter or even a serious guard post on the road.

I would guess something related to the Myanmar government, given the two towers and the berm and ditches, and something explosive (otherwise, usually you fence, rather than berming). Power in quantity would tend to indicate more than just an ammo dump, but it could be any number of sensitive things involving explosives without being nuclear in nature.

The holes in the mountains near Naypyidaw are more interesting, if harder to divine.

— George William Herbert · Aug 3, 11:26 PM ·

12.

The annoying aspect of the Australian “breaking” story—as usual I guess, to my jaundiced mind—is that it is a mixture of fact and fiction. If you read it carefully what will likely turn out to be the fictional bits pop out at you. I know where I want to be in about 24 hours but I’m not hot-dogging into print this morning.

— mark hibbs · Aug 4, 07:08 AM ·

13.

Where are Yale and Hairs when we need them?

— Jeffrey Lewis · Aug 4, 07:27 AM ·

14.

It is pretty clear that the BOB is in the right place.

The defectors told us that the Burmese army has been building since 2002 a nuclear research and engineering centre in the vicinity of Naung Laing village, south east of Pyin Oo Lwin in Mandalay Division.

The facility is southeast of Pyin Oo Lwin in Mandalay Division.

Moreover, although there are many villages called Naung Laing in Burma (Myanmar), according to a 1901 Gazetteer of Burma there is a village of that name "eight miles east by a little north" of Maymyo (Pyin Oo Lwin).

That would be consistent with the terminus of the road that leads out of the facility. Which, in fact, is how I found it. I went east out of Pyin Oo Lwin and saw the shiny, new road and followed into the mountains.

— Jeffrey Lewis · Aug 4, 08:28 AM ·

15.

Hairs is still around, but hasn’t posted for months in deference to trying to keep his employer happy in these straitened times!

My first impression is: great swimming pool – does it have a diving board too!?

Second impression: Hmmm…? I’m intrigued by the wide turning circles of the access road’s bends; all
except for the tight 90 deg bend at the top right-hand corner, where one would have thought it would be most
critical. All of which seems to suggest that whatever goes in / comes out is not over-long.

Apart from that, I’ll have to prepare three pipes and look at it properly at the weekend.

— Hairs · Aug 4, 09:17 AM ·

16.

Actually, maybe that last comment of mine should be cancelled. I hadn’t appreciated just how enormous the
site is: I’ve just measured up on Google earth and the road is about 12m wide at the turn – so you could almost
take an articulated lorry in sideways!

— Hairs · Aug 4, 09:49 AM ·

17.

George William Herbert, there’s a major military checkpoint on the blacktop highway before you get to the
big temple 22°3’36.96“N 96°32’6.03“E

— Gump · Aug 4, 11:58 AM ·

18.

Are the newer Digital Globe images online somewhere?
Do they show more perimeter security in place now?

— George William Herbert · Aug 4, 01:37 PM ·

19.

JL: Doh! I should have looked harder at the actual report before hitting Google Maps.

— Anders Widebrant · Aug 4, 03:45 PM ·

20.

19°52’31“N 96°20’45“E

— gandalf · Aug 4, 03:49 PM ·

21.

Looking at the road leading into the box, I can’t come up with a better reason for the J shape than that there’s
a significant height difference between the box and the road and that whatever is supposed to travel between the
two is heavy enough that only a small inclination is allowable. Sort of like those models of how the Egyptians
supposedly dragged rocks up their pyramids.

— Anders Widebrant · Aug 4, 04:10 PM ·
22.

Gump – that’s a checkpoint of some type, across their National Highway 3 (I assume, from the map markings). But it’s not a useful perimeter. It’s 4 km from that to where the road to this site turns off. Inside that perimeter are an easy dozen hamlets. I don’t see a symmetrical checkpoint north on National Highway 3 (could be missing it, but I looked a ways north).

Perimeter security for a nuclear facility would be in closer and far tighter than that. A checkpoint on a major highway, that far away, obviously could help pay attention to comings and goings. But NH 3 goes up to China and is apparently a major trade route. I am not seeing any major security installations between where the access road meets NH 3 (at around N 22 03’ 52” E 96 34’ 15”) and the large facility. There are several side roads to villages which eventually meet/cross the main access road. There appear to be terraced farm areas in the next valley over to the north, and even just a bit away on the south side, just across the access road.

If that was a nuclear facility and I was in charge of security, there’d be a big security checkpoint around the curve of the road at N 22 3’ 8” E 96 36’ 57”, and a dual perimeter road and fence, one at the bottom of the surrounding hills at the far side, and one at the top of the hills, with clear areas 10m or more on each side, plus light posts and observation cameras (and probably, guard towers).

You see security like that at known nuclear facilities in many nations. It’s routine.

— George William Herbert · Aug 4, 06:14 PM ·

23.

I thought to determine a position you needed three points. How many photos do you need to compare to guess at the height of specific things in the posted photo?

— bradley laing · Aug 4, 10:59 PM ·

24.

A big cooling device?
A huge swimming pool would be a good disguise for it.

— Fernando · Aug 5, 05:39 AM ·

25.

Evidence to date: Big important facility with roof on it that uses/produces electricity and has a road.

Enough with the pool jokes(?) - it is clearly a roof and not water.

— FSB · Aug 5, 08:17 AM ·

26.

I challenge anyone to find me an official open source document or reference identifying where the Russian reactor is to be located in Myanmar. C’mon guys, emigre and dissident assertions don’t cut it, and in this case (Myaing and Kyaukse) they don’t even agree, they are hundreds of miles apart.

— mark hibbs · Aug 5, 10:35 AM ·
27.

Security is not a definitive indicator of anything and one should not draw too many conclusions based on its presence or absence.

At this point that building could be anything. It’s certainly big enough to house a reactor, but reactors need cooling and I don’t see any evidence of a cooling system.

It is an intriguing and strange building – hopefully additional imagery and other information will be forthcoming that will tell us more.

— Andy · Aug 5, 10:57 AM ·

28.

> You see security like that at known nuclear facilities in many nations. It’s routine.

The BOE is a counterexample, if you accept the Standard Story that it housed a reactor.

— Allen Thomson · Aug 5, 01:24 PM ·

29.

Well, that is a puzzle.

(By the way, I can’t say enough good things about using the 3D Connexion “Space Navigator” 3D pointing device along with Google Earth).

The pronounced jog in the access road at 22° 3’11.07“N 96°34’50.73“E is easier to understand when we let GEarth supply elevation data and look obliquely; it’s a switchback on a hill.

The building itself, when zoomed in enough, can be seen to be a factory/warehouse like structure with a shallow-pitch peaked roof. A survey of others in the area show a lot of blue roofs; this could be either a military construction standard, or even the use of blue plastic tarp (sometimes called “smurf skin” for waterproofing).

Interesting that the power line that has Big Blue Box on one end appears to have another end at 22° 3’27.70“N, where there are four odd looking little boxes. No idea what’s up there. But there’s a *bunch* of those structures (which I’m taking the liberty of naming “quadboxes”); I found seven of them running along a crooked 4km SW-NE line (including the one where the power line ends/begins, (KMZ file available on request) I’m sure there are some others. And why does only one of them need a power line? Is there a tunnel underneath? Haven’t spotted a portal yet.

— Maggie Leber · Aug 5, 04:10 PM ·

31.

BOE meaning the Building On the Euphrates, I assume here.

That building had good intrinsic site security – in a desert region, one side bounded by a river, a road several km away inland, no farming between the road and river on that side in the near area.
They added in berms on the ridgeline to block line of sight on the building from the road nearby. They also had a large, cleared field many km wide to work with for physical security. For a covert installation, you don’t need a solid fenceline – you do need a perimeter which is relatively easy to watch, and a way to prevent casual or directed intrusions.

If one went back further in time at the Syrian site, one would presumably find some small bunkers put in the ground, covered by terrain, with view slits looking out over the surrounding land. Entrances could be small enough to not show up on overhead photo imagery – they’d probably stand out on radar, but the US never released radar imagery of the site. There was no need to clear land to establish lines of sight / fire.

The dirt mounds along the ridgelines around the site would be good locations for bunkers – good visibility, and the dirt would help visually obscure the bunker’s vision slits and entrance.

If a kid started wandering across the desert, you just put a guy in a 4×4 out to drive up and tell him to go back to the road.

If there was a ground attack, you have a quick response force inside one of the buildings to respond, and the people in the bunkers can pin down attackers while the QRF gets rolling.

In a forested or jungle environment, as in this site in Burma, you really need to clear a perimeter and add a fence. While it’s technically possible to do that underneath the trees, it usually shows up anyways, and doing it underneath trees leaves enough trunks in the way to make lines of sight difficult.

The Myanmar facility could be using the ditch and the fence around the outside of the pad around the building for a single, close in perimeter… normal for industrial facilities, abnormal for something like a nuclear installation.

They could also have a virtual fence, with a fenceline in the bush somewhere to discourage casual trespassers, and a serious set of wired or wireless cameras and motion sensors covering at least up to and over the ridgelines a bit. That’s possible – difficult to make perfect, but possible. It takes a lot of manpower to watch all the cameras and make sure someone doesn’t sneak in.

— George William Herbert · Aug 5, 07:36 PM ·

32.

they still use visible roofs.
it’s not difficult to use a less visible colour and receive less protests around the world

— durpi · Aug 6, 01:50 AM ·

34.

Judging from the amount of coffee and other produce that is grown in the cooler climes up that way I’d be more inclined to say it’s nothing more than a processing plant of some description. There’s certainly plenty of plantation in the surrounding fields. The auxiliary buildings will be no more than the usual buildings you would expect to see at a factory in Myanmar, i.e. generator house, water treatment etc.

— Anon · Aug 6, 11:42 AM ·
It could be an open air opium dryer, I’ve never seen one this large, but if this is a Tay Za operation it makes sense, he has the capital and the connections to pull this off. The blue tarp on top, completely unnecessary for conventional coffee or teak drying would be crucial to help prevent satellite and UAV recce of the operation.

Myanmar’s government is publicly very anti-opium; they consider the cultivation and distribution of narcotics to be equivalent to genocide in light of their colonial legacy of British imposed opium trade. However, it wouldn’t be the first time that an isolated government has been forced to turn to drug exports as a hard cash trade good.
QUESTION: On North Korea and Burma issue, according to a couple of the news reports in Australia over the weekend, Burma has underground nuclear complex built with the help from North Korea. Is this part of what Secretary Clinton tried to allude to when she talked about concerns about military cooperation between Burma and North Korea?

MR. CROWLEY: We do have concerns about the nature of cooperation between both Burma and North Korea, and North Korea and any other country. And as the Secretary did during her recent trip, she argued quite forcefully that all countries have responsibilities regarding the UN sanctions and we are hard at implementing them. I think over time, we would like to clarify with Burma more precisely the nature of its military cooperation. The Secretary was encouraged that Burma said that it would abide by its responsibilities under the sanctions that were recently passed by the UN, and we will be looking to see them implement those sanctions.

QUESTION: Is the U.S. aware of this kind of underground nuclear complex, possibly with help from North Korea?

MR. CROWLEY: It is an issue of concern and it is an issue that we continue to focus on intensively.

QUESTION: Well, what’s an issue of concern? The facility?

MR. CROWLEY: The nature of cooperation between North Korea and Burma.

QUESTION: Well, are you saying that you are aware of this facility?

MR. CROWLEY: I’m not commenting on any particular facility.
Robert Wood  
Deputy Spokesman  
Daily Press Briefing  
Washington, DC  
August 4, 2009

[EXCERPT]

QUESTION: How – give us some idea of how deeply you’re looking into the – U.S. Government is looking into this report about the Burmese. Are they being questioned, are they being asked?

MR. WOOD: About which Burmese are you talking about?

QUESTION: About the tunnels.

QUESTION: The nuclear reactor.

QUESTION: Nuclear reactor.

MR. WOOD: Well, I don’t want to get into much more detail than I already have on this issue, but it is an issue of concern to us. We’re obviously looking into these types of reports. But I just don’t want to go beyond what we have said on that.
Recent revelations in Sydney Morning Herald and Yale Global Online (Part I and Part II) have begun to shed more light on the potential nuclear ambitions of Burma. While it is known that an IAEA monitored, Russian-built research reactor is being constructed near Myaing, reports from defectors have surfaced claiming that a second nuclear facility is being created. This second facility, reportedly near Pyin Oo Lwin, is allegedly being constructed with the aid of the DPRK, Russia, and possibly Iran. It is the cornerstone to the Burmese clandestine nuclear weapons program.

Burma’s nuclear program is allegedly composed of two facets: a nuclear plant and plutonium reprocessing center, and an artillery unit, which may eventually be equipped with ballistic missiles imported from North Korea. The entire complex is believed to be placed within the Setkhaya Mountains, southeast of Pyin Oo Lwin. Burmese scientists and soldiers have traveled to Russia for training in the operation of nuclear reactors, as part of the Burma-Russia program to develop a research reactor near Myaing, and reports suggest that some personnel have traveled to North Korea for similar reasons. North Korea appears to be the source for the bulk of the design and infrastructure development for the reactor and reprocessing plant. The reactor is believed to use water to provide the carbon dioxide used in the cooling loop. This is consistent with North Korean reactor design, and both the reactor at Yongbyon and the alleged reactor being built in Syria were sited near water sources for this reason.

Recent analysis of satellite imagery has brought a potential location for Burma’s nuclear program to light. The facility, roughly 10 miles east of Pyin Oo Lwin, can be seen in the image below. This facility was under construction in 2005 when the imagery was captured, which would make it a candidate for the covert nuclear program but not the civilian program supported by Russia, which had not yet seen any significant activity in 2009. Three key points are annotated in the image, the facility itself, the power transmission lines which can be traced to Anisakhan southwest of Pyin Oo Lwin.
A detailed view of the main complex itself is provided below. Many features of the complex can be discerned even though it is still clearly being constructed. Note the aforementioned power lines, and the fact that they terminate at a substation, likely providing electricity for the complex. The main facility appears to be situated in a shallow revetment carved out of the terrain, with a smaller complex overlooking it from above. There are signs that fencing is being placed around the revetted facility, and signs that further buildings and roads are being constructed. The main facility, measuring 82 by 84 feet \textit{sic; should be meters}, appears to have a slanted, inverted v shaped roof made of corrugated metal.

![Image of the main complex](image1.jpg)

There are numerous aspects of this facility which suggest that, while it may have some part to play in Burma’s nuclear program, it is not the site of the covert nuclear plant or reprocessing center. Firstly, recall the cooling requirements for a North Korean reactor design. There is no indication of any nearby source of water, or any significant piping from such a source, to provide the necessary water needed to cool the reactor. It was reported by one of the defectors that North Koreans were present at the covert site to engage in significant tunneling projects, as the reactor and/or plutonium processing plant were allegedly to be placed below ground. No sign of any sort of tunneling is present, or at least was not present in 2005. Furthermore, the terrain where the building is placed, as seen in the image below, does not preclude a large degree of tunneling or UGF emplacement. While there is a degree of terrain variation, it is not of sufficient depth to allow for UGF construction without boring down into the Earth at an angle, and thereby producing a much more noticeable construction footprint. Also, the facility does not appear to be sunk into the terrain to a great degree, disqualifying its use as a portal for entering a buried UGF.

![Image of the terrain](image2.jpg)
There are two interesting features which may indicate where the covert facility, if it exists, will be sited. First, the access road leading to the east into the terrain is a new construction, and it leads right past the second feature, a possible security checkpoint. This is the first major security-related feature present in the area, and suggests that whatever is being concealed is further to the east. In fact, it has been suggested by a Burmese security officer that the “Naung Laing” (an alternate name for Pyin Oo Lwin, as well as Maymyo) facility is merely a distraction meant to hide the location of the real facility. While this is not necessarily likely, lax security noted in the area as of late suggests that the officer was at least half correct: this is not a nuclear facility. The likely location for the covert site is further east, near the river. An area of interest (AOI) for future investigation has been marked on the following image:

![Google Image](image_url)

This location has a number of advantages:

- Preexisting, convenient water source for cooling
- Deeper and more varied terrain for UGF construction
- Conditions more amenable to the formation and persistence of mist, a feature claimed by defectors to have been chosen so that work on and the presence of the facility (and potentially cooling emissions) could be hidden from the air

As demonstrated above, while the unidentified facility located in Burma may not be related to the nuclear program, it does represent an interesting enigma, and its presence may have provided enough information to locate the general position of the covert site. The most likely explanation for the U/I facility, apart from the previously mentioned decoy site, is a support function for the significant amount of tunnelling which must be undertaken in order to construct the UGFs required by the project. In time this may even represent the security and site support base for the facility. Further investigation and analysis is required, but it can be stated with a degree of certainty, given the evidence and information at hand, that no nuclear activity will be undertaken underneath the 82 by 84 foot roof.
Comments

1. Hey Jeff – A couple of points.

From the way the shadows fall, I would say that the roof is a normal pitched roof and agree that it looks like corrugated metal.

The “sideways” image, however, probably adds no information at all because it is simply a transformation of the overhead image, as I explained here. There may be some terrain elevation information added in, but the building clearly is from the overhead, and therefore the excavated terrain around the building is likely a simple transformation of the overhead, no additional information to interpret there.

It would be nice to see the dirt pile from excavation, but it would also be an easy thing to distribute that dirt in the jungle.

— Cheryl Rofer · Aug 5, 04:36 PM ·

2. 2 points on O’Connor’s analysis:

1. Roof shadow on north side shows normal, center peak roof not inverted-V.

2. 82 meter square, not foot.

My own review… Something was bugging me about the building itself, looking at it. I had assumed that there was a drainage ditch dug around it, below natural grade, and that accounted for the stepped appearance of the surrounding dirt. I think I was wrong.

I had been assuming that the hill to the east was a sharp up-grade – that the two parallel access roads on the east, one of which goes “past” and to the small rectangular building about 75m northeast, was “uphill” from the road going to the BOB itself.

I was looking at clues and now I think I had that backwards – I think the site is fundamentally more flat, that the LBB to the northeast is at the same grade roughly as the entrance road past the berm areas. My current read is that the building sits on top an artificial, two-step step pyramid type dirt structure, with the access ramp to it sloping up as it heads northeast, then level with the facility as it makes the 90 degree turn to the northwest and across to the cement pad around the building.

The 2-step dirt structure has very linear, squared off sides, and the bottom of the outside seems to be “at grade”.

That is very, very odd.

If I am interpreting the topology correctly, if those steps are 45 degree slopes, then the concrete pad is on the order of 15 meters above surrounding grade.

I can think of no good reason to place an ordinary building up on a raised pad like that.

The only purpose that comes to mind is building an earth-covered structure inside an artificial mound, and disguising it by putting a normal-looking warehouse type building on top. Presumably, there’s an access ramp back down inside somewhere under the BOB roof.

The only type of facilities worth doing that with that I can think of would be nuclear or military command and control.

So, challenge for other readers – look at the site topology with me. Let’s try and figure out – is that a step pyramid up, or am I misreading the site topology.
I agree with O’Connor that a bigger facility further east, off the Google Earth detailed image patch over by the river to the east, is more likely a primary facility. But I am no longer convinced this facility is relatively innocent.

— George William Herbert · Aug 5, 08:53 PM ·

3. I don’t know what BoB is for, but O’Conner is basing part of his analysis upon a false assumption. Significant supplies of water for cooling a reactor and/or reprocessing facility are not sine qua non.

This is particularly so for a low power plant like the Syrian LEGO factory, or the NK bomb machine. An array of dry forced air heat exchangers are certainly effective.

Working exactly like a car radiator, the hot reactor water from the secondary loop is pumped thru a grid of finned tubes. Large fans pull cooling air thru the grid. The now cooled water circulates back to the primary CO2/Water heat exchanger at the reactor.

If you have a good source of cooling water like a river or lake, then fine, you save big bucks on electricity, but if you’re in the desert or mountains, and cost-effectiveness is not primary, then dry cooling is fine.

— Yale Simkin · Aug 6, 10:11 AM ·

4. > So, challenge for other readers – look at the site topology with me. Let’s try and figure out – is that a step pyramid up, or am I misreading the site topology.

(I sent this in e-mail a bit ago, but repeat it here. As always, FWIW):

I should have done this before, but the Google Earth terrain tool indicates that the BOB was built on a site that sloped up by twenty meters or so from the south to the north edge. If that’s so, they had a fairly serious amount of leveling to do by cutting down the north side, building up the south, or some combination of the two.

— Allen Thomson · Aug 6, 03:18 PM ·

5. 1/4

For those of you with a life, you can skip my verbal diarrhoea below – I haven’t a clue what this building is.

For those of you who want to read further – you should get out more, and maybe also get some professional help! :-)  

When I look at Google Earth I’m struck not just by what this thing is, but also where it is. As I’m sure you’ve all noticed, Pyin Oo Lwin seems to be in the heartland of the Burmese military. For example, there’s a spanking great 3000m airfield just southwest of the town, which clearly can’t be for tourism because there’s a 4000m one about 50 km southwest, near to Mandalay. There’s also the Defence
Services Academy (nicely marked with a link to Wikipedia) at 22 01’ 26” N and 96 27’ 57” E. And a nice golf course nearby (22 00’ 33” N, 97 27’ 44” E) and some pretty plush housing at 21 59’ N, 96 26’ 40” E. Given the look of the DSA, I’d also guess that the regular structures around 22 00’ 00” N, 97 27’ 00” E are a barracks. Oh, and there’s also the Governor’s house at 22 01’ 06” N, 97 27’ 26” E.

As an earlier poster pointed out, NIMBYism is surely as valid in Burma as anywhere else, so already I start to have doubts about the structure being a secret MAGNOX-type reactor, which could be bombed at any moment (if we’re to believe the explanation of the BOE). Nonetheless, placing BOB only 20 km from such a collection of military nobs and hob-nobs, suggests two things: Either the Burmese want the protection afforded by having several thousand soldiers and trainees nearby, or else they wanted to put it somewhere where any unusual activity would be invisible against a background of regular military flights, convoys, checkpoints, detachments of soldiers marching hither and thither, etc. My money’s on the second option: BOB is where it is (i.e. near to Pyin Oo Lwin) because it would be more difficult to distinguish BOB-related activities from the regular comings and goings of a military town.

As to what it is, your guess is as good as mine. Based on the Google Earth photo I don’t believe at the moment that it is a reactor. Yale correctly says that “Significant supplies of water for cooling a reactor and/or reprocessing facility are not a sine qua non” for a reactor. But the alternative of using air-cooled condensers just doesn’t strike me as credible. Air cooled condensers are enormously less efficient; you’d be doing well to get a hotwell temperature of 60 deg C with air-cooled, compared to 33 deg C with water cooled, meaning that if a putative reactor has a core-coolant circulation of about 100 kg/s then the water-cooled version could run at a thermal power about 10 MW higher. On a reactor that’s only 40 – 50 MWth anyway, that’s a big difference.

— Hairs · Aug 8, 06:21 AM ·

6. 2/4

Not only are air-cooled condensers less effective, but they are BIG; they’d be very visible from the air, and you could easily see what temperature they’re running at, and thus deduce, from their surface area, what heat load is being dumped to the air. This would tell you a lot about the operation, and maximum capability, of any reactor. On the engineering side, air-cooled condensers tend to foul easily in tropical regions, meaning they rapidly lose performance, and they’re also rather susceptible to the effects of wind, meaning that you can’t always achieve design load because of the wind. It’s bad enough running a combined-cycle gas turbine with air-cooled condensers, but I certainly wouldn’t want to operate a nuclear plant with one, because constraints and variations in my cooling would feedback to core reactivity, with consequences for plutonium production. If Burma really is building a MAGNOX type reactor then I think it would make far more sense to site it near a river and use once-through cooling (it would also be easier to hide the thermal signature by mixing excess river water with the condenser discharge, before pumping it back under the surface of the flowing river).

— Hairs · Aug 8, 06:23 AM ·

7. 3/4

Regarding the “sub-station” at 23 03’ 01” N, 97 37’ 37” E, for what it’s worth I’d say it is a 132 kV station. Two years ago there was a Franco ASEAN seminar, which included a country report by Myanmar on its electrical grid (try googling “Powering ASEAN: Technology and Policy Options” and “Country report of Myanmar”; but if all else fails I could send a copy of the report to Jeffrey for posting). Slide 34 of the report shows a 132 kV line connecting Mandalay to Pyin Oo Lwin, so it would make sense if that supply was extended to the BOB. I don’t think the supply is 66 kV or 33 kV because the shadows of the pylons, and the lines (inasmuch as they are visible), around 23 03’ 40.5” N, 96 35’ 54” E suggests towers with lines on both sides (i.e. double circuit). That suggests to me both the higher voltage, and a certain amount of redundancy (for example, the Burmese could have just installed a
single-circuit 33 kV supply if that’s all that was needed). If we accept – based on the Google earth photo – that there’s no indication of any major cooling, then the power lines are probably bringing power in rather than exporting it out.

Lastly, the earthworkss are interesting; surely they haven’t been built just so that ACW readers can’t get some nice, sharp shadows for deducing the height of the building! :-) I presume that there is a reason for the earth bunds / berms, but I can’t think what it might be. Similarly, the road heading off into the very blurry neighbouring photo (at 22° 02’ 52” N, 96° 38’ 54” E) was presumably built for a reason; it’s just a shame we can’t follow and see where it goes. I also wonder if the structure at 22° 02’ 56” N, 96° 38’ 56” E is some kind of a checkpoint?

— Hairs · Aug 8, 06:27 AM ·

8. 4/4

All in all, I see a large building close to a very militarised area, where it looks as if the access roads to the building are guarded by checkpoints. The building itself is surrounded (sunk into?) earthen berms, with access by a wide road up a ramp, with a 90 deg turn at the end. There’s no obvious source of cooling (if it is some kind of reactor / power station), yet there seems to be a twin-circuit grid connection to the site (possibly 132 kV, but likely to be at least 33 kV). 33 kV could plausibly be for lighting and HVAC in such a large building, but 132 kV would imply that something inside is consuming a lot of power.

If someone put a gun to my head and said “It’s definitely proliferation-related; now make a guess” then I’d go for a centrifuge installation. But in comparison to Natanz the whole footprint is too small. Quite frankly, although it’s suspicious I’m not at all sure that it is proliferation-related. As I said at the beginning, I haven’t a clue what this building is.

— Hairs · Aug 8, 06:29 AM ·

9. It’s worthwhile to look at the location of the building in the terrain and satellite views in Google Maps. It’s built into the lower slope of a hill in what, for lack of better, I’ll call an embayment in the surrounding, higher topography.

Like everybody else, I don’t know what it is, but would recommend caution when accepting or rejecting hypotheses.

— Allen Thomson · Aug 8, 01:40 PM ·

10.In the NYT picture of the same building, it shows a river within at least a mile of it, Im now confused why you say its not close enough to water?

— jw · Aug 9, 04:45 AM ·

11.Just linked over from Kristoff’s article, don’t know much about nuclear sites but have learned a lot already.

Question: why the blue color? Looks like a swimming pool.

— John Edwards · Aug 9, 08:24 AM ·

12.What about an ICBM silo? It would be a lot cheaper to simply buy a weapon from NK than to build the infrastructure and make one themselves. Could the power be to run a liquid oxygen plant for the ICBM? Liquid fueled rockets are too fragile for “real” military utility, but as a deterrent for a rogue state they might be “enough”. NK’s longest range missiles are liquid fueled.
Putting it close enough to all the military stuff would protect it from ground forces, but it is far enough away from military housing that if (when) it is attacked by precision munitions those in the military housing are not at risk.

Look at the turn radius of the access roads. What does that imply as to the length of what ever is going to be trucked to the site? The recent spate of testing by NK might be part of their marketing effort, to demonstrate they have something to sell.

The use of air cooling is not unrealistic. The Israeli reactor at Dimona is in the middle of a desert and uses air-cooled cooling towers. The temperature of an air-cooled cooling tower is easy to measure, but the air flow is not. One can easily make a big dry cooling tower and then not blow much air through it to give the illusion of a large power dissipation.

13. This is clearly a pyramid with an above ground area topped with a blue pitched roof, that is clearly above the tree line. All major activity will take place in the pyramid.

The smaller building to the back is not above it but below it with a smaller building in front of it. A car sits in between the pyramid and the building showing that the two buildings are far below it. What is missing is any entrance to or from any of the buildings connecting them to the pyramid, indicating underground access. The ramp is not a road but probably the base for an above ground pipeline or is for an already built underground pipeline. The river is close enough if the water is being pumped underground. There is far too much focus on the blue roof being on a singular above ground building. It is the highest point of the entire facility that is below it in the pyramid and who knows how much farther down into the earth it goes. Being close to a militarized area provides the highest protection. I only see at this point maybe one building that could be barracks. So only a few will be on site at any time for internal security. External will come from the nearby military area. This BOB could very well be nuclear.

14. This is a common or garden, prefabricated, square metal building (no “pyramid”), surrounded by parking (@ the same level as the driveway), and further surrounded by planted berms.

Where are the control points, guard houses, and alternate routes in and out?

If this is a nuclear, or military facility, I’m a monkey’s uncle.

15. Looks like a luxury resort, to me.

16. I agree that the roof is a normally pitched v-roof. It is 82m x 82m, and at the north entrance(?) is an ~6m long object, possibly a vehicle.

The longest vehicle you could move up the ramp would be something pulling a trailer 18-20m long judging from the curvature of the ramp. Furthermore, the ramp is 10-12m wide, whereas the road leading to the site is only about 5m wide. Does this suggest that they could be expecting to build larger items on site before moving them up the ramp?

There is a flat graded site 50×50m SE of the building – could this be a helipad or a site for another building? The other buildings are smaller, but still substantial 30m20m and 25mx8m.
Finally, the site is only 6km from the river, which would mean piping in water would be easy. A large enough pipeline could be constructed in only a month or two. However, at the time of this photo there is no evidence of a pipeline or pumping station near the river.

— Cam Snow · Aug 9, 05:19 PM ·

17. While Hairs points out *Yale correctly says that “Significant supplies of water for cooling a reactor and/or reprocessing facility are not a sine qua non for a reactor”*, he writes that the alternative of using air-cooled condensers just doesn’t strike me as credible.

I would rather say that 100% air-cooling is unlikely, but credible.

Remember what my original point was – that lack of convenient sources of water should NOT be overly depended upon as an indicator of nuclear facilities.

A proliferator makes choices that necessity requires. Efficiency, cost-effectiveness, reliability, etc. may not always apply.

Saddam’s uranium enrichment program was missed because no one thought that he would use the clunky, massive, and terribly wasteful obsolete technology of calutrons. The Iraqis were circling into getting mastery of the process when the Gulf War aborted it.

BTW – I don’t have any reason to think that BoB has any atomic facilities, just that lack of water does not completely preclude it – a more general observation.

Be that as it may, dry cooling is not the only water-scarce option. If the fan-cooled heat-exchangers are sprayed with a minimal amount of water, efficiency skyrockets. The water film is tremendously more efficient transferring the heat and much energy is carried away by evaporation.

These coolers can use more than 95% LESS water than comparable open water systems. This quantity of water can be piped (as Cam pointed out), drilled or hauled in.

Dimona in the Israeli desert and Khashub in Pakistan (about 4 km from the nearest large water source) appear to use these:

Khashub:
Dimona overhead:

![Dimona overhead](image)

Dimona side view (blowers in the center of picture):

![Dimona side view](image)

18. Continuing...


Dry cooling methods

Specific features of an air-cooled condenser (ACC) and Heller system are insignificant make-up water consumption but also rather ineffective cooling. **However, under circumstances where water is not available these cooling methods can be a reasonable solution despite the greater investment costs and the demand of large area.**

ACC uses air as the cooling substance. The low-pressure steam from the turbine is led to the condenser, which consists of numerous finned tubes, usually mounted to an A-form. The steam condenses to water inside the tubes and cools down to the design temperature. The cooling occurs with convection and
radiation. The air circulates through the condenser by fans, which require electricity. Because of the large diameter of the low pressure steam pipelines, the condenser must be located near the steam turbine. Due to relatively low heat transfer efficiency, ACC also requires a large area to be placed.

Heller is an indirect dry cooling method. There’s a closed circulation between the condenser and the dry cooling tower whose structure is very similar to ACC’s. The condenser is jet type which sprays the cooled water directly to the boiler water circulation. Therefore the cooling water has to be demineralised water. As the condenser is at vacuum, the cooled water from the tower is expanded at a regeneration turbine which regenerates a part of the pumping power needed for cooling water circulation.

An EXCELLENT fully illustrated overview of existing dry-cooled power stations can be found here

— Yale Simkin · Aug 9, 09:54 PM ·

19. ‘Hairs’ posted:

“…there’s a spanking great 3000m airfield just southwest of the town”

Take a careful look at this structure, at 21°59’19.49”N, 96°26’28.55”E about 8 miles SW of Pyin Oo Lwin. At low zoom it looks like a runway, and if you zoom in on it there appear to be very faint runway markings: centerline, fixed distance (500’ 1000’ 1500’ 2000’), but no identifier (eg. compass heading). These markings look way too faint to be of practical use, especially flying IFR.

Speaking of instrument flight, I find no visible evidence of navaids, approach lighting, tower – heck, not even a windsock. The ‘runway’ is about 10,000 feet long, according to Google Earth, but has no taxiways, turnoffs nor, assuming it is still under construction, any grading to prepare for adding them. The only ramp area is a small pad near the south end that could probably only accommodate a single wide body cargo jet.

And the single weirdest thing about this “airport” – no aircraft visible on the ground!

There are other oddities if you look for them. However, despite the faint markings, it is striking that what it reminds me of is not a runway, but the covered 2-mile-long shed that houses SLAC (Stanford Linear Accelerator Center). Could Burma possibly be trying to do some basic physics research? This is of course far-fetched, but overall it seems hard to explain what this installation is.

— Bill L · Aug 10, 02:51 AM ·

20. It’s an airstrip intended primarily for executive travel. I believe it’s the one the Indian defence minister flew in on a few years back.

— Azr@el · Aug 10, 12:32 PM ·

21. Apologies to Yale and others: I agree that air cooling is “credible” (in the sense that it is technically possible, and has been done before) though unlikely.

In any case, I think the point is moot: The lack of any obvious provision for cooling i.e. no indications of piping or pumps at the river, no hardstands for cooling towers (whether air or water), no indications of LP steam pipes going in / out the building, all suggests that this is not a reactor. The lack of cooling may also rule out BOB being a chemical weapons factory too, although here my knowledge is tiny and I am on very shaky ground.

— Hairs · Aug 10, 05:00 PM ·
22. The limestone road seems to have fairly fresh limestone on it and it extends some distance from the site. The limestone had to come from somewhere and I don’t see a quarry anywhere in proximity to the site. My assumption is that it has come from a hole under said shed roof and has been distributed along the road. The road is pretty suspicious as it is quite wide and and well made and leads nowhere.

— Simon · Aug 11, 01:49 AM ·

23. There is an intriguing series of squares on the ground, each with four smaller squares inside, commencing at the walled building (another substation?) at 22.110515°, 96.614832°. Some of these features have elaborate roads built to them. Here are some examples as they lead to the south of the airport at Anisakan and into the low-res area: 22.098502°, 96.605272°; 22.089592°, 96.598239°; 22.073161°, 96.586298°; 22.066907°, 96.575194°; 22.057571°, 96.563067°; 22.053335°, 96.544739°; 22.052184°, 96.539779°; 22.051508°, 96.536936°; 22.029315°, 96.521720°; 22.012443°, 96.512148°; 22.007270°, 96.509487°; 21.983725°, 96.495744°; 21.982472°, 96.476372°; 21.918012°, 96.392498°.

They could be construction sites for future powerlines, although the idea of ventilation shafts for a tunnel did cross my mind.

Compare their size to the existing powerlines to/from the main facility, which are on a much smaller scale, e.g. 22.062015°, 96.590979°. I can’t trace these all the way to Anisakan, only to 22.061568°, 96.528988°.

— Andrew · Aug 11, 01:58 AM ·

24. JJ above fell for the same optical illusion I did, sort of an earthen step-pyramid up above a mostly flat surrounding terrain.

This is a goof, as topology and other sources available now indicate. To illustrate what I mistakenly saw at first close look, and the real topology, I created this graphic:

http://www.retro.com/employees/gherbert/Myanmar/Topo-Goof.png

[Included in Appendix B of this sourcebook.]

I have cross sections roughly W-E and N-S for the mistaken “pyramid” topology, and the actual “cut into hillside” topology which the other sources including better read on the slope and hill heights support.

— George William Herbert · Aug 11, 02:06 AM ·

25. In relocating entire Myanmar Government from Yangon to Nyapyidaw, the Burmese (soldiers) Tatmadaw built a luxury beach resort for their higher ranked military and SLORC/SPDC staff and APPARENTLY sited it in a location way up in the hills and near Mamyo (Pyin OoLwin) - with all the trimmings of a beach resort but away from the traumatic potential of coastal living – they imported sand, created a fake beach, sailing, imported chinese beach umbrellas, deck chairs opened cafe serve cocktails etc etc In absence of other validity it may well be that Frank’s surmisal of these google earth photos depicting a luxury resort is a pretty accurate description – Daw ma khin aye 11 August 2009 1400 hrs

— Ma khin aye · Aug 11, 11:18 PM ·
QUESTION: Robert, the Thai Government has said that it’s looking into that report that came out last week about the Burmese factory plant or the complex, whatever it might be, that supposedly was built with help from North Korea. Is it fair to say that without disclosing – without necessarily addressing any intelligence on this, is it fair to say that the U.S. Government is also looking into that report?

MR. WOOD: I said yesterday that we are looking into reports about military – the military cooperation between Burma and North Korea. And there is nothing I can really say here from the podium, but certainly we would be concerned about really close cooperation between the two. But beyond that, I don’t have anything more I can add to it.

QUESTION: So this report wasn’t serious enough or substantive enough for any branch of the U.S. Government to actually look into it seriously, or you just can’t address it?

MR. WOOD: I just can’t address it here.
1. (C) Summary: Ambassador Susan Burk, Special Representative of the President for Nuclear Nonproliferation, met with key Nuclear Nonproliferation Treaty (NPT) interlocutors in London, Paris, and Berlin from July 14 to 17. The meetings demonstrated that we have very few differences with these governments on the main objectives for the Treaty and the 2010 Review Conference (RevCon). The UK and France are quite eager to take strong leadership roles and work closely with us, including on disarmament issues, and to engage with a wide range of NPT Parties to ensure a successful RevCon. Burk agreed with UK and French officials on the importance of coordination among the P-5 on NPT issues. The UK and France agreed that we should be ambitious in pursuing our objectives for the RevCon. They differ in one key area, however, with the UK eager to promote its aggressive disarmament posture and France defensive about disarmament and concerned that US/Russian initiatives and UK unilateral measures will lead to increasing pressures on France to engage on nuclear disarmament. This different perspective is causing considerable unease between the two.

2. (C) German officials were more cautious about goals for the RevCon, possibly because their evident sensitivity to the views of Non-Aligned Movement states leads them to focus on the gulf between those states and the West. All three governments with whom we met see Iran as perhaps the biggest problem for the NPT, and believe that high-level intervention with Egypt will be necessary to resolve the Middle East issue at the RevCon. Burk was asked at every stop about the relationship of the U.S.-proposed nuclear security summit to the RevCon; she described the events as related and complementary, rather than linked.

3. (U) In London and Paris, Burk was joined by ISN/MNSA Deputy Director Scott Davis, OSD’s Amy Prible, and Adam Scheinman, Director of Nonproliferation, National Security Council. Davis and Prible also attended the Berlin meetings. End Summary

[deletia]

28. (C) The last meeting was with Christian Democratic Bundestag member Eckart von Klaeden and staffers from all the major German political parties. Von Klaeden asked whether the United States seeks to enforce compliance by amending the NPT, something Burk assured him is not an option we will pursue. Other questions concerned P-5/NAM disputes, Iran, CTBT, the IAEA fuel bank, the U.S.-proposed nuclear security summit, and concerns about Myanmar’s nuclear intentions.

CLINTON
Nuke theory in Burma tunneling confirmed by defectors

Updated August 6, 2009 11:42:38

A US non-proliferation group is calling on the International Atomic Energy Agency to investigate Burma, after fresh reports the military junta has a secret nuclear program which may be working towards a bomb. Suspicions have long existed, but have been bolstered by claims from two Burmese defectors who say they had close knowledge of the operations. One of the defectors says huge tunnels are being used to transport equipment sent from North Korea, echoing comments from Hillary Clinton last month that the two countries may be working together on nuclear development.

Professor Desmond Ball, along with freelance journalist Phil Thornton, spent two years collecting evidence from the Burmese border. It's this evidence which has put the issue back on the international security agenda.

Presenter: Liam Cochrane
Speaker: Professor Desmond Ball from the Strategic and Defence Studies Centre at the Australian National University

BALL: Well I talked to, as you said, many defectors. The two principle [sic] ones were a civilian who had been involved in the negotiations with North Korea and who had been involved in the preparing of the Memorandum of Understanding and the actual contracting on the civilian side. On the military side Moe Jo was a junior military officer who had been in the second group of Burmese army officers to be sent for nuclear training in Moscow. After his period in Moscow he returned to Rangoon and then worked in nuclear-related areas within the army.

COCHRANE: And in fact he claimed that the Burmese military have developed a nuclear battalion. What's the role of that group of the army?

BALL: Both of the defectors had knowledge of that battalion, him [Moe Jo] more particularly because in effect he was part of that battalion. That's a group that has been setup near Mandalay to try and consider over the long term some of the specific technical and organisational issues, command-and-control issues for what to do with a nuclear device once they reach that point.

COCHRANE: And from all that you've heard are you convinced that they are working towards a nuclear weapon?

BALL: I've got no doubt whatsoever; I met with these defectors, six times with one and three or four with the other. I've got no doubt they're telling everything truthfully as they believe it, and because neither of them had never met before, they did not know of the existence of the other, but they had such similar stories or identical stories about one particular area where they allege the North Koreans are in the process of building this second reactor.

COCHRANE: Now I can sense you are approaching this with some scepticism, is there a fear that this might be part of some sort of disinformation campaign, that these defectors might have sort of been loaded with this information for people like you to collect?
BALL: I don't believe that, I've got to know them fairly well, I got to know where they're coming from. I'm also fairly familiar with the way Burmese intelligence works, I just don't think that that sort of campaign is really on the cards. No, these guys are telling it as it is. Now one qualification though to our previous discussion, it's not so much in my view Burma doing this, Burma could not do this at all by itself. This has to have very substantial North Korean involvement in the technical and construction side if indeed they're to build a bomb as you asked.

COCHRANE: Specifically what are the North Koreans helping the Burmese with?

BALL: Well it does seem that they're involved in pretty much all elements of the fuel cycle, from the uranium mining through to the refining and processing, they have basically built a second refinery from which they take the yellow cake [a uranium concentrate], and then the allegations of the defectors are that they have in addition to the publicly known Russian reactor that Burma's getting, that they have supplied, or are in the process of supplying, a second reactor similar to the one that they have in Yongbyon in itself. And that they're following that up with a plutonium reprocessing capability. In other words it would give Burma and/or North Korea basically a complete fuel cycle all the way to production of a nuclear device.
JAKARTA, Indonesia, Aug 8 (TNA) -- Myanmar may be forced to abandon its Association of Southeast Asian Nations (ASEAN) membership if it is found to have a nuclear reactor in the country, ASEAN Secretary-General Surin Pitsuwan said on Saturday.

So far there is no clear evidence that the Southeast Asian country, Thailand’s neighbour to the west, has such a facility but if it does, it will be forced to leave the organisation because operating a nuclear plant violates a regional pact which states that ASEAN will be a nuclear free zone, said Mr Surin.

Mr Surin was responding to Western media reports which said recently that impoverished Myanmar was building a secret nuclear reactor and plutonium facilities with the help of North Korea and aims to have a nuclear bomb in five years.

US Secretary of State Hillary Clinton during the ASEAN meeting in Thailand’s Phuket last month also warned about possible nuclear links between the two countries. She said the communist-state could be sharing atomic technology with military-ruled Myanmar which could pose a major threat to the region.

“ASEAN (government) leaders will have to jointly consider on the issue. If (Myanmar) is found guilty then it will be forced to leave ASEAN,” said Mr. Surin, adding that so far there is no sign that the country has built such facilities.

[deletia]
IAEA probes Myanmar data, discourages new research reactors

NuclearFuel
TheMcGraw Hill Companies
Originally published August 10, 2009

The IAEA Department of Safeguards during most of 2009 has been sifting through open-source documents, aerial photographs, and other data to obtain a clearer picture of the scope and intent of nuclear activities in Myanmar, Western officials and other sources said last week.

Separately, according to these sources, the IAEA Department of Nuclear Energy — supported by the IAEA legal department, US agencies, and some member states — has been discreetly encouraging Myanmar and other countries in southeast Asia not to launch new research reactor construction projects but to better utilize existing facilities in the region instead. Contrary to some recent media reports, no reactor is being built in Myanmar with the help of Russian industry.

Myanmar, formerly known as Burma, is a poor, politically isolated country that has been run by a military junta since 1962.

Speculation about Myanmar’s nuclear activities flared up after US Secretary of State Hillary Clinton said last month that the US was concerned about the possibility that North Korea was providing clandestine nuclear assistance to Myanmar’s secretive leadership. Shortly after these remarks, Australian newspaper reports, which relied on accounts attributed to Burmese refugees, asserted that Myanmar is building a secret reactor.

Beginning two weeks ago, some private researchers have posted photographs on the Internet that they speculated might show a secret reactor being constructed in Myanmar. The photos show a square, box-like structure about 80 meters, roughly 262 feet, across that is in a jungle area about 30 miles east of Mandalay. Some of these reports claim that the location where the photos were taken is identical with the site named in one Australian press account, described as near Pyin oo Lwin.

According to some information that sources said has been made available to Western governments and the IAEA, the “box” in the photos is likely not a reactor but a non-nuclear industrial workshop or machinery center.

That determination, the sources said, follows from the absence of certain “overhead signatures” for a reactor in the photos and from specific information derived from first-hand knowledge of the site and its activities, deemed to be highly reliable.

“We can conclude that it’s not a reactor with near certainty,” one Western analyst said.

The IAEA, sources said, has studied photographs of the site in question and has also not concluded the installation is a reactor under construction. Western governments and the IAEA have become familiar with data on this site over about half a year, one source said.

In 2008, the US and Israel asserted that North Korea provided assistance to permit Syria to build a clandestine reactor at a site called Al Kibar. Aerial photographs of the site taken prior to an aerial attack by Israel in 2007 were posted on web sites and abetted speculation about the identity of the box-like structure in these photographs.

A former nuclear intelligence analyst for one Western government said August 6 that, after the Clinton statement in July warning of possible North Korean aid to Myanmar and the publication of Australian press articles and
photographs, “what happened was a minor feeding frenzy in cyberspace.” To some observers, he said, “the photos looked sexy because there was suddenly fresh information pointing to another country getting a secret reactor from North Korea.”

**No Russian reactor**

According to the former government intelligence analyst, beginning around 2001 agencies learned that “hundreds of people were traveling from Myanmar to Russia to work in nuclear research centers. Nearly all of them were trainees.” Most of the Burmese on these trips, he said, went to Dubna, the site of Russia’s Joint Institute of Nuclear Research, which is involved in high-energy physics, neutron physics, and theoretical physics. “We had no idea why they were going there, or what exactly they were doing, and we never established a research profile” for Myanmar that was related to the trips to Russia, he said.

At about the same time, Myanmar announced its interest in setting up a research reactor with Russian help. The IAEA visited Burma and found serious deficiencies in the area of safety culture and infrastructure to support such a project.

Nonetheless, in 2007 Russia announced that it had reached an agreement with Myanmar for the supply of a 10-MW research reactor.

According to sources, around that time both the US and some IAEA officials expressed strong reservations about that project, supported by efforts at the IAEA Department of Nuclear Energy to discourage poor countries from embarking on expensive projects to build new research reactors without having in place sufficient supporting know-how, infra-structure, and financial resources. “The IAEA doesn’t want countries like Burma to end up with stranded research reactors,” one source said. “Without a supporting environment,” he said, these facilities “will over time pose a safety and security risk.”

For a country like Myanmar, “they’re also superfluous and a waste of resources,” he said.

Beginning a few years ago Myanmar has told the IAEA it needs the reactor because it needs radioisotopes, he said. “This is the classic rationale poor countries usually give for having to have a national research reactor. But many of the isotopes Burma needs can be produced elsewhere in the region, such as at established reactors in Thailand and Malaysia.” The IAEA has been “encouraging all these countries to form a research reactor coalition,” he said. More advanced IAEA regional programs to share research reactors are already in place for countries in eastern and central Europe.

If Myanmar were to give up its research reactor quest, it might even qualify for financial support from US DOE and from the private Nuclear Threat Initiative, or NTI, to participate in such a cooperative program, he said.

Some media and blog reports alleging secret reactor construction in Myanmar this month nonetheless asserted that Myanmar is building, or has built, a Russian supplied research reactor. Some of these reports, citing Burmese refugee sources, claimed the reactor is sited near Myaing. Others said that it was at Kyaukse. The two locations are about a hundred miles apart.

A senior official responsible for external projects at Atomstroyexport, which would be tagged by Russia to build the research reactor and associated infrastructure in Myanmar under the 2007 Russo-Burmese agreement, told Platts August 7 that currently there is no construction in Myanmar of any reactor with Russian assistance.

The US since 2007, on political and nuclear policy grounds, has opposed this project and, according to US officials, has voiced its objections to both the IAEA and the Russian government. Diplomatic sources suggested the project might be discreetly on hold, or is being intentionally delayed, following talks involving the US, Russia, Burma, and the IAEA.
Lax reporting requirement

Thus far, sources said, no reactor project or installation has been declared by Myanmar to the IAEA Department of Safeguards. Under reporting requirements that Myanmar has not amended regardless of IAEA requests since 2005, Myanmar could legally build a reactor and complete it without reporting that activity to the IAEA. Myanmar joined the Nuclear Nonproliferation Treaty in 1992, and concluded a comprehensive safeguards agreement, Infcirc-477, three years later.

According to the IAEA, Myanmar since 1995 is subject to the small quantities protocol, or SQP, which waives certain safeguards reporting requirements for states that have virtually no nuclear infrastructure and have 1 kilogram or less of nuclear material associated with nuclear facilities. Under Myanmar’s SQP, it must declare a facility no later than six months before nuclear material is introduced into it, the IAEA said.

Infcirc-477 also contains so-called subsidiary arrangements, including so-called Code 3.1, which sets requirements for provision of design information for facilities to be safeguarded. A recent modification of Code 3.1 requires early notification of this information.

Since 2005 the IAEA has requested that Myanmar revise its SQP to essentially harmonize its requirements with those of the modified code 3.1, but Myanmar has not complied. Were Myanmar to revise its SQP and accept the modified version of Code 3.1, should Myanmar then decide to build a nuclear reactor, it must notify the IAEA as soon as the facility is “planned.” Until then, however, Myanmar could construct a reactor or other nuclear installation without declaring it, until it was six months away from introducing nuclear material into it. So far, Myanmar has not notified the IAEA of any intended reactor construction.

It is also not implementing Code 3.1, an IAEA spokesman said, since there are apparently no facilities to be put under safeguards in Myanmar.

Young scientists

In step with Myanmar’s intensifying nuclear links with Russia since the beginning of this decade, Myanmar has also increased its participation in the IAEA’s technical cooperation program. From 2000 through 2008, according to a statement by Myanmar’s ambassador to the IAEA last year the country participated in numerous TC projects worth about US$5.2 million. About one-quarter of this work was in the field of radiation health and medicine, about 20% related to application of radiation in agriculture, 17% in radiation safety and security, 14% was for “general atomic energy development,” and another 11% in “nuclear engineering and technology,” he said.

Under these last two rubrics, the IAEA is providing what one IAEA official said was “very basic assistance” to Myanmar concerning its efforts to set up a nuclear research and development infrastructure. The current TC project dubbed MYA/0/007 is meant to “establish a nuclear science and technical training center for scientists, engineers, technicians, and graduate students,” according to IAEA data. This endeavor has been under way since 2001, according to Burmese TC documents, but its activities have been focused on Myanmar personnel in Yangon, the former capital and headquarters of Myanmar’s Ministry of Science & Technology and its Department of Atomic Energy — not in any site designated to host a future nuclear research center or reactor.

Separately, Myanmar has been participating in a technical cooperation program for the Asia-Pacific region called RCA, sponsored by the IAEA and administered largely by the South Korean government. Most of
Myanmar’s activities in this program have, as is also the agriculture, medicine, and other developing-country concerns. But two Myanmar researchers in 2003 and 2005, respectively, participated in six-month programs at the Korea Atomic Energy Research Institute in the fields of research reactor technology and advanced spent fuel management.

In both these cases in Korea, and as was the case for nearly all the trainees known to have been sent to Russia since about 2001, one Western government analyst said, “the typical profile is young, inexperienced scientists and technicians in their early to mid-twenties.” During a visit to Myanmar in 2004, Platts was told by university students that until recently, the junta during many years since the late 1980s had closed virtually all institutions of higher learning in the country.

Every year, the Department of Safeguards evaluates several thousand published scientific papers that might signal proliferation-sensitive research is taking place in member states. Said one official close to this effort, in south and southeast Asia, “there are lots of papers from Vietnam, Pakistan, Thailand, Malaysia, Indonesia, Singapore, Taiwan, India, and China. There’s practically nothing from Myanmar.”

Given Myanmar’s severe educational infrastructure deficiencies, the official said, Western states are concerned about Myanmar “because of the North Korean connection and because they could hide facilities deep in jungles and mountains. But this would have to be a totally black [i.e., secret] program with everything imported” because “in Burma there is no national R&D center for them to hide behind. It’s unthinkable that they could mount a [clandestine] nuclear program on the basis of what we already know is there.”—Mark Hibbs, Bonn
Mysterious Burmese facility revealed on Google Earth
STEPHEN HUTCHEON
August 11, 2009

The "interesting enigma" in central Burma, which some pundits say may be part of a clandestine nuclear operation. Photo: Google Earth

Amateur spies and armchair sleuths using Google Earth have discovered a suspicious development in the Burmese jungle thought to be linked to the pariah state's clandestine nuclear program.

The main facility, which measures 82 by 84 metres, can been seen on satellite images published on both Google Earth and Google Maps (see embedded map below).
It features a pitched, blue corrugated roof, which, at first glance, makes it look like an over-sized swimming pool.

The large industrial complex is located in a rural area of central Burma, east of Mandalay near the town of Pin Oo Lwin.

That's the same zone in which defectors recently told two Australian researchers that the Burmese army had been building a nuclear research and engineering centre with support from North Korea and Russia.

The defectors' testimony was collected over two years by Professor Desmond Ball, a strategic studies expert at the Australian National University (ANU) and Phil Thornton, a freelance journalist based in Thailand.

Details of their investigation, which concludes that the secret reactor could be operational and producing a bomb a year by 2014, was published in The Sydney Morning Herald and The Age earlier this month.

Sean O'Connor, a blogger specialising in open source military analysis and Google Earth imagery interpretation, said that, while it might not be related to the nuclear program, the facility "does represent an interesting enigma".

"The most likely explanation for the [unidentified] facility, apart from the previously mentioned decoy site, is a support function for the significant amount of tunnelling which must be undertaken in order to construct the [underground facilities] required by the [nuclear] project," he wrote in the Arms Control Wonk blog.

He speculates that the main structure, which appears to be dug into the ground in the foothills of the Setkhaya Mountains, could also be a "security and site support base for the facility".

One prominent NGO, which monitors international nuclear activity, told us that the building and related infrastructure is "a machine shop with no connection to a nuclear program".

The Google Earth images, which are provided by Digital Globe, a leading supplier of satellite imagery to commercial and governmental organisations, are dated from October 2005.

The NGO, which did not want to be named for "tactical reasons", said that it first became aware of the structure in early July and subsequently obtained 2009 imagery, which it is still assessing.

The NGO's conclusion is similar to the one reached by the Institute for Science and International Security (ISIS), a Washington-based non-profit organisation specialising in international security issues.

In a statement released this month, it described the structure as an "anomalous building buried in the ground" without "obvious nuclear industrial characteristics".

That hasn't been enough to stop the speculation, given the scale of the development, the new infrastructure (roads and powerlines) and the fact that access roads look to be guarded by checkpoints.

[Selected comment]

[Ack, I've been quoted out of context in the middle of a technical analysis, which I later refuted...

Early in the analysis the available images showed an ambiguous sun shading effect - part of the embankments around the building could have been photointerpreted as being sloped either up or down.
Other available imagery and a topology analysis disambiguated the topology - the site slopes up about 20 m in altitude from the road at the front (south) to the hills immediately north of the edge of the facility. With that information, and other information made available, it's clear that the facility is built on a flat concrete pad on a section of earth excavated out to be flat relative to the road out in front of it, with a berm built around the south and part of the east side hiding the building from the access road.

The berm and other features including location and associated security indicate that it's a military or government facility of some sort - the berm is an indicator of possible explosives storage, but not conclusive by any means.

My apologies if the work-in-progress discussion caused any confusion or distress. It's clearly not a buried hard command center or buried nuclear facility.

[SH: Hi George, Thanks for the heads up, I've removed the out of context comment.]
George William Herbert | USA - August 11, 2009, 4:19PM

[Selected comment]

Well known to the Burmese administration, the location of the pictured structure is close to the Kyauk Kyant fault line, which experienced a massive quake on 23 May 1912, estimated to be 8.0 on the Richter scale. It is pure ignorance to think that the regime are unaware of this. This type of obvious beat up, sensational headline, simply undermines the credibility of this "news" organisation. Disappointing and disgraceful.
Scruffy - August 11, 2009, 4:31PM

[Selected comment]

if you look to the left of the building, there is a High tension power line running from the building. This is where the vegetation has been removed. THE BIG question is if that this is to supply electricity for a fledgling nuclear reactor or what is there that requires a large supply ????
steven | st albans - August 11, 2009, 5:32PM
The Box in Burma: Preliminary Analysis

The last couple of weeks have seen intense speculation that the self-styled Union of Myanmar (known as Burma in the West) is seeking nuclear weapons. The affair started with an article in the Sydney Morning Herald based on interviews with two Burmese defectors: Moe Jo and Tin Min. The former claimed that he had been trained to be part of a thousand man strong "nuclear battalion". He also claimed that Myanmar had provided yellowcake to North Korea and Iran. The defector continued to claim that the country was planning a plutonium reprocessing facility, and that the Russian Federation were assisting them with expertise. The other defector had worked as an accountant, and claimed to have had access to documentation on various tunnel projects implemented by North Korea and Russia. This information was sketchy at best, and must be read with scepticism.

However, a number of private researchers nevertheless started to survey Myanmar for possible locations confirming the defectors stories. Initial efforts focussed on a region about 50 kilometres west of Mandalay, near a city called Pyin Oo Lwin, the former summer capital of British Burma. This region of the country is known for being important to Burma's national economy. First, it is the centre for Burma's silkworm rearing industry, it also has a research centre for indigenous medical plants, and it has a pharmaceutical production plant. In addition, various tourist websites explain that the area is frequently visited by trekkers, indicating that it's not closed off for international tourists. The region is served by the Aniskan Airfield (21°57'28"N 96°24'18"E) which is located just off the Mandalay to Lashio highway.

In particular, analysts looked at a big building about 15 kilometres from the city (at 22° 3'4.82"N96°37'46.21"E). The building is about 80 times 80 meters and is resting on a 121 by 114 meter fundament. Based on an analysis of the shadows, it appears to be about 10 meters high. A team of VERTIC volunteers started an analysis of available Landsat-7 imagery, and paid particular attention to the thermal band. Based on that analysis, we could conclude that construction had started at some time in early 2004, and that the building had been completed sometime in 2009. The thermal analysis indicated that the building was warmer than the surrounding background, which was attributed to heat being reflected off the roof, rather than activities inside the building.
The vegetation in the area west of the facility also gives off some thermal radiation. The VERTIC team did not calculate the heat emissions in centigrade, although that is possible to do with Landsat-7 imagery. A colour comparison indicated that the building was not radiating significant amounts of heat, as it would if any major industrial process was on going under its roof.

In part based on this information, Jeffrey Lewis and others requested new imagery from GeoEye. One image, captured at 13 April 2004 reveals the absence of any basement level. It also showed that the access road, at that time, had not been paved. A multitude of tracks radiating out from the facility shows a significant level of human activity. It is not possible, however, to draw any conclusion from the imagery on the building's planned function. Another high resolution image, acquired on 21 February 2009, shows the building in its finished state. It seems to rest on an asphalt-concrete foundation, and there is no evidence of further excavation on the site. Construction is finished, as evidenced by the emergence of vegetation, and the disappearance of some of the dirt roads associated with the early construction period.
Some observers have commented that there is an absence of many external features indicative of a reactor. Here, many have observed the absence of a convenient nearby source of water. However, cooling could be brought to the facility through pipes from the nearby river, and then being stored in local pools. This is common practice in some parts of the world. The VERTIC team therefore paid some attention to a group of newly erected buildings by the water at the shortest distance from the river. This group is of buildings is located at 22° 4’38.57”N 96°34’22.83”E. We're still assessing this imagery.
However, we learned from two sources, independent from each other, that the box-like building has been under scrutiny by the IAEA's Department of Safeguards for quite some time, and that the department is nearly certain that the building does not serve any nuclear programme. An official, associated with a Western intelligence agency, later told us that, "we've been looking at that site for years, since construction started. You cannot hide a reactor in a low building without a basement level". A relatively recent visit to the facility has reportedly confirmed with '99 per cent confidence' that it is a machine shop, and that it's not impossible that the shop is using machinery imported from the DPRK trading company Namchongang. Its relatively large size, low height, and absence of basement levels is consistent with this information.

On 10 August 2009, Mark Hibbs reported in Nuclear Fuel that nuclear activities in Myanmar are low, but slowly increasing. The country has requested a number of technical cooperation projects with the IAEA, and is presently implementing projects worth about $5.2m. But all activities are conducted in the Ministry of Science & Technology and are conceptual in nature. This is consistent with the low nuclear knowledge base of the country. As reported by Hibbs, the 'typical profile' of a Myanmar nuke worker 'is young, inexperienced, scientists and technicians in their early to mid-twenties'. The IAEA's Department of Safeguards have picked up virtually no scientific papers published by Myanmar academics of interest to the department. While this is consistent with some nuclear weapons efforts, where the most promising minds of the country are isolated and prohibited from publishing, it is also consistent with a country with a very small scientific base.

Finally, Hibbs reports that there are severe educational infrastructure deficiencies in the country. He quotes an official familiar with the IAEA Department of Safeguards open-source investigation efforts saying that a clandestine nuclear effort, 'have to be a totally black program within everything imported. In Burma there is no national R&D center for them to hide behind. It is unthinkable that they could mount a [clandestine] nuclear program on the basis of what we already know is there'.

While Burma has approached Russia for the purchase of a research reactor, a senior official at Atomstroyexport has confirmed that there is no construction in Myanmar of any reactor with Russian assistance.

We hope to conclude our investigations and to publish a VERTIC brief on this matter by the end of the month.
US Senator: Burma Denies Nuclear Plans
By Heda Bayron
Bangkok
17 August 2009

U.S. Senator Jim Webb, who recently held talks with Burma's military leaders, says the government denies reports that it is trying to acquire nuclear technology. The senator also says Burma's opposition leader Aung San Suu Kyi has indicated a willingness to see some sanctions on Burma lifted.

Senator Jim Webb says he did not directly raise the issue of whether Burma has a covert nuclear program during talks with the country's leader, General Than Shwe. Webb met with the reclusive leader on Saturday, the first high-ranking U.S. official to do so.

However, he said Monday that the Burmese government denied having a nuclear program.

"But it was communicated to me earlier on that there was no truth to that, from a very high level in their government," Webb said.

Earlier this month, Australian researchers said interviews with defectors from Burma revealed that the government has a secret nuclear program, allegedly aided by North Korea. In June, a North Korean ship believed to be headed to Burma with a suspicious cargo turned back under international pressure. U.S. Secretary of State Hillary Clinton warned that any military ties between Burma and North Korea pose a security threat to the region.

In an unprecedented gesture toward the United States, Webb was allowed to meet opposition leader Aung San Suu Kyi in Rangoon Saturday. He also was able to win the release of a U.S. citizen, John Yettaw, jailed for illegally visiting Aung San Suu Kyi at her home in May. That visit led to the government extending her house arrest by 18 months.

Webb says it appears Aung San Suu Kyi might not oppose easing sanctions on Burma. The U.S, the European Union and other Western governments have imposed economic sanctions over the years to punish the repressive military government. Webb favors the eventual lifting of sanctions on Burma, which he and others argue only increased the isolation of its people.

"I don't want to take the risk of misrepresenting her views," Webb said. "But I would say to you that it was my clear impression from her that she is not opposed to lifting some sanctions."

In the late 1990s, Aung San Suu Kyi expressed some support for economic sanctions as a way to pressure the government to recognize her party's election victory in 1990 and allow it to form a government. But in recent years, she has not publicly commented on sanctions. She has spent 14 of the last 20 years under house arrest.

On Sunday, Webb said Washington needs to develop new ways to end Burma's isolation and bring about political and economic change. Webb, a Democrat, spoke with Secretary Clinton Sunday and will brief her again upon his return to Washington.

The chairman of the Senate Foreign Relations subcommittee on East Asia and Pacific Affairs is on a five-nation tour of Southeast Asia. From Bangkok, he will fly to Cambodia Tuesday and from there, to Vietnam.
Does Myanmar Want Nuclear Weapons?
by Michael Sullivan

August 24, 2009

[NPR] Morning Edition

There is no doubt Myanmar has a nuclear program. It sent scientists, technicians and army officers to Russia for training in recent years. And Moscow has agreed to supply Myanmar, formerly Burma, with a small nuclear reactor for civilian use. The question is, do the Burmese generals want a nuclear weapon, too?

STEVE INSKEEP, host:

Even as he tries to keep his domestic program from falling apart, the president has to pay attention to threats abroad. And this morning, we have a hint why the U.S. may need to pay attention to Myanmar. Last week, we heard from a Virginia senator, who visited that country. Here's one reason why that engagement matters. Myanmar, like Iran, has a nuclear program.

Here's NPR's Michael Sullivan.

MICHAEL SULLIVAN: There is no doubt Myanmar has a nuclear program. It sent scientists, technicians and army officers to Russia for training in recent years. And Moscow has agreed to supply Myanmar with a small nuclear reactor for civilian use. None of this is disputed. The question is do the Burmese generals want a nuclear weapon too.

Mr. BERTIL LINTNER (Yale Global Online): It is quite clear, I think, that although the Burmese may not have a bomb or even a nuclear capability - no, not yet - they're certainly interested in acquiring one.

SULLIVAN: That's Bertil Lintner. He has written extensively about both Myanmar and North Korea from his base in Thailand.

Mr. LINTNER: And they're seeing how the North Koreans have been able to stand up against the Damascus and the rest of the world because they are nuclear armed. And they would like to have the same kind of negotiating positions.

SULLIVAN: Lintner's recent piece in Yale Global Online detailed the growing defense ties between the two countries and the elaborate underground complexes Myanmar's generals are building with help from North Korea. The tunnels, and the reports this summer - ships from North Korea with mysterious cargos bound for Myanmar - have many countries concerned, including the U.S.

Secretary of State Clinton speaking last month in Thailand.

Secretary HILLARY CLINTON (Department of State): We know that there are also growing concerns about military cooperation between North Korea and Burma, which we take very seriously. It would be destabilizing for the region, it would pose a direct threat to Burma's neighbors and it is something as a treaty ally of Thailand that we are taking very seriously.

SULLIVAN: But the ship may have already sailed. Interviews with defectors, done by Professor Desmond Ball of the Australia National University's Defense Study Center and journalist Phil Thornton, suggest Myanmar is already well on its way with two reactors already in place.
One of the defectors who worked for a prominent Burmese businessman with close ties to the military, says his former boss helped transport materials from North Korean ships to the remote nuclear sites.

Unidentified Man: Their first intention is with the help of North Korea, they produce U235. If they get U235, (unintelligible) not so difficult. If they can arrange UF6, they can make the nuclear bomb.

SULLIVAN: Phil Thornton says he believes the defector's story to be both credible and worrisome, since it matches what other defectors interviewed in Thailand has said.

Mr. PHIL THORNTON (Journalist): Professor Ball has estimated, based on the defector's testimonies, that it could be about 2014 that may have enough nuclear material to start thinking about a weapon.

SULLIVAN: Myanmar, of course, denies any weapons program exists, but seems unusually sensitive to the recent publicity about the issue. Virginia Senator Jim Webb says it came up during his meetings with Myanmar's leadership ten days ago.

Senator JIM WEBB (Democrat, Virginia): I did not directly raise the issue of the nuclear program. It was raised to me by a high governmental official, basically saying, you know, we would never move toward a nuclear weapons program.

SULLIVAN: These denials, of course, are met with a great deal of skepticism by those who follow the growing relationship between North Korea and Myanmar. But analyst Bertil Lintner still isn't convinced Myanmar has even one reactor, let alone two. There is no concrete evidence, he says, that the Russians have delivered the reactor they promised, nor, he says, is there any hard evidence the North Koreans have either - though satellite images do show construction around Myanmar's suspected nuclear sites.

What is clear, Lintner says, is that Myanmar's main ally, China, is well aware of Myanmar's nuclear ambitions. Last year's clandestine visit to North Korea but a senior Burmese general, he says, proves it.

Mr. LINTNER: He passed through China on his way to North Korea, back again. On his way back from North Korea, Shwe Mann and his entourage had meetings with high-level officials. It was almost as the Chinese were, not only aware of what this trip through North Korea, but they were closely involved in it. See, it's very convenient for the Chinese to be able to say, we're not doing this. This is the North Koreans. We can't control them. It's kind of a sort of plausible deniability. But there's definitely Chinese complicity in this new corporation between North Korea and Burma.

SULLIVAN: Something else for the U.S. to think about as it considers a review of its policy toward Myanmar, amid the ongoing tug-of-war with North Korea over its nuclear program.

Michael Sullivan, NPR News.

INSKEEP: This is NPR News.
Thailand rattled by reports of secret Burma nuke program
Thursday, August 27, 2009
East-Asia-Intel.com

Authorities in Thailand are attempting to verify reports that the military regime in Burma is building a covert nuclear reactor as part of a program to build nuclear weapons within five years.

Thai National Security Council chief Thawil Pliensri has ordered intelligence officials to check on reports provided by Burmese defectors. But as of early August, the Thai intelligence service had found no evidence of such a program.

However, Thawil warned that regional security could be undermined if Burma’s plan to build a nuclear weapon is verified.

Defectors from Burma have reported that the nuclear program was being developed with assistance from Russia and North Korea.

The Burmese opposition Mizzima News reported June 14 that the Burmese military junta was building an underground complex in the new capital at Naypyidaw with North Korean help.

The North Korean presence has fueled concern that the underground work may involve nuclear weapons development.
China forces worth watching: US admiral
September 2, 2009 - 12:09AM

A US military commander says China's military build-up should be watched very carefully, but has stopped short of calling the emerging superpower a threat.

The head of the US Pacific Command, which patrols the Pacific Ocean from California to China, has held talks in Australia with Defence Force Chief Angus Houston.

Admiral Timothy Keating, whose command covers 51 per cent of the earth's surface, says the US is monitoring China's military build-up.

"I would call them a country whose military development is worth watching very carefully," Admiral Keating told ABC Television on Tuesday night [presumably 2009-09-01].

"I would not call them a threat."

The US had "repeatedly" asked China to "come out" and join them in a "very small scale" partnership.

"There's plenty of room for all of us in the Asia-Pacific," Admiral Keating said.

Admiral Keating also praised the Australian Defence Force's white paper, which seeks more transparency on China's military build-up.

Its strategy was "very closely aligned" with the US Pacific Command, he added.

Two Burmese army defectors have recently claimed the military state was developing a nuclear-weapons program with North Korea, but Admiral Keating said he had seen "no direct evidence".

"If, of course, is of some concern to us if there's any remote resemblance to the truth in the report," Admiral Keating said.

North Korea is still considered part of the axis of evil, a term coined by former US president George W Bush in 2002, he said.

"It's a rogue nation. We watch very carefully day-to-day military activity."

Asked about NATO's desire for more Australian troops to be deployed in Afghanistan, Admiral Keating said apart from expressing "very strong" gratitude to Air Chief Marshal Houston, he had no specific message.
SKorea to provide nuclear training
The Myanmar Times
August 31 - September 6, 2009
Volume 25, No. 486
By Ye Lwin

SOUTH Korea is to provide training to officials and technicians from Myanmar and other ASEAN countries on nuclear energy.

The offer was made during the 27th ASEAN Energy Ministerial Meeting held in Mandalay in late July.

Mr Park Kil Chae, first secretary of the South Korean embassy in Yangon, said the South Korean government had agreed with ASEAN member countries to provide technical know-how on nuclear power stations in order to reduce the burning of fossil fuels and to help protect the environment.

During each year of the three-year program, which is scheduled to run from 2009 to 2011, South Korea will select 50 senior officials and technicians from ASEAN member countries, including Myanmar, for training.

“Altogether 150 technicians and senior government officials from ASEAN countries will be provided with training for the whole program,” said Mr Park.

Training for senior government officials will take 10 days while the training for technicians will be conducted over three weeks.

According to Mr Park, South Korea operates 20 nuclear power plants.
Burma could face ASEAN expulsion if it goes nuclear

Reporting by Than Win Htut
Sept 10, 2009 (DVB)–

Burma may be forced to revoke its membership of a regional Asia bloc if it is found to be building a nuclear plant for weapons, the bloc’s chief said last week.

Although no hard evidence has emerged of Burma becoming nuclear, speculation over the regime’s ambitions has heightened in recent months.

A report released in August after two years of investigations by an Australian academic and a Thailand-based journalist quoted two Burmese defectors as alleging that the government is attempting to construct a nuclear plant in the country’s north.

The United States has also expressed concern about the growing relationship between Burma and North Korea, whom earlier this year confirmed it had carried out a nuclear test.

ASEAN, which by protocol follows a policy of non-interference in domestic matters of member states, appears to be increasingly uneasy about Burma’s membership of the bloc.

Thailand, who holds the revolving ASEAN chair, has said in recent months that continuing unrest in Burma is tarnishing the bloc’s image, an issue that will no doubt be compounded by rumours of a nuclear Burma.

The general secretary of the Association of Southeast Asian Nations (ASEAN), Surin Pitsuwan, said on Saturday [2009-09-05] that Burma could face expulsion if a nuclear plant is found, the Thai News Service reported today.

ASEAN has a status as a nuclear-free zone, following a 1995 treaty signed in Bangkok.

“It’s a long-standing ASEAN instrument that we wish for Southeast Asia to be a nuclear weapons-free zone,” a Thai foreign ministry official told DVB today.

“It’s nuclear weapons that we are talking about; I don’t believe it applies to nuclear energy.”

What appears to be growing cooperation between Burma and North Korea was brought to light earlier this year following the revelation by DVB of North Korean involvement in a network of suspected military tunnels running throughout Burma.

Furthermore, a North Korean ship being tracked by the US navy on suspicion of carrying weaponry appeared to be heading towards Burma, before turning around.
Junta Cracks Down on Internet Access in Ministries
By AUNG THET WINE
Friday, September 11, 2009

Government ministries in Burma have clamped down on civil servants accessing the Internet because of leaked information to Burmese exile media, according to sources in Naypyidaw.

The ministries include the Ministry of Defense, Ministry of Home Affairs, Ministry of Finance and Revenue, Ministry of Commerce, Ministry of Foreign Affairs, Ministry of Hotels and Tourism and the Ministry of Industry No.1, said the source.

An employee in the Ministry of Commerce in Naypyidaw said that information from confidential files detailing the work of high officials with foreign countries, especially North Korea, have appeared in the exile media, including The Irrawaddy.

The source said that the order was posted by the ministry’s director-general. Government workers who need to use the Internet now must request permission.

Also, workers are now restricted to using government e-mail accounts assigned to them, and they may not use non-government accounts at work.

Sources said the speed and efficiency of work has been greatly reduced, because people routinely need to access the Internet for information.

A Rangoon civil servant said, “Before I could look at exile media news from my office. But, after exile media reported about Burma’s plans to acquire nuclear technology, they blocked Internet access at our office.”

A computer technician in Rangoon said, “Our government is trying to move backward, while many other developing countries are trying to move forward.

“They often boast that they will implement e-government systems within ministries. If they want to do that, why are they restricting the Internet?” he said.

According to the CIA World Fact Book, there were 70,000 Burmese Internet users in 2007 and 108 internet hosts in 2008, while Thailand had 13.4 million Internet users and 1.1 million Internet hosts in the same period. Internet speed in Burma is normally slow compared to neighboring countries.

Since September 2007, the junta has viewed Internet users as a threat to military control of information. The international community learned of the junta’s brutal crackdown on pro-democracy demonstrations in 2008 through reports from private citizens posted on the Internet.

The authorities post notices in Internet shops in Burma that warn customers accessing banned Web sites is against the law.
Concerns about military co-operation between North Korea and Myanmar have heightened since June when a North Korean freighter destined for Myanmar was suspected of carrying military cargo in violation of UN Security Council sanctions.

Bilateral co-operation between the two countries has increased, focusing on conventional military transfers. North Korean experts also appear to have been covertly assisting Myanmar in constructing an extensive tunnel network as emergency shelters for military personnel and equipment.

Allegations that Pyongyang is providing assistance to Myanmar's ruling junta in installing nuclear research reactors and uranium prospecting appear far-fetched. No evidence - satellite imagery or eyewitness - has emerged of this.

Myanmar has plenty of reasons to pursue a nuclear programme and North Korea to supply one. Naypyidaw fears external military intervention, and may perceive a deliverable nuclear weapon as an ultimate security guarantee. Pyongyang continues to desire foreign currency, and the sale of nuclear technology or expertise could be one source. However, a deliverable nuclear arsenal remains far beyond what Myanmar can currently achieve and afford.

Whether or not in nuclear co-operation, North Korean-Myanmar relations are set to intensify. Conventional military transfers are set to continue, with Myanmar seeking to procure further equipment to aid its counter-insurgency campaigns near its borders.
Remarks At United Nations After P-5+1 Meeting

Hillary Rodham Clinton
Secretary of State
United Nations
New York City
September 23, 2009
Date: 09/23/2009
Description: Remarks by Secretary Clinton at UN Headquarters after the P-5+1 Meeting.

[EXCERPT]

SECRETARY CLINTON: (In progress) to give you brief readouts on two meetings this afternoon. The first was a meeting I participated in called by Security Council Ban Ki-moon about the policies and approaches toward Burma. A number of countries were represented, and I reported that our policy process, which has been underway for some time now, is almost complete, and I gave a preview.

I had announced this review back in February, and the major messages are as follows. First, the basic objectives are not changed. We want credible, democratic reform; a government that respond to the needs of the Burmese people; immediate, unconditional release of political prisoners, including Aung San Suu Kyi; serious dialogue with the opposition and minority ethnic groups. We believe that sanctions remain important as part of our policy, but by themselves, they have not produced the results that had been hoped for on behalf of the people of Burma.

Engagement versus sanctions is a false choice, in our opinion. So going forward, we will be employing both of those tools, pursuing our same goals. And to help achieve democratic reform, we will be engaging directly with Burmese authorities. This is a policy that has broad consensus across our government, and there will be more to report as we go forward.
U.S. Policy Toward Burma

Kurt M. Campbell
Assistant Secretary, Bureau of East Asian and Pacific Affairs
Washington, DC
September 28, 2009

[EXCERPTS]

ASSISTANT SECRETARY CAMPBELL: Thank you, P.J., and it’s great to see so many friends here. This is my first time in front of the podium, so I’m going to take a variety of questions, if that’s possible.

Let me first underscore that last week was a big week for us in the Asia Pacific region. I think all of you know the President and the Secretary had a series of meetings with our friends and allies in the Asia Pacific region. President Obama met both in Pittsburgh and in New York with President Hu, had a broad range of discussions on North Korea, on Iran, on climate change, on a variety of economic and trade-related issues. The President also met with new Japanese Prime Minister Hatoyama to discuss our vital, important partnership and the direction ahead. We also had strong meetings between the President – between the Secretary and her counterparts in several key countries in Asia.

The Secretary also, on Wednesday, had a meeting of the Friends of Burma, and at that meeting she rolled out some of our initial views concerning the Burma review, which is going to be fully discussed this week on Capitol Hill and also with other key players. There will be testimony before the Senate subcommittee on Wednesday; I will appear before that, before Senator Webb and the committee.

I’d like now, if possible, to read a relatively long statement. I apologize for the detail, but it will give you some context in terms of our overall review and what we’ve concluded over the course of these last seven months.

In terms of the background, the Administration launched a review of Burma policy seven months ago, recognizing that the conditions in Burma were deplorable and that neither isolation nor engagement, when implemented alone, had succeeded in improving those conditions. Throughout this review, the Administration consulted closely with Congress, the international community, and a wide range of stakeholders inside Burma, including the National League of Democracy.
For the first time in memory, the Burmese leadership has shown an interest in engaging with the United States, and we intend to explore that interest. In addition, concerns have emerged in recent days about Burma and North Korea’s relationship that require greater focus and dialogue.

What are the strategic goals and interests of this approach? We have reaffirmed our fundamental goals in Burma. We support a unified, peaceful, prosperous, and democratic Burma that respects the human rights of its citizens. To that end, we will continue to push for the immediate and unconditional release of Aung San Suu Kyi and all political prisoners, an end to conflicts with ethnic minorities and gross human rights violations, and initiation of a credible internal political dialogue with the democratic opposition and ethnic minority leaders on elements of reconciliation and reform.

We will also press Burma to comply with its international obligations, including on nonproliferation, ending any prohibited military or proliferation-related cooperation with North Korea, and full compliance with United Nations 1874 and 1718.

If Burma makes meaningful progress towards these goals, it will be possible to improve the relationship with the United States in a step-by-step process. We recognize that this will likely be a long and difficult process, and we are prepared to sustain our efforts on this front.

Burma’s continued estrangement from the international community harms the country and has direct negative consequences beyond Burma’s borders. Burma’s engagement with the outside world has the potential to encourage new thinking, reform, and participation in the work of the international community.

In terms of engagement, we intend to begin a direct dialogue with Burmese authorities to lay out a path towards better relations. The dialogue will include specific discussion of democracy and human rights inside Burma, cooperation on international security issues such as nonproliferation and compliance with 1874 and 1718, and areas that could be of mutual benefit such as counternarcotics and recovery of World War II era remains.

[deletia]

QUESTION: How do you – Jill Dougherty from CNN.

ASSISTANT SECRETARY CAMPBELL: Hi, Jill.

QUESTION: How do you square this apparent approach that they have with the alleged cooperation with North Korea?

ASSISTANT SECRETARY CAMPBELL: Well, first of all, I think that Burma has done a variety of things. We think they did play a positive role behind the scenes recently in terms of some steps associated with the implementation of 1874, UN Resolution 1874, and we have noted that in public. And so that willingness to play a more responsible role in the realm of international sanctions support vis-à-vis North Korea has been factored into our overall approach. The truth is that we’ve had so little dialogue with Burma over the course of the last several years that we’re still looking for a clear indication of the direction of its leadership in terms of what it seeks in terms of international engagement.
We’ve seen much more engagement of Burma, particularly at the level of economic engagement and other kind of interactions, both with China, with India, and other countries in Southeast Asia. It’s possible that they seek to diversify those contacts to include the United States, and we intend to explore that over the course of the next several weeks again.

Yes.

QUESTION: Andy Quinn from Reuters.

ASSISTANT SECRETARY CAMPBELL: Hi, Andy?

QUESTION: It’s sort of a follow-up question. You talked about asking the Burmese to stop whatever prohibited contacts they may have had with the North Koreans. Are you willing to let us know what your assessment is of the current state of their contacts, where they’re making deals and what these sorts of deals might be?

ASSISTANT SECRETARY CAMPBELL: I don’t think I can go very much beyond what Secretary Clinton said at the ASEAN Regional Forum a few months ago in July, late July. She underscored at that time that there clearly were some areas of interaction on the military side, and perhaps even beyond that, between North Korea and Burma that raised concerns not just for the United States, but also for countries in the immediate region. And one of our goals over the course of this period of strategic review have been discussions with Thailand, with Indonesia, with the Philippines, with China. And I think there is a greater desire on the part of these regional partners for the United States to have a direct dialogue with Burma about aspects of their relationship with North Korea that we’re seeking to gain greater clarity into.

[deletia]
U.S. Senate Committee on Foreign Relations

Verbatim: Lugar statement on Burma
Last updated: September 30, 2009 12:07 p.m.

U.S. Senate Foreign Relations Committee Ranking Member Dick Lugar submitted the following statement for the record for today’s hearing on Burma before the East Asian and Pacific Affairs Subcommittee of the Foreign Relations Committee:

Thank you, Chairman Webb for holding this hearing to review U.S. policy toward Burma, and I also extend appreciation to Senator Inhofe for his work as Ranking Member on the East Asian and Pacific Affairs Subcommittee.

This hearing is timely given the Obama Administration’s review of the United States’ policy on Burma.

As the United States contemplates policy options, we will, I hope, compare notes with other countries actively engaged in Burma.

China, Japan, India, Thailand, Singapore and South Korea are among those nations who are direct witness to the deteriorating education and healthcare infrastructure within Burma. The mismanagement of Burma’s economy started long before imposition of U.S. sanctions.

At a massive cost to themselves and the United Nations, Thailand and Malaysia receive hundreds of thousands of migrants and refugees, largely ethnic minorities, who continue to flee Burma.

More than 50,000 persons have now applied through UNHCR offices in Malaysia and Thailand for resettlement to a third country. Ten thousand Burmese refugees have now resettled in my home state of Indiana.

The Obama Administration’s policy review includes reference to the growing North Korea–Burma relationship.

The United States has a responsibility to our friends and allies throughout Asia to oppose actively the possible proliferation of weapons of mass destruction to or from Burma.
Since I first discussed the troubling prospects of renewed ties between these two countries in 2004, the Foreign Relations Committee has repeatedly raised the issue of Burma’s growing relationship with North Korea with a wide array of U.S. Administration officials.

For example, we have questioned the basis for hundreds of Burmese officials going to Russia for technical education which included nuclear technology training. The number of persons traveling to Russia for specialized training seemed to be far beyond the number needed for the eventual operation of a nuclear reactor for medical research purposes, intended to be built by the junta with Russian government assistance.

Burma’s multiple uranium deposits, reports of uranium refining and processing plants, and its active nuclear program reportedly assisted by North Korea collectively point to reason for concern in a country whose officials resist transparency.

Dr. Sigfried Hecker, Director Emeritus of Los Alamos National Laboratory and now Co-Director of the Center for International Security and Cooperation at Stanford University recently wrote, "The A.Q. Khan network connected companies, individuals and front organizations into a dangerous proliferation ring. The revelations of the North Korean reactor in Syria, along with developments in Iran and Burma, appear to point toward a different type of proliferation ring --- one run by national governments, perhaps also assisted by other clandestine networks".

Mr. Chairman, today’s witnesses represent distinguished experts on Burma. I am pleased to introduce a Hoosier, Professor David Williams, Executive Director of the Center for Constitutional Democracy at Indiana University, who has extensive background on Burma-related issues. Again, Mr. Chairman, thank you for holding today’s hearing.
Mr. Chairman, Senator Inhofe, and Members of the Subcommittee, thank you for inviting me here today to testify about U.S. policy toward Burma and a possible new direction for U.S.-Burma relations.

Let me take this opportunity to brief you on the overarching assessments that helped shape our review. The Administration launched a review of our Burma policy seven months ago, recognizing that political and humanitarian conditions in Burma were deplorable. Neither sanctions nor engagement, implemented alone, have succeeded in improving those conditions and moving Burma forward on a path to democratic reform.

Moreover, it was clear to us that the problems Burma presents, not only to its people, but to its neighbors, the wider region and the world at large, demand that we review and reconsider our approach. In addition to taking a hard look at the current situation inside Burma, we also focused on emerging questions and concerns regarding Burma’s relationship with North Korea, particularly in light of the passage of UN Security Council Resolution 1874, which prohibits member states from engaging in trade with North Korea in virtually all conventional weapons as well as in sensitive technologies, including those related to ballistic missiles and nuclear and other WMD programs.

We will also discuss our proliferation concerns and Burma’s close military relationship with North Korea. Burma has said it is committed to comply fully with UN Security Council Resolutions 1718 and 1874. Nevertheless, we remain concerned about the nature and extent of Burma’s ties with North Korea. Full and transparent implementation of these resolutions is critical to global peace and security, and we will be looking to the Burmese authorities to deliver on their commitments.
In parallel to the dialogue on our core democracy, human rights and nonproliferation concerns, we hope to identify some initial positive steps the Burmese could take in other areas that would help build momentum in the talks and could potentially allow the United States to respond in an appropriate manner. There are a number of areas in which we might be able improve cooperation to our mutual benefit, such as counter-narcotics, health, environmental protection, and the recovery of World War II-era Missing-in-Action remains.

[deletia]
WASHINGTON – Evidence that Myanmar and North Korea are exchanging weapons and even nuclear material isn’t conclusive, an Obama administration official said Wednesday, “but it is a concern.”

Kurt Campbell, the assistant secretary for East Asia and Pacific affairs, told a Senate committee that derailing those ties is part of the reason to have direct talks with Myanmar’s military rulers.

Last week, Secretary of State Hillary Rodham Clinton said the U.S. would keep its trade ban against Myanmar but would attempt to talk to the government because “engagement versus sanctions is a false choice.”

Direct talks would reverse the U.S. policy of trying to freeze out the military rulers who have been in control for two decades. Campbell said he had discussions in New York this week with a top official.

Campbell said the conversation was just a first step in thawing relations. But he said the overtures are an important step in the effort to nudge Myanmar’s rulers in the direction the U.S. and other Western countries want.

Asked whether there is any indication that Myanmar is violating a U.N. resolution that prohibits members of the United Nations from buying or selling weapons – including nuclear weapons – with North Korea, Campbell said he did not want to answer in a public hearing.

But he said there is evidence the trade “has extended into areas that are prohibited” by the U.N. resolution.

“One of the goals of this dialogue between the United States and Burma is to make very clear what our expectations are in this respect,” he said.

[deletia]
Don't lift Myanmar sanctions
Sep 30, 2009

WASHINGTON - THE United States cannot 'even consider' easing sanctions on Myanmar until the military-led country has freed all political prisoners, including Aung San Suu Kyi, a top US Senator said on Tuesday.

Republican Senate Minority Leader Mitch McConnell also said that the punitive measures should remain in force unless Myanmar holds free and fair elections in 2010 that include opposition and ethnic groups.

'There remain two significant tests of whether or not Burma's relationship with the United States has improved to the degree that we should even consider moving away from a policy of sanctions,' Mr McConnell said in a statement.

'The United States must also insist that Burma comply with its international obligations and end any prohibited military or proliferation related cooperation with North Korea,' said the senator.

His comments came as the US State Department said that, as part of a new policy of engagement, one of its top diplomats would meet on Tuesday with a delegation from Myanmar on the margins of the UN General Assembly.

State Department spokesman Philip Crowley said at a press briefing in Washington that Kurt Campbell, assistant US secretary of state for Asia, was to meet in New York today with a delegation headed by Myanmar's science and technology minister U Thaung.

Myanmar's representative to the United Nations, Than Swe, is also expected to participate.

The meeting comes after the United States announced Monday it was starting a dialogue with the military-led Myanmar, though it insisted it would keep sanctions in place until the regime makes progress on democracy.

On Monday, Campbell announced that President Barack Obama's administration had decided to reengage Myanmar after years of stalemate proved unproductive. -- AFP
QUESTION: Yeah, can you take my question? One on Burma, the meeting yesterday – how was it yesterday morning in New York? What issue discussed?

MR. CROWLEY: Assistant Secretary Kurt Campbell and Deputy Assistant Secretary Scot Marciel did meet yesterday in New York with a Burmese delegation headed by U Thaung, the Burmese minister for science and technology. Burma’s permanent representative to the United Nations, Than Swe, also participated in these discussions. I think we’d characterize it as an introductory meeting – obviously, the first meeting of this kind in many, many years.

And so I think it’s, from our standpoint, the opening stage of an interaction. From our side, we discussed a number of issues, obviously, including the status of political prisoners, including Aung San Suu Kyi, the issue of ethnic conflict and dialogue between the Government of Burma and various ethnic groups within the country. We talked about our concerns about Burma’s relationship with North Korea, our proliferation concerns associated with that. I think it was a cautious beginning and an initial meeting, and will obviously require time and patience as we continue these discussions.

QUESTION: Is there any timeline for these meetings? How long does it go and when is the next meeting?

MR. CROWLEY: The meeting yesterday happened – it lasted a couple of hours, maybe a little bit longer than we had expected.

QUESTION: Two hours?

MR. CROWLEY: Yeah.

QUESTION: Both within the UN premises or outside? Was it within the UN premises, that – the United Nations?

MR. CROWLEY: I believe it was at the Waldorf-Astoria.
QUESTION: Thank you. Yeah, just – when you said that you discussed Aung San Suu Kyi and ethnic minorities and so on, you raised your longstanding concerns and demands that Aung San Suu Kyi be released, along the --

MR. CROWLEY: Absolutely, yes.

QUESTION: Okay. And the same thing on the ethnic minorities, the long – okay.

MR. CROWLEY: Yes.

QUESTION: And then why is it appropriate to talk to the minister of science and technology? Why is this the right person?

MR. CROWLEY: For this meeting, and just to explain a little bit that over time, we’ve received indications from the Burmese that they had an interest in this kind of dialogue. We heard it also from other parties in the region. So – but for this particular meeting, the minister for science and technology was designated as the lead official.

QUESTION: For that – I mean, I realize it’s the – Myanmar’s choice who they want to send to the meeting with you guys. What I don’t get, though, is why you think this is the right person. I mean, does --

MR. CROWLEY: Well, I’m being careful.

QUESTION: Yeah.

MR. CROWLEY: This was the individual that they designated for this first meeting. I’m not suggesting that he will be the interlocutor for future meetings. That’s not – obviously, you’re right. It’s up to the Burmese.

QUESTION: Okay, and then two other things on this. One, when was the – you know, there is a slight propensity to feel as if the world is entirely new. But in fact, Scot Marciel met with Myanmar officials in July. So what’s new here is that it’s at the assistant secretary level from the U.S. side. When was the last time that a U.S. assistant secretary or somebody of a similar rank met with the Myanmar authorities?

MR. CROWLEY: That’s a fair question. It might be a matter of decades.
Myanmar says nuclear ambitions are peaceful: Japan
By Ek Madra
Sat Oct 3, 2009 10:52am EDT

SIEM REAP, Cambodia (Reuters) - Japan said on Saturday it had been assured by military-ruled Myanmar that it was not developing nuclear weapons even though it was working with Russia on a nuclear energy program.

Myanmar has remained tight-lipped about its nuclear plans, despite speculation it has been receiving help from North Korea to build nuclear facilities near its remote capital with the intent of developing a weapon.

Myanmar's Foreign Minister Nyan Win told his Japanese counterpart Katsuya Okada that his country was seeking Russia's expertise, but only in developing a peaceful energy program for its people.

"(Nyan Win) told Japan's foreign minister that Myanmar has no intention to have a nuclear weapon," Japan's Foreign Ministry spokesman Kazuo Kodama told reporters on the sidelines of a Mekong-Japan ministerial meeting in Siem Reap, Cambodia.

"Myanmar has conducted a consultation to have assistance from Russia for a peaceful use of nuclear energy."

Kazuo did not say if the issue of any nuclear links with North Korea was discussed.

Academic researchers said in August Myanmar was building a secret nuclear reactor and plutonium facility in caves tunneled into a mountain, citing intelligence from two defectors.

The defectors also said Myanmar, which has known reserves of uranium ore, had provided refined "yellowcake" processed uranium that can be used as nuclear fuel to Iran and North Korea.

The isolated country has been under Western sanctions for two decades and analysts say a nuclearized Myanmar could trigger an arms race in the region.

U.S. Secretary of State Hillary Clinton said at a security forum in Thailand in July that she was concerned about the possible transfer of nuclear technology to Myanmar from North Korea.

In reference to ties between North Korea and Myanmar, U.S. Assistant Secretary of State Kurt Campbell, the top U.S. diplomat for Asia, said there were "some signs that that cooperation has extended into areas that would be prohibited.

However, many analysts have said evidence of attempts to develop nuclear weapons is scant and have questioned the reliability of the defectors' information.

(Writing by Martin Petty; Editing by Alison Williams)
Nuclear bond for North Korea and Myanmar
By Norman Robespierre
Oct 4, 2008

YANGON - A recent flurry of high-level contacts between North Korea and Myanmar raises new nuclear proliferation concerns between the two pariah states, one of which already possesses nuclear-weapon capabilities and the other possibly aspiring.

At least three delegations led by flag-level officers from Myanmar's army have traveled to Pyongyang in the past three months, hot on the heels of the two sides' re-establishment last year of formal diplomatic relations. According to a source familiar with the travel itineraries of Myanmar officials, Brigadier General Aung Thein Lin visited North Korea in mid-September.

Before that, other Myanmar military delegations visited North Korea, including a group headed in August by Lieutenant General Tin Aye, chief of the Office of Chief Defense Industries, and another led in July by Lieutenant General Myint Hlaing, the chief of Air Defence.

The rapid-fire visits have gone beyond goodwill gestures and the normal diplomatic niceties of re-establishing ties. Rather, the personalities involved in the visits indicate that Myanmar is not only seeking weapons procurements, but also probable cooperation in establishing air defense weaponry, missiles, rockets or artillery production facilities.

The secretive visits are believed to entail a Myanmar quest for tunneling technology and possible assistance in developing its nascent nuclear program. Tin Aye and Myint Hlaing, by virtue of their positions as lieutenant generals, are logical choices to head official delegations in search of weapons technology for Myanmar's military, while Brigadier General Aung Thein Lin, current mayor of Yangon and chairman of the city's development committee, was formerly deputy minister of Industry-2, responsible for all industrial development in the country.

Prior to 1998, the minister of Industry-2 also served as the chairman of the Myanmar Atomic Energy Committee. This came to an end when Myanmar's Atomic Energy Act of 1998 designated the Ministry of Science and Technology as the lead government agency for its aspirant nuclear program. However, the Ministry of Industry-2, by virtue of its responsibilities for construction of industrial facilities and the provision of equipment, continues to play a key supporting role in Myanmar's nuclear program.

Myanmar's stagnant nuclear program was revitalized shortly after Pakistan's first detonation of nuclear weapons in May 1998. Senior general and junta leader Than Shwe signed the Atomic Energy Law on June 8, 1998, and the timing of the legislation so soon after Pakistan's entry into the nuclear club did little to assuage international concerns about Myanmar's nuclear intentions. Some analysts believe the regime may eventually seek nuclear weapons for the dual purpose of international prestige and strategic deterrence.

Myanmar's civilian-use nuclear ambitions made global headlines in early 2001, when Russia's Atomic Energy Committee indicated it was planning to build a research reactor in the country. The following year, Myanmar's deputy foreign minister, Khin Maung Win, publicly announced the regime's decision to build a nuclear research reactor, citing the country's difficulty in importing radio-isotopes and the need for modern technology as reasons for the move.
The country reportedly sent hundreds of soldiers for nuclear training in Russia that same year and the reactor was scheduled for delivery in 2003. However, the program was shelved due to financial difficulties and a formal contract for the reactor, under which Russia agreed to build a nuclear research center along with a 10 megawatt reactor, was not signed until May 2007.

The reactor will be fueled with non-weapons grade enriched uranium-235 and it will operate under the purview of the International Atomic Energy Agency, the United Nations' nuclear watchdog. The reactor itself would be ill-suited for weapons development. However, the training activities associated with it would provide the basic knowledge required as a foundation for any nuclear weapons development program outside of the research center.

**Constrained reaction**

The United States' reaction to Myanmar's nuclear developments has been somewhat constrained, despite the George W Bush administration referring to the military-run country as an "outpost of tyranny".

After Myanmar's 2002 confirmation of its intent to build the reactor, the US warned the country of its obligations as a signatory to the nuclear Non-Proliferation Treaty (NPT). After the contract was formally announced in May 2007, the US State Department expressed concerns about the country's lack of adequate safety standards and the potential for proliferation.

The warming and growing rapport between Myanmar and North Korea will likely further heighten Washington's proliferation concerns. Myanmar broke off diplomatic relations with Pyongyang in 1983, after North Korean agents bombed the Martyr's mausoleum in Yangon in an attempt to assassinate the visiting South Korean president, Chun Doo-hwan.

The explosion killed more than 20 people, mostly South Korean officials, including the deputy prime minister and the foreign minister, and the South Korean ambassador to Myanmar. Four Myanmar nationals perished and dozens more were wounded in the blast. Myanmar severed ties with North Korea after an investigation revealed the three agents responsible for planting the bomb spent the night at a North Korean diplomat's house before setting out on their mission.

However, common interests have brought the two secretive nations back together. The famine in North Korea in the late 1990s and Myanmar's military expansion ambitions, including a drive for self-sufficiency in production, have fostered recent trade flows. While Myanmar has the agricultural surplus to ease North Korean hunger, Pyongyang possesses the weapons and technological know-how needed to boost Yangon's military might. There is also speculation Myanmar might provide uranium, mined in remote and difficult-to-monitor areas, to North Korea.

As testament to Pyongyang's willingness to supply weapons to the military regime, more North Korean ship visits have been noted at Thilawa port in Yangon, one of the country's primary receipt points for military cargo. During one of these visits in May 2007, two Myanmar nationals working for Japan's News Network were detained outside Yangon while covering a suspected arms delivery by a North Korean vessel.

Growing bilateral trade has helped to heal old diplomatic wounds and eventually led to a joint communique re-establishing diplomatic relations in April 2007. The emerging relationship is also a natural outgrowth of the ostracism each faces in the international arena, including the economic sanctions imposed and maintained against them by the West.

While it is possible the recent visits are related to Myanmar's nascent nuclear program, the evidence is far from conclusive. Nevertheless, Myanmar has undoubtedly taken notice of the respect that is accorded to North Korea
on the world stage because of its nuclear weapon status. Unlike North Korea, Myanmar is a signatory to the NPT.

Myanmar has publicly stated it seeks nuclear technology only for peaceful purposes, such as developing radio-isotopes for agricultural use and medical research. Yet two well-placed sources told this reporter that North Korean and Iranian technicians were already advising Myanmar on a possible secret nuclear effort, running in parallel to the aboveboard Russia-supported program. Asia Times Online could not independently confirm the claim.

The lack of participation by Myanmar's Ministry of Science and Technology in the recent trips to Pyongyang would seem to indicate that nuclear developments were probably not the primary focus of the high-level meetings. The regime is also known to be interested in North Korea's tunneling technology (see Myanmar and North Korea share a tunnel vision, Asia Times Online, July 19, 2006 ) in line with the ruling junta's siege mentality and apparent fears of a possible US-led pre-emptive military attack.

[http://www.atimes.com/atimes/Southeast_Asia/HG19Ae01.html]

The junta and others have no doubt noted the extraordinary problems tunneling and cave complexes have caused US forces in Iraq and Afghanistan, not to mention the success North Korea has enjoyed in hiding underground its nuclear facilities. Bunkers are rumored to underlie several buildings at Naypyidaw, where the regime abruptly moved the national capital in 2005. The ongoing construction of a second capital, for the hot season, at Yadanapon, is also believed to have tunnels and bunkers integrated into its layout.

Whether the visits are related to arms procurement, military industrial development, tunneling technology or nuclear exchange, they foreshadow a potentially dangerous trend for Myanmar's non-nuclear Southeast Asian neighbors and their Western allies, including the US.

As the true nature of the budding bilateral relationship comes into closer view, the risk is rising that Pyongyang and Yangon are conspiring to create a security quandary in Southeast Asia akin to the one now vexing the US and its allies on the Korean Peninsula.

Norman Robespierre, a pseudonym, is a freelance journalist specializing in Sino-Asian affairs.
New US Policy has Multiple Goals
By SIMON ROUGHNEEN
The Irrawady
Monday, October 5, 2009

[EXCERPTS]

Mere days after the US announced it would alter its Burma policy, the Burmese courts refused to release Aung San Suu Kyi from house arrest. While her appeal was never likely to succeed, the timing of the denial arrives as a clear signal that change will not come quickly in Burma.

Not that anyone was expecting it. Addressing a Senate Foreign Relations Committee hearing on Burma in Washington last week, Kurt Campbell, the assistant secretary of the Bureau of East Asian and Pacific Affairs, acknowledged that “a long and difficult process” lay ahead. Tough US sanctions, Campbell said, will remain in place until the United States sees "concrete progress toward reform" in Burma, and he added that more sanctions could be imposed if changes are not forthcoming.

[deletia]

US interests are both stated and unstated. Allegations that the junta is working with North Korea on nuclear technology have neither been proven nor disproven. However, the US is taking this seriously.

In his testimony, Campbell said: “We also focused on emerging questions and concerns regarding Burma’s relationship with North Korea, particularly in light of the passage of UN Security Council Resolution 1874, which prohibits member states from engaging in trade with North Korea in virtually all conventional weapons as well as in sensitive technologies, including those related to ballistic missiles and nuclear and other WMD programs.”

The US wants to bring Burma more closely into its counter-proliferation activity, which, in general, has met with varied success. Despite entreaties from the White House, North Korea tested missiles earlier this year, and Iran's second, “secret” facility at Qom led to a behind-the-scenes dispute between President Obama on the one hand, and French President Sarkozy and UK Prime Minister Brown on the other, at the UN.

In keeping with the non-proliferation theme at the UN, the junta offered what could be a subtle hint to the US about what is on the table. Prime Minister Thein Sein said the following in his address to the UN General Assembly last week -

“The continued existence of weapons of mass destruction, particularly nuclear weapons, poses the greatest threat to mankind. Myanmar believes that the total elimination of nuclear weapons is the single absolute guarantee against the threat or use of those weapons.”

[deletia]
Assistant Secretary Campbell: Thank you very much. I’m really sorry to keep you waiting. It’s a fairly busy schedule here in Beijing.

Then over the last two days I’ve been in China here having intensive consultations with the Ministry of Foreign Affairs, the Education Ministry, and the Ministry of Defense. Our agenda has been full and very broad. I’ve been trying to lay some of the ground work for the upcoming, historic visit of President Obama to China in mid-November. We’re working on many initiatives.

We also had detailed discussions on a range of regional and global matters. I compared notes on the recent visits of senior Chinese leaders to North Korea. We talked about the coordination among the six parties about the next steps associated with North Korea. Our Chinese friends briefed us on the trilateral meeting between the leaders of Japan, South Korea, and China that took place over the course of the weekend. We talked about efforts on the part of the United States to get greater Chinese support for our activities vis-à-vis Iran, making very clear our desire to diplomatically make clear to Iran our strong desire to have them suspend their nuclear activities. We talked about mutual efforts and goals in Afghanistan and Pakistan.

I had a new set of discussions with Chinese interlocutors, to brief them on our recently concluded review of Burma policy and to tell them about the upcoming diplomatic steps that we will be taking. We talked a little bit about the United States’ efforts at APEC in Singapore and the U.S.-ASEAN Summit that will be held there.

Question: Thank you, from Reuters. First of all, in the review of Burma policy could you tell us more about your discussions here? In particular, what role you see China playing in that country, and what potential role you see in shifting policy there.
Also I was wondering if you could sketch out your expectations for President Obama’s visit. Especially you mentioned discussion on climate change. What do you see emerging there?

Assistant Secretary Campbell: I don’t want to dodge your second question, but I do want to say there is an incredibly intricate set of working groups - technical and political - that are underway between the United States and China, and those negotiations are advanced and they take place on a daily basis. I’m really not up to date to the moment.

I think my biggest role in our deliberations with Chinese friends is to underscore how important it is for the United States and China to take a leadership role and that we have to be very wary of how much is resting on our need to coordinate in this regard.

On the question of Burma policy, one of the things that Senator Webb, who is the head of our East Asia and Pacific Subcommittee in the United States Senate, has been very clear about is his strong desire that the United States - in addition to a dialogue with the junta and with elements of the opposition and ethnic groups within Burma - that there will also be a stepped-up regional diplomacy that would involve not only the key nations of ASEAN, Southeast Asian countries who have a very deep interest in Burma – Thailand, Indonesia, Singapore and others - but also to engage in a much deeper dialogue between India and China.

I would say that this was our first meeting that I’m aware of in which Burma was a principal topic of discussion. My role here was to explain in great detail the process that we took in terms of arriving at our conclusions and our policy review, make clear to China that we would seek their support in this endeavor, and ask for their assessments about what they’re seeing inside - developments both leading up to the 2010 elections and how they see the various military offenses that have been underway inside the country.

China is unique in the sense that they have very high-level, consistent dialogue with members of the military establishment, so we think their insights and their role and support behind the scenes could be very valuable going forward.

I think it would be fair to say that this is still a preliminary consultation. We dealt with an aspect of the Asian Affairs Directorate in the Ministry of Foreign Affairs that has had remarkably little contact with the United States. So we’re going to work with them over the course of the next couple of months as our initial diplomatic steps with Burma unfold.
[Remarks as prepared]

[EXCERPTS]

Mr. Chairman, Ms. Ros-Lehtinen, and Members of the Committee, thank you for inviting me here today to testify about U.S. policy toward Burma and a possible new direction for U.S.-Burma relations.

I appreciate this opportunity to discuss the overarching assessments that helped shape our review. The Administration launched a review of our Burma policy seven months ago, recognizing that political and humanitarian conditions in Burma were deplorable. Neither sanctions nor engagement, implemented alone, have succeeded in improving those conditions and moving Burma forward on a path to democratic reform.

Moreover, it was clear to us that the problems Burma presents, not only to its people, but to its neighbors, the wider region and the world at large, demand that we review and reconsider our approach. In addition to taking a hard look at the current situation inside Burma, we also focused on emerging questions and concerns regarding Burma’s relationship with North Korea, particularly in light of the passage of UN Security Council Resolution 1874. This resolution prohibits member states from engaging in trade with North Korea in virtually all conventional weapons as well as in sensitive technologies, including those related to ballistic missiles and nuclear and other WMD programs.

We will also discuss our proliferation concerns and Burma’s close military relationship with North Korea. Burma has said it is committed to comply fully with UN Security Council Resolutions 1718 and 1874. Nevertheless, we remain concerned about the nature and extent of Burma’s ties with North Korea. Full and transparent implementation of these resolutions is critical to global peace and security, and we will be looking to the Burmese authorities to deliver on their commitments.

We expect engagement with Burma to be a long, slow, and step-by-step process. We will not judge the success of our efforts at pragmatic engagement by the results of a handful of meetings. Engagement for its own sake is obviously not a goal for U.S. policy, but we recognize that achieving meaningful change in Burma will take time.

[deletia]
The Administration’s own senior-level dialogue with the Burmese government began with a first meeting in New York on September 29. I led the U.S. delegation, and my counterpart on the Burmese side was U Thaung, the Burmese Minister for Science and Technology and former Ambassador to the United States. The Burmese Permanent Representative to the UN, Than Swe, also participated in the discussions. These were substantive talks that lasted approximately two hours. We laid out our views clearly and I stressed to U Thaung that this dialogue is an opportunity for Burma if the authorities are ready to move forward. This was an introductory meeting. It will take more than a single conversation to resolve our differences. We intend to go to Burma in the next few weeks for a fact-finding mission. During that trip, we will talk to the Burmese government, representatives of the ethnic nationalities, and the democratic opposition, including the National League for Democracy “Uncles” and Aung San Suu Kyi. We will keep you informed as this process moves ahead.
Dialogue: Far and Away
Thursday, 22 October 2009 11:33 [Date appeared on Google News]
Email: demosternelson@aol.com

To

Mr. Barack Obama
The President of the United States
Mr. Gordon Brown
The Prime Minister of the United Kingdom
Mr. Nicolas Sarkozy
The President of France
Mr. Paro ASO
The Prime Minister of Japan

Date: September 9, 2009

Dear Sirs,

We would like to present the view of Burmese soldiers on behalf of officers and other ranks from within the Burmese military. The West tends to view all Burmese soldiers as ruthless tyrants on par with the military dictators. In our opinion, dialogue between the regime and the opposition seems the only viable option for the West, because the world regards all soldiers as anti-democratic and group them with their superiors. However, in reality, many soldiers favor democracy. The proof is in the 1990 election, in which the opposition NLD convincingly won electoral seats in Mingladon and Dagon Townships, where a majority of those voting were soldiers.

The people of Burma have fulfilled their role well enough for more than twenty years and are now exhausted and tired amidst all sorts of misery. Therefore they understand that only when the military sides with them will they achieve democracy. Or in other words, democratic trailblazers need to arise from within the Army. As we have heard that the United States has passed a policy of engagement on Burma, we would like to introduce some facts about Burma's historical traditions, the nature of the Burmese Army and the characteristics of dictatorial rule in Burma.

Summarizing Burma's political history, good leaders have always adopted political strategies based on the military. General Aung San, who accepted the strategy of winning independence through armed struggle, evaded arrest and cooperated with the Japanese in order to establish an Army to rebel against the British.

When the British re-conquered the country, Aung San mobilized decommissioned reserve forces and pressured the British Government to grant Burma its just independence. Most of post-independence Burma's history is tainted with military-politics. Therefore, democratization in Burma cannot be brought about via Gandhi's non-violent tactics. This fact is evident from the many futile years of Gandhian struggle in Burma.

The nature of the Burma Army includes red-tape control and repressions. Human rights inside the Army are not respected. Meanwhile, ordinary people as well as neighboring Army units cannot learn about the oppression and maltreatment among the troops.
Burma Army's radio communications system stipulates that officers are only to go on air on specified channels. Only under instruction according to regulations set by the Directorate of Signals can they get on a common channel. This means military units cannot easily learn about happenings among themselves.

During the reign of Ne Win, his Personal Assistant (PA), Captain Kyaw Swa Myint, fled to the US. Additionally, Captain Ohn Kyaw Myint, PA to the Chief-of-Staff, disliking the military dictatorship, attempted to organize a pro-democracy mutiny. He was able to win over some senior officers but was eventually betrayed. He sought asylum at the US embassy in Rangoon but was turned down, eventually being found out by authorities and executed. If only the US has stood firmly by him, Burma may have started down the road toward democracy.

When General Than Shwe became the supreme dictator, Captain Win Bo conveyed a letter to him from a revered Buddhist figure. The letter urged the "initiation of dialogue between Daw Aung San Suu Kyi and General Than Shwe for the benefit of country." Captain Win Bo was persecuted for this act, being tortured in Moulmein jail, where he was eventually beaten to death. This shows that calls for dialogue were unproductive even during the time of the opposition's golden days.

General Than Shwe’s character is secretive, shrewd, inconsistent and hard to predict. As soon as he got the top job in 1992, he ordered two projects. One was a rocketry systems and the other is a nuclear weapons project. The rocketry systems project involves long-range and medium-range surface-to-surface missiles, surface-to-air missiles and air-to-air missiles.

Objectives of the missile system include the capacity to threaten US bases in Thailand, Taiwan and the Philippines with nuclear-tipped missiles. With the help of Russian technicians, the junta has already built air defense bases in mountains within the Coastal Region Command area close to US bases in Thailand.

North Korean technicians were stationed secretly at two detached dwellings owned by the Housing Department in Thaketa Township’s Aye Nanda Housing Estate. Due to the previous embargo, arms deals with North Korea were cleared using Soe Min Htike Co. and a barter system. The rocketry project is centered at Defense Industry 10 in Magwe Division’s Upper Minhla Township’s Kongyee village.

South Korean Daewoo Corporation’s acquirement of important natural gas exploration and prospecting rights is also part of the junta's wider scheme, in planning to use it for the transport of arms and military equipment camouflaged as gas production equipment.

We will report later on the second phase of General Than Shwe's plan to expand Burma's military might – possession of nuclear weapons. We will tell your Excellencies why he wants to acquire these and also about a question to which there is as of yet no answer for Burma’s soldiers.

Respectfully,
Pro-democracy officers and other ranks
Burmese Military
A question with no answer yet

Friday, 23 October 2009 11:35 [Date appeared on Google News]

To

Mr. Barack Obama
The President of the United States

Mr. Gordon Brown
The Prime Minister of the United Kingdom

Mr. Nicolas Sarkozy
The President of France

Mr. Paro Aso
The Prime Minister of Japan

Date: September 9, 2009

Dear Sirs,

General Than Shwe wants to acquire nuclear arms because of the United States attack on Iraq. He reckons that if only Iraq possessed nuclear arms in addition to chemical weapons, the US would not have dared attack. Burma’s military dictators realize that possession of nuclear weapons is the reason for the restrained dealing, by the US, toward North Korea. Aware of this catch, Burma’s generals covet a nuclear capacity.

In late 2006, natural gas was found in Arakan State and uranium deposits discovered in Northern Burma. This has only driven Than Shwe crazier in his nuclear dream, pushing the Science and Technology Ministry, Defense Ministry and Directorate of Defense Industries to speed up the work. General Than Shwe has entrusted Defense Industry 20 to head the nuclear project and chose Seitottaya, Pwintbyu, Natmauk, Pyin Oo Lwin and Thabeikkyin Kyauptho as designated areas for nuclear construction and experiments.

Vice-Senior General Maung Aye has been named as the point man in dealing with Russia, while Defense Industries Director and UMEHL boss General Tin Aye is working with North Korea and General Shwe Mann dealing with China.

However, owing to the poor level of learning by returnees from Russia, the junta has been forced to turn to North Korea for nuclear matters. Thus, Senior General Than Shwe sent General Shwe Mann, who was powerful enough to strike a deal, to China on an apparently formal visit but which was in reality to secretly contact North Korea with China's help.

Since 1996, General Than Shwe has adopted a National Defense Strategy which "uses people to control people" by employing entities such as the Fire Squad and Red Cross. Now the junta has even formed an alternative Monk community to divide and rule the clergy.

Therefore, only if we adopt a counter-strategy of "using the Army to control the Army" against the country’s military dictators can we move on toward democracy. Both foreign-based scholars and people inside the country are recommending, expecting and enlisting the Army to achieve democracy.

Soldiers inside the country are asking a question to which there is no answer yet. The question is, "If the soldiers stand by the side of the people, will the nations of the world acknowledge and support them?"
In other words, when soldiers stand by the people's side there will be a bloody revolution. So they would like to know whether your Excellencies are likely to stand by them and render support if such an occasion arises.

Yet, if there is no support and recognition by world leaders, it is certain that Army officers would not spontaneously rise up because of their bitter experiences described in our previous letter. Since the Army can provide international standards of recognition such as a safe haven for MPs, buffer zones, independent armed forces, parliament, federal constitution, etc., it is critical for the Army and the people to unite before 2010.

Your Excellencies are mistaken in that you think too much of your modern IT equipment, facilities, satellite communications, Internet and computers while you think lowly of Burma.

As we have said before, he has manipulated two Koreas which are at loggerheads, employed one country to explore uranium, another country to provide nuclear technology and still another to provide weaponry so as to cover up the tracks of his pursuit of WMD, also linking the nuclear issue with the electricity and energy sector to avoid international scrutiny. Additionally, he successfully switched to an Indian satellite out of fear of the US spying on Thaksin's Thai satellite.

Even General Than Shwe's closest aides do not know what is in his mind. He has a habit of having his plane readied for him by his trusted tycoon friend Tay Za and flying off for a destination which is disclosed only in midflight.

The best spy satellites cannot look into the underground tunnels he has dug. Almost all the people think that Naypyitaw must be his ultimate redoubt, but in fact he has designated and built up Maymyo as his ultimate line of defense.

We know there are countries which the US takes seriously due to its national interest or perceived threat to its security. However, we sadly realize that the US is not much concerned with Burma since it poses neither a national interest nor security threat. But what would happen if Burma acquires nuclear weapons by 2015?

At the time of Cyclone Nargis, a French warship was about to land troops in Burma but the US was hesitant – fearing China – frustrating the Burmese people with the US indecision. Would you believe that most of the lower officers and other ranks of the Burma Army were expecting you at that time? We would like to tell you that they were not going to fight you like Vietnam but lay down their arms and readily welcome US troops coming on shore to help their distressed relatives in the Irrawaddy Division.

The British Prime Minister's open letter at the time of our popular leader Daw Aung San Suu Kyi's recent trial cheered the Burmese people, but the later bailout of John William Yeattaw – facilitated by a US Senator – has since caused further disappointment. As we have said, dialogue is possible only under a relative balance of power. Therefore, only when the power base of the military dictators erodes will they turn up at the negotiating table.

Burmese soldiers who want to side with the people can make it happen to some extent, but are reluctant to do so because of the question to which they have yet to receive an answer. It is necessary to differentiate between the Burma Army led by some Generals that would like to stand by the peoples’ side and the army led by General Than Shwe. As long as dialogue is floated superficially and perfunctorily, the Burmese people will continue to be bored and disillusioned.

Respectfully,
Pro-democracy officers and other ranks
Burmese Military

Email: demosternelson@aol.com
Man sentenced over nuclear arms-convertible exports to Myanmar


YOKOHAMA, Nov. 5 (AP) - (Kyodo)—The Yokohama District Court on Thursday sentenced a company president to two years in prison, suspended for four years, for exporting devices to Myanmar that can be converted for use in making nuclear weapons.

While giving the suspended sentence for violating the foreign trade law to Keiko Ri, 41, the court slapped 6 million yen in fines on his Tokyo-based trading house Toko Boeki.

"These (devices) could be used to produce nuclear weapons. It could have a grave impact on world peace and erode trust in our country," Judge Juichiro Kora said.

The devices can be used to develop centrifuges that could be used to enrich uranium, a process used for nuclear weapons.

The defendant pleaded guilty.

Ri was convicted of exporting three grinding machines to Myanmar from Nagoya port, central Japan, in August and November last year without the permission of the Economy, Trade and Industry Ministry and attempting to export a magnetic measuring instrument to Myanmar from Yokohama port via Malaysia this January.

Prosecutors had demanded two years in prison for Ri and a 7 million yen fine for his company.
AMBASSADOR MARCIEL: Thank you very much, and thank you all for coming. Assistant Secretary Campbell and I just returned last night from a two-day visit to Burma. It was an exploratory mission. The main purpose of the visit was really to explain to the key parties there, and I don’t just mean political parties, but the stakeholders in the country - government, political parties, opposition, ethnic minority groups, et cetera - to kind of explain the context of our recently concluded policy review, but also to hear from them, their views and their ideas.

Let me begin by talking a little bit about the policy review. As you know, Secretary Clinton announced in Jakarta in February that we would begin this policy review and she stated quite clearly at the outset that the reason for the policy review was that our previous approach, which relied heavily on sanctions, had not achieved the desired results. That’s a factual statement.

She also said that the ASEAN approach of engagement had not achieved the results. So the purpose of the review was not really to question the fundamental goals of our approach, but rather to see if there was a more effective way that we could try to bring about positive developments in the country.

So we undertook that review. It went on for quite some time. It was recently concluded a few months ago. The results of that review were first, to reaffirm our fundamental goals for Burma. That we want to see a Burma that is at peace, unified, prosperous, stable, respects the rights of all of its citizens, and is democratic. That hasn’t changed.

What we said, what we concluded in terms of approach, was that we were going to maintain our existing sanctions, even though sanctions by themselves had not worked sufficiently - they were still a valid tool of our policy, so we’re maintaining the existing sanctions pending progress; that we would begin pragmatic engagement with the government; that we would continue our humanitarian assistance to help the people of the country as long as we were confident that that assistance was actually reaching the people and doing what it was intended to do. And we also committed to talk to the Burmese authorities about our concerns about non-proliferation, particularly related to North Korea.

So as part of our pragmatic engagement piece we agreed to begin a dialogue - a senior level dialogue with the government - but also with opposition groups, ethnic minority groups, all of the people who have an important role to play in the country’s future.

We had an introductory meeting in New York, I believe it was late September, where we met with the Burmese Minister of Science and Technology who the government had designated to meet with us, and we sort of laid out
where we were and what we hoped to achieve. Then, as I said, we took this trip the last two days to meet with the government, to meet with others.

We spent a day in Naypyidaw where we met with several government officials, government ministers, including the Minister of Science and Technology [U Thaung]; the Minister of Information; and then yesterday morning, with the Prime Minister as well as with some others.

[deletia]

QUESTION: Mr. Marciel, you mentioned that during these discussions you have also touched on the issue of nuclear proliferation and the contacts between the regime and North Korea. Would you be able in any way to elaborate on that? Thank you.

AMBASSADOR MARCIEL: What I can say is that there have been reports of cooperation and closer relations between Burma and North Korea, including on the military side. There have been things in the press you’ve seen speculating about nuclear cooperation. And I think the situation we’re in is we want to, I think the international community wants to work with the Burmese authorities to find out what the facts are and to impress upon the government the importance particularly of honoring and abiding by UN Security Council Resolution 1874.

[deletia]

QUESTION: I have two questions. One is where does the process go from here? The logistics? I understood that there was going to be appointment of special envoys on both sides. Is Kurt Campbell going to remain the envoy as far as America’s concerned? And U Thaung, the Burmese counterpart?

[deletia]

AMBASSADOR MARCIEL: [deletia] In terms of special envoys, the JADE ACT mandates that we name a special envoy. We are in the process of moving to name a special envoy. Meanwhile, Kurt Campbell and to some extent I are working on that. Once a special envoy is named I think all of us will work together. Exactly how we’ll divide things up is to be seen. On the Burmese side, we understand the Burmese have asked Minister U Thaung to be our counterpart. I haven’t heard anything different and of course that’s up to them.
1. (S) [NAME REMOVED], who on [DETAILS REMOVED] informed Australian Ambassador Chan in Rangoon that Burma and the DPRK were engaged in “peaceful nuclear cooperation” (refel), has changed [DETAILS REMOVED] story. In a November 9 conversation with Ambassador Chan, [NAME REMOVED] said there had been a “misunderstanding.” After Chan’s “blunt” response to the August revelation (Chan had responded with incredulity to the thought that the GOB might consider nuclear cooperation of any sort with the DPRK to be acceptable), [NAME REMOVED] had checked around Nay Pyi Taw. [DETAILS REMOVED] now says GOB-DPRK conversations were merely “exploratory.” [DETAILS REMOVED] cannot confirm any direct nuclear cooperation. [DETAILS REMOVED] added that, in any case, the Kang Nam 1 affair and Secretary Clinton’s remarks in Phuket in July “put everything on hold.”

2. (S) [NAME REMOVED] observed that Russia is the key GOB partner for a nuclear reactor, but [DETAILS REMOVED] said there has been no progress. Russia has proposed a commercial deal, and the GOB cannot afford it. [NAME REMOVED] added that many countries have relations with the DPRK, including Australia, “so why worry?!”
3. (S) As with many issues in Burma, the truth behind and possible motivations for [NAME REMOVED] first version and the recent revision are difficult to ascertain. Ambassador Chan now believes [DETAILS REMOVED] was simply speculating in August and has corrected the record. We were not in the actual conversations, but to us [DETAILS REMOVED] revision sounds more like an effort to cover a lapse in judgment than to deny the earlier story outright. The comment about the Kang Nam 1 and the Secretary’s remarks having “put everything on hold” leave room for concern. That noted, other of [NAME REMOVED] comments have caused us to question just how well plugged in [NAME REMOVED] is on the “nuclear” issue. Bottom line: GOB-DPRK cooperation remains opaque. Something is certainly happening; whether that something includes “nukes” is a very open question which remains a very high priority for Embassy reporting.

DINGER
Joint Statement -- 1st ASEAN-U.S. Leaders’ Meeting
Singapore, 15 November 2009

[EXcerpts]

Enhanced Partnership for Enduring Peace and Prosperity

1. We, the Heads of State/Government of Brunei Darussalam, the Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand and the Socialist Republic of Viet Nam, the Member States of the Association of Southeast Asian Nations (ASEAN), and the United States (U.S.), held our first ASEAN-U.S. Leaders’ Meeting on 15 November 2009 in Singapore. The Meeting was co-chaired by H.E. Abhisit Vejjajiva, Prime Minister of the Kingdom of Thailand, in his capacity as Chairman of ASEAN, and the Honourable Barack Obama, President of the United States. The Secretary-General of ASEAN was also in attendance. We agreed to hold a second Leaders’ meeting in 2010.

[deletia]

10. The Leaders of ASEAN welcomed the high level dialogue and the policy of the United States to engage with the Government of Myanmar, as indicated by the recent visit of U.S. officials to Myanmar. We expressed our hope that this effort, as well as ASEAN’s, would contribute to broad political and economic reforms and the process will be further enhanced in the future. We also underscored the importance of achieving national reconciliation and that the general elections to be held in Myanmar in 2010 must be conducted in a free, fair, inclusive and transparent manner in order to be credible to the international community. We called on the Government of Myanmar to help create the conditions for credible elections including by initiating a dialogue with all stakeholders to ensure that the process is fully inclusive. We also reiterated our continued support to the good offices of the United Nations Secretary-General in the democratization process in Myanmar. We also noted the Joint Communiqué of the 42nd ASEAN Foreign Ministers Meeting in Phuket, 20 July 2009.

[deletia]

19. We reaffirmed our commitment to nuclear non-proliferation and disarmament. The Leaders of ASEAN also welcomed the efforts of the President of the United States in promoting international peace and security including the vision of a nuclear weapons free world through efforts such as the agreement between the United States and Russia to reduce their respective nuclear arsenals through the START Follow-on Treaty negotiations.

20. We are convinced that the establishment of a South-East Asia Nuclear Weapons Free Zone (SEANWFZ) will contribute towards global nuclear disarmament and nuclear non proliferation and peace and security in the region. We encouraged nuclear weapon states and States parties to the SEANWFZ to conduct consultations, in accordance with the objectives and principles of the Treaty, to resolve comprehensively outstanding issues with the view to ensuring the early accession of the nuclear weapon states including the United States to the Protocol of the Treaty.
21. We will increase consultation and cooperation on the challenges affecting the international community, including non-proliferation, disarmament and regional peace and security. We agreed to work towards preventing the spread of nuclear weapons and work together to build a world without nuclear weapons and other weapons of mass destruction. We reaffirmed the Nuclear Non-Proliferation Treaty (NPT) as the essential foundation for the pursuit of nuclear disarmament, nuclear non-proliferation and peaceful uses of nuclear energy. We agreed to support the Philippines as it assumes the presidency of the 2010 NPT Review Conference, which provides an important opportunity for the international community to act in a concerted manner towards these ends. We also declared our support for the Comprehensive Test Ban Treaty, and welcomed the declared intention of the United States to ratify the treaty. We urged all states to ratify the treaty and facilitate its early entry into force. We welcomed the establishment in the ARF of an Inter-sessional Meeting on Non-proliferation and Disarmament as a venue to further explore dialogue and cooperation on these issues.

22. We urged the DPRK to return to the Six-Party Talks process and to fully implement its commitments made in the September 19, 2005 Joint Statement of the Six-Party Talks to abandoning all nuclear weapons and existing nuclear programs and returning, at an early date, to the NPT and to IAEA safeguards. We also urged the DPRK to comply fully with its obligations in accordance with the relevant United Nations Security Council Resolutions, including those related to denuclearization and resuming its missile launch moratorium.
Obama issues call to free Suu Kyi
By Kavi Chongkittavorn
The Nation
Published on November 16, 2009

[EXCERPT]

US President Barack Obama yesterday called for the release of all Burmese political prisoners, including Aung San Suu Kyi.

Obama made the appeal at a historic gathering with Asean leaders, which included Burmese Prime Minister Thien Sein, following his speech in Tokyo on Saturday.

He also expressed appreciation at the progress Asean had made, according to high level sources present at the leaders' meeting.

Among other things, the US president called for a national reconciliation dialogue with all stakeholders and an inclusive, free and fair election in Burma.

Obama and the leaders of the 10-member Southeast Asian bloc agreed that the junta-run election next year must be "free, fair, inclusive and transparent" to be credible.

The sources said the Burmese prime minister did not respond to Obama's appeal, and instead talked about nuclear non-proliferation.
Southeast Asia pressured to validate test ban treaty
By Achara Ashayagachat
Published: 25/11/2009 at 12:00 AM

Thailand, Indonesia, Burma and Brunei have been urged to ratify the Comprehensive Nuclear Test Ban Treaty.

Southeast Asia could not detach itself from nuclear test risks, said Tibor Toth, executive secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the organisation set up to implement the treaty's provisions.

"As a strategic corridor for material supplies and a financial cross-roads, the Asean region's involvement in the CTBT is therefore crucial and justified," he said at a regional workshop in Bangkok.

The CTBT would complement the Asean treaty to make Southeast Asia a nuclear-free zone, he said. The workshop was held to promote the build-up to the verification of the treaty so that it would be ready to be fully operational when it comes into effect.

"The CTBT is the last safety net for the international community to ensure there are no nuclear applications for military use ... the nuclear destruction impact on climate change would be even larger than a natural disaster such as a tsunami," he said.

Currently, 150 states have ratified the nuclear test ban treaty. Ratification is still being sought from 44 other member states including China, North Korea, Egypt, India, Indonesia, Iran, Israel, Pakistan and the United States.

"International public opinion is clear that multilateralism, diplomacy and the peaceful resolution of conflicts is preferred to a nuclear resolution," the CTBTO executive secretary said.

Chaivat Toskulkao, secretary general of the Office of Atoms for Peace, said Thailand needed to take some necessary legal steps, including amending a number of related laws, before any ratification could be made.
WASHINGTON -- President Barack Obama's special representative to North Korea is set to hold his first bilateral meetings with Pyongyang this week, in the administration's highest-level dialogue with the country to date.

But signs that the communist state may be prepared to return to international disarmament negotiations were overshadowed by U.S. concerns that it could seek new conditions to the talks.

Stephen Bosworth, a career diplomat and negotiator, was expected to arrive in Pyongyang on Tuesday for two days of meetings, with the goal of persuading North Korea to rejoin talks aimed at getting it to give up its nuclear-weapons program.

U.S. officials said they didn't know who Mr. Bosworth would meet during his trip. Kim Jong Il hasn't directly engaged Washington on the nuclear issue, though he did discuss it with former President Bill Clinton in August.

The Obama administration is interested in learning about North Korea's economy in light of Pyongyang's decision to revalue its currency last week. U.S. officials also said they'll continue to push for information on North Korea's alleged support for the nuclear programs of Syria and Myanmar.
Programmes PEOPLE AND POWER
Myanmar: Beneath the surface

The 'Saffron Revolution' was Myanmar's only show of mass opposition in 20 years [GALLO/GETTY]

Two years ago the world watched in dismay as Myanmar's military junta brutally crushed the so-called Saffron Revolution. It was the only show of mass opposition to have occurred inside the country in almost 20 years.

Now, that same junta is moving towards elections some time in 2010, but no one expects them to be either free or fair, based as they are on a constitution seemingly designed to ensure the survival of those in power.

Filmmaker Hazel Chandler entered the country undercover for People & Power, to find out how Myanmar's people are fairing, and to investigate disturbing claims that the regime may be trying to develop nuclear weapons.

This episode of People & Power can be seen from Wednesday, December 23, 2009, at the following times GMT: Wednesday: 0600, 1230; Thursday: 0130, 1400, 1930; Friday: 0630, 1630; Saturday: 0330, 2030; Sunday: 0030, 0530; Monday: 0830.
Two Receive Death Sentence for Information Leak

Thursday, January 7, 2010

A former military officer and a foreign affairs official were sentenced to death and another foreign affairs official was sentenced to long-term imprisonment on Thursday in a special court of the Rangoon Northern District held in Insein Prison, according to Insein prison sources.

Win Naing Kyaw, a former personal staff officer assigned to the State Peace and Development Council’s Secretary-2, the late Lt-Gen Tin Oo, was sentenced to death under the State Emergency Act III for leaking military secrets to the exiled media.

Win Naing Kyaw also received a 20-year sentence for violation of the Electronic Act and holding illegal foreign currency. The Electronic Act prohibits sending information, photos or video damaging to the regime abroad via the Internet.

Thura Kyaw, aka Aung Aung, of the ministry of foreign affairs office was also sentenced to death under the state emergency act.

Pyan Sein of the Ministry of Foreign Affairs received a 15-year sentence for violation of the Electronic Act.

The three were arrested after information and photos about Gen Shwe Mann's trip to North Korea were leaked to exiled news media last year. The trip involved procuring military arms, tunnel building and other matters.

Dozens of officials in the Ministry of Defense and Ministry of Foreign Affairs, including Col Kyaw Kyaw Win, who was director general of the State Peace and Development Council, were also arrested, military sources said. The status of their cases is not known.

After the information leak, the junta made a significant reshuffle at the Ministry of Foreign Affairs that affected more than 70 positions, including two directors, four deputy directors and eight assistant directors. It is not known if the reshuffle was directly a result of the information leak.

Yin Yin Oo, a sister of former deputy minister Kyaw Thu, who was the director of the ministry's influential political department, was transferred to Saudi Arabia to a counselor post.
Burma to execute two over secret tunnels leak

Richard Lloyd Parry
January 8, 2010

A Burmese court has sentenced to death two men and imprisoned at least three others for leaking military information, including photographs of a secret visit to North Korea by one of the military junta’s most senior generals.

The three men, one of them a major in the Burmese army, were also convicted of distributing photographs of a secret network of military tunnels which, together with the evidence of high-level contacts with North Korea, raised suspicions that Burma might be developing its own nuclear weapons.

The photographs and documents were published last summer after being obtained by exiled media and foreign reporters in Bangkok. They showed a visit to North Korea and to China by the third-ranking figure in the Burmese junta, General Thura Shwe Mann.

According to journalists based in Rangoon, the Northern Yangon District Court sentenced to death Major Win Naing Kyaw and an employee of the foreign ministry named Thura Kyaw under the Emergency Provision Act. Major Win Naing Kyaw was also convicted of holding illegal foreign currency and of offences under the Electronic Act, which bans the transmission via the Internet of data, photos or video judged to be damaging to the Government.

Three other civilians, including one named Byan Sein, also received prison sentences of up to 15 years. According to exiled Burmese journalists, dozens of other people were also arrested in connection with the leaks.

The trial was held in secret in Rangoon’s notorious Insein Prison. It has not so far been reported in Burma’s strictly censored state media, and few details of the alleged offences or perpetrators are known. But according to journalists in Rangoon, a man named Win Naing Kyaw used to be the private secretary of General Tin Oo, the country’s fourth most powerful man, responsible for defence procurement, who died in a helicopter crash in 2001.

The publication of the photographs prompted the US Secretary of State, Hillary Clinton, to say that she was “very concerned at the possibility of nuclear co-operation between Pyongyang and Rangoon”.

“We know that there are also growing concerns about military co-operation between North Korea and Burma, which we take seriously,” she said. “It would be destabilising for the region. It would pose a direct threat to Burma's neighbours.”

The photographs, taken between 2003 and 2006, did not in themselves prove anything definitive about Burma’s nuclear ambitions. But they did show that the regime and its military have done a great deal of tunnelling, with the help of the world’s great military moles, the North Koreans.

The tunnels, believed to be close to the regime’s purpose-built new capital, Naypyidaw, are more likely to be designed for the storage of weapons, ammunition and personnel as they are to be nuclear sites.

Some tunnels and subterranean meeting halls have been built near Taunggyi, in the northeast of Burma, where insurgent armies are fighting decades-old independence struggles. Pictures dating from 2006 show a group of technicians with East Asian features emerging from a hotel in Naypyidaw area — these have been identified as North Koreans, whose own million-strong army is hunkered down in massive tunnel complexes along the border with its enemy, South Korea.
As repressive and isolated military dictatorships, Burma and North Korea might appear to have much in common. In fact, relations were frozen for years after an incident in 1983 when 18 South Korean officials, including four cabinet ministers, were blown up by North Korean agents during a visit to Rangoon.
Two Death Sentences Reported in Myanmar

By THOMAS FULLER

January 9, 2010 [Accessed 2010-01-08T18:25Z]

BANGKOK — A court in Myanmar has sentenced a retired military officer and a foreign ministry official to death for leaking details of secret trip to North Korea by top government officials, according to news reports that cited lawyers in the country.

There has been no mention in the official media in military-run Myanmar of the court decision, which was said to have been handed down on Thursday and was first reported on The Irrawaddy, a Web news site covering Myanmar.

Another Foreign Ministry official received 15 years in prison for a related offense, according to both The Irrawaddy and Reuters.

The case appeared to highlight the repressive government’s concern about a number of leaks and lapses in recent years, including the publication of minutes of high-level military meetings and photographs of extensive tunnel systems reportedly built by North Korean engineers in the country’s administrative capital, Naypyidaw.

“Clearly there are leaks,” said Win Min, an expert on Myanmar at Payap University in Chiang Mai, in northern Thailand. “It’s a sign that there are a lot of people even within the military who do not like the government, and they’re trying to protest in different ways.”

The three men sentenced Thursday were reported to have been arrested in July after photographs and documents of a visit to North Korea by Gen. Shwe Mann, the third-highest ranking officer in the junta, appeared on Web sites run by critics of the government living abroad.

The extensive collection of photographs showed General Shwe Mann visiting military facilities, including a factory for Scud missiles.

Experts believe that Myanmar, formerly called Burma, has been seeking to establish a nuclear program but that the government lacks the technical ability to proceed beyond its current nascent stages.

“It is not clear if North Korea is involved in any nuclear activities in Burma,” said Bertil Lintner, who has written extensively on both Myanmar and North Korea. “What we know with certainty is that North Korea and Burma have established a secret alliance and that North Korea has delivered military-related equipment to Burma.”

Reuters identified the two men sentenced to death as Maj. Win Naing Kyaw and Thura Kyaw, both of whom were charged under a broad law that covers threats to national security. The third person sentenced was identified by The Irrawaddy as Pyan Sein, who was convicted of violating an act covering the use of illegal electronic devices.

The sentences reflect what many experts describe as the paranoia of Myanmar’s senior general, Than Shwe, who appears continually concerned about threats to his power. Five years ago he moved the seat of government to Naypyidaw, a more remote location, in part to defend against potential outside attacks.

General Than Shwe recently confirmed that elections would take place this year — the first in two decades — and the death sentences may be a warning to potential dissenters, analysts said.
“He doesn’t have a choice — he has to call elections because he already announced they would go ahead,” Mr. Win Min said. “But he is still worried about threats from within.”

Death sentences in Myanmar are often commuted to life in prison, but the court decision remains a potent reminder for those thinking of stepping out of line, Mr. Win Min said.
Chiang Mai (Mizzima) - A former foreign ministry employee has accused the Burmese military regime of trying to wipe out secrets of the past – the killing of SPDC's Secretary 2 General Tin Oo, who died in a controversial helicopter crash in 2001 by giving death sentences to two officials last Friday.

They were accused of leaking secret details of the military government’s ministerial visits to abroad and the network of tunnels built in Burma.

Sein Lwin, a former employee in the Burmese embassy in Cambodia told Mizzima in an interview that he does not believe that those who were sentenced to death by the Burmese regime last Friday leaked the information as accused by the Burmese government.

Sein Lwin (35), was in the Burmese embassy in Phnom Penh, Cambodia till 2004 as head of branch II and worked for intelligence gathering and reporting for the Burmese military. However, he was not in Burma at the time of the arrests last year.

Excerpts from the interview:

Qs. 1. What do you think of the recent death sentence to two officials because of secret documents leaked?

Ans: Starting from July 2009, the Head of Sa- Pha-Ra (Military Affairs Security- MAS) issued orders to his newly appointed intelligence officers at Naypyidaw to find out details of the leakage.

The new intelligence officers had to find scapegoats for temporary satisfaction of Lieutenant General Ye Myint, the chief of MAS. If the two men could be blamed for blowing the whistle, there would be no more news regarding transfer of staff members to embassies and abroad.

The dictators may hope that by giving the death penalty to the whistle blowers will stop others, but sooner or later, there will be more news and pictures on the public media again and again, until the regime is changed.

Qs: 2. Can you tell us about former army Major Win Naing Kyaw (who is a friend of Zaw Tun Oo, son of General Tin Oo) and how he was arrested?

Ans: He was working and living in Phnom Penh, Cambodia. He was traced by Brg. Gen Than Han from Military Attaché office in the Burmese embassy in Cambodia. He did not know that he was being watched and not only the leaked files. He knew that his boss Lt-Gen Tin Oo, former Secretary-2 of SLORC (State Law and Development Council, the name of the junta, which was changed to State Peace and Development Council) was assassinated in 2001. By this time, the Generals used one stone to kill two birds. Win Naing Kyaw was changing to the side of democracy activists and one day, if he revealed the details of the conspiracy, the current batch of generals would lose the support of the new generation within the army.

He came back in early December 2009. He was arrested at the Rangoon Mingalardon airport by MAS. To be honest, I was not in Burma but according to my sources, MAS found the pictures of tunnels and Gen. Shwe Mann’s North Korea trip. But the true reason is more secret files of Secretary 2 were stored in his laptop. But the generals did not want more ripples in the case.
Qs. 3. How can you tell that he is not the one who leaked secret files to the media in exile?

Ans. Win Naing Kyaw is not from the Ministry of Foreign Affairs. His last post was Director of the Foreign Economic Relations Department in the Ministry of National Planning. He quit his post around 2004-05 as he got a job with a UN agency.

In MOFA the cases are usually copied to Ka Ka- Kyi (Office of Chief of Staff of Defence Services - Army), Ka Ka (Hlan) (Chief of Staff of Defence Service s- Intelligence) and the Head Office of Home Affairs. The John Yattaw case for instance and all other files spread around the government departments.

Qs. 4. The junta sentenced to death not only Win Naing Kyaw but also Thura Kyaw, a clerk in the Foreign Ministry. The files may have come from Thura Kyaw. What do you say?

Ans. Even though the case file was from Thura Kyaw’s office room, there are similar copies in other government agencies. In Naypyidaw, there is freedom to access the internet and they also need to count on Ka Ka- Kyi and Ka Ka- Hlan. Someone else from the defence establishment could have easily sent it. In this case, finding Thura Kyaw’s files in the laptop of Win Naing Kyaw is illogical but they could not defend themselves at the junta court controlled by MAS.

At any cost, Senior Gen Than Shwe wanted to wipe out the straw from the past. This time, finding files in his laptop became valid evidence in court.

Qs. 5. Did you know where they were detained and about his trial?

Once they caught him, they reported to the headquarters of the MAS and sent him to Yae Kyi Eye for interrogation then before being sentenced he was sent to Insein Prison. The court is the northern province court in Insein township, Shwe Pyi Tha road.

Qs. 6. What is the evidence that S2 was assassinated?

Ans. While I was attending the the Criminal Investigation Department - CID’s course at the old MOFA in 2002, Win Naing Kyaw attended that course too and we become close friends. At that time, the helicopter pilot, a Major was saved from the San Lwin River but was shot dead.

Qs. 7. Who shot the pilot?

Ans. It is not known. But it could be between the military intelligence or the army.

The authorities did not allow publication of the funeral advertisement in the state-run newspaper. Zaw Tun Oo, son of S2 Tin Oo is still in MOFA. He and I were in the same batch in Phaung Gyì (government employees training) in 1998. According to him, there was a big power rivalry between his father and Maung Aye and Khin Nyunt at that point in time.

Qs. 8. Why did you decide to defect and what are the immediate causes?

Well, former Major Win Naing Kyaw did not know that he was being watched and was blacklisted. If he knew he would not have gone back to Burma. As for me, I learnt that I and some of the other former staff members were already blacklisted. So, I had to defect, even though I love my country. The day it is safe I will proudly go back to Burma and that would be the day the country gets genuine democracy.
Qs 9. What do you think of the nuclear ambition of the regime?

The military government is really afraid of being attacked by the US like Iraq.

Having military might by getting nuclear missiles may give it more weight politically and it assumes the US will not attack the regime.

Qs. 10. What do you know about regime 2010 election plan?

Ans. The regime won’t allow free and fair polls like 1990. The Union Solidarity Development Association would win by a majority. So, with one stone the junta will kill three birds. The junta will also automatically cancel the results of the 1990 elections and disarm ethnic groups.

Qs. 11. What do you know about the regime’s plan for ceasefire and the Border Guard Force issue?

Ans. The cease-fire groups are already in the trap of the Generals with their long term plan, which was initiated by former Military Intelligence Chief Khin Nyunt. Forming the Border Guard forces under army control is a tactic to destroy the armed groups over a five year plan. Five years on, there will be no Border Guard Force troops, who Burmese Army soldiers will replace gradually.

Qs 12. What do you think of the relationship between North Korea and the Burmese regime? What are North Korea’s projects in Burma?

Ans. The two countries are politically isolated in the international community. There are a lot of nuclear projects including the training of Burmese military intelligence personnel. You may already have read about the secret files and these are true.
Reports that Burma’s military junta has received assistance with constructing nuclear facilities from North Korea and Pakistan are causing a headache for Indian strategists, reports Rajeev Sharma. And, although global attention is fixed firmly on Tehran and Pyongyang, the ticking of this newest nuclear clock could start to sound loud to Delhi’s policymakers.

While Iran’s acts of defiance in the face of international condemnation of its secretive nuclear programme continue to make headlines, and while the United States focuses on getting North Korea to return to the six-party denuclearisation talks, another nuclear clock is ticking quietly away in Southeast Asia.

Burma, ruled with an iron fist by a military junta that seized power in a coup in 1962, confirmed plans to build a nuclear research reactor, with Russian assistance, for ‘peaceful purposes’ back in early 2002. Since then, select students and army officers have undergone nuclear orientation and training in Moscow, while nuclear physics departments have been established at the universities of Rangoon and Mandalay, with enrolment controlled by the junta.

But it is the persistent reports of a secret programme being undertaken with North Korean assistance, based in part on information from defectors, that are troubling Indian policymakers already distracted by border tensions with China and Pakistan.

Indeed, Colonel R Hariharan, a retired military intelligence analyst who specializes in South Asia, says if such rumours are true they would introduce a new strategic nuclear paradigm to the region and in the process make life extremely complicated for India’s military planners.
‘It might lead to a situation not dissimilar to India’s western front, where it’s facing an unstable, nuclear Pakistan,’ he says. ‘Even though it seems unlikely Myanmar [Burma] would invest in such a nuclear game, India will still be forced to keep a careful watch over developments.’

Burma’s nuclear interest has been fuelled by significant uranium deposits discovered in areas including Magwe, Taungdwingyi and Kyaukphygon, as well as some largely untouched in southern Tanintharyi Division—formerly Tenasserim Division—although Russia is said to be involved in the limited mining operation there.

The government is also reportedly actively exploring other potential uranium production sites in, among other locations, Tagong and Moe Meik, while a team of Russian and Burmese engineers from early 2007 were reportedly drilling for uranium in Hawng-Pa village.

Such activity, combined with rumours of covert North Korean involvement and a Burmese regime that seems willing to do anything to stay in power, has generated enough concern among Indian policymakers for it to create a dossier of what it believes has been going on, a copy of which was shown to this correspondent by a senior government official who asked to remain anonymous.

The dossier first lays out the background of Burma’s alleged interest in nuclear technology, beginning in December 2000, when it indicated it was interested in establishing a nuclear research centre with Russian assistance that was to have included building a 10 megawatt light-water research reactor.

However, in September 2005, with Burma apparently unable to afford the full cost of the reactor, it was decided that the Russian Ministry for Atomic Energy would play a supervisory role and provide the necessary fuel and expertise for the facility, while Burmese authorities would handle its construction. An agreement to this effect was finally signed by the two countries in May 2007.

The facility, known as the ‘Myaing Reactor or Nyaungone Project,’ was to be constructed near Anesakhan on a flat expanse of land surrounded on all sides by steep hills, and placed under IAEA safeguards. It was not supposed to be capable of producing weapons-grade plutonium.

However, the agreement could not be implemented as Burma did not comply with IAEA guidelines requiring it to properly advise the nuclear body of its plans. Since then, and despite repeated prodding from Russia, Burma has not approached the IAEA, scuppering the prospects of progress between the two on the facility. Indeed, according to the dossier, it was Russia’s insistence on transparency that prompted Burma to look elsewhere for assistance in setting up a reactor—namely from North Korea.

Burma is said in the dossier to be building a 10 megawatt light water research reactor inside a mountain complex at Naung Laing in the north of the country, while North Korea has also built a huge underground bunker at Taungdwingyi next to a known uranium ore site.

Meanwhile, during visits by delegations of scientists led by a man known as Dr. Zaifullah, a deputy of notorious Pakistani scientist A Q Khan, in August and December 2005, Pakistan is believed to have offered nuclear technology cooperation, including the training of Burmese scientists. Under the agreement, Burmese officials from the Ministry of Science and Technology and Armed Forces are said to have attended a 12-month course on the ‘Adverse Effects of Nuclear and Biological Weapons.’

C S Kuppuswamy, who has been closely tracking Burma’s exploits in the nuclear sector, says that prior to former Pakistani President Pervez Musharraf’s visit to Burma in 2001, three Pakistani naval vessels—a submarine, a tanker and a destroyer—that made port calls to Burma and Pakistan are known to have supplied conventional weapons to Burma.
If true, analysts say such co-operation would only add to a sense of encirclement among Indian officials already acutely aware of an unstable and nuclear-armed Pakistan and a tense border dispute in Arunachal Pradesh with China.

And they believe Burma’s geo-strategic significance—and China’s covert military and strategic assistance—should be seen in the context of the Indian Ocean Region (IOR) as a whole.

According to Sanjaya Baru, a former media advisor to Indian Prime Minister Manmohan Singh, force projection capacity in the IOR is essential for India. ‘We’re visible in East Africa due to our successful anti-piracy missions,’ he says. ‘But we have to show our presence in the Indian Ocean Region by rethinking the way we deploy our forces.’

The IOR stretches from Africa across to Australia and is the third largest water body in the world, with includes 33 littoral states. Eighty percent of China's and 65 percent of India's oil is shipped through this region.

‘The IOR is important because most of our energy and trade supplies flow through the area, so it needs to be protected,’ says Nitin Pai, a fellow at the Takshashila Institution, a non-profit trust in Chennai, Tamil Nadu. ‘We need to be ready to redeploy our forces to protect our strategic interests, especially as China is continuing to play its strategic games.’

Commodore (retired) Uday C. Bhaskar goes further, complaining that India has actually been going backward in this regard. ‘India allowed the influence it generated following the 2004 tsunami to be diluted because of its continued absence in Southeast Asia and the region,’ says Bhaskar, who currently heads the National Maritime Foundation, a New Delhi-based think tank.

In the near-term, the first task for Indian diplomats trying to regain their footing will be to face up to the challenge of how to handle the first multi-party elections in Burma in more than four decades of junta rule, which are scheduled for this year as part of the country’s seven-step roadmap to democracy.

But even if all goes smoothly, with the junta determined to hang on to power and apparently receiving covert support from Pakistan and North Korea (and moral support from China), there seems nothing that India—or any other country—can do as it hurtles down the nuclear road.
QUESTION: A question on Burma. ISIS has come out with a report today about Burma’s nuclear ambition and it also reports some construction activities going on near Mandalay, which could be a possible nuclear reactor site. Are you – do you have any statement about --

MR. CROWLEY: I’m not familiar with that particular report. We – in our discussions with Burma, we do have concerns about certain activity and the potential – that risks to the global nonproliferation agenda. I’ll be happy to – why don’t you ask me again and we’ll see what we can find out about the report.

QUESTION: Okay, thank you.

[ Sourcebook note: On 2010-01-28 the Institute for Science and International Security (ISIS) published the following studies:

Burma: A Nuclear Wanabee: Suspicious Links to North Korea: High-Tech Procurements
http://isis-online.org/isis-reports/detail/burma-a-nuclear-wanabee-suspicious-links-to-north-korea-high-tech-procureme/

Exploring Claims about Secret Nuclear Sites in Myanmar
http://isis-online.org/isis-reports/detail/exploring-claims-about-secret-nuclear-sites-in-myanmar/

Deep Connections between Myanmar’s Department of Atomic Energy and the DTVE
http://isis-online.org/isis-reports/detail/deep-connections-between-myanmars-department-of- ]
For several years, suspicions have swirled about the nuclear intentions of Burma’s secretive military dictatorship. Burma is cooperating with North Korea on possible nuclear procurements and appears to be misleading overseas suppliers in obtaining top-of-the-line equipment. Certain equipment, which could be used in a nuclear or missile program, went to isolated Burmese manufacturing compounds of unknown purpose. Although evidence does not exist to make a compelling case that Burma is building secret nuclear reactors or fuel cycle facilities, as has been reported, the information does warrant governments and companies taking extreme caution in any dealings with Burma. The military regime’s suspicious links to North Korea, and apparent willingness to illegally procure high technology goods, make a priority convincing the military government to accept greater transparency.

Suspicions about nuclear intentions followed an agreement by Russia to sell Burma a research reactor in 2001 and intensified in 2007 with the resumption of a formal military relationship between North Korea and Burma, known officially as Myanmar. Secretary of State Hillary Clinton said in July 2009, “We know there are also growing concerns about military cooperation between North Korea and Burma, which we take seriously.” According to U.S. officials, these concerns extend to possible nuclear cooperation, but their information is incomplete. The evidence supports that Burma and North Korea have discussed nuclear cooperation, but is not sufficient to establish that North Korea is building nuclear facilities for Burma’s military junta, despite recent reports to the contrary.

Nonetheless, no one can ignore the possibility of significant North Korean nuclear assistance to this enigmatic, military regime. Because North Korea secretly sold a reactor to Syria, a sale which the world’s best intelligence agencies missed until late in the reactor’s construction, no one is willing to turn a blind eye to the possibility of North Korea selling nuclear equipment, materials, or facilities to Burma. North Korea’s past proliferation activities and the failure to promptly detect the Syrian reactor cannot but lead to more scrutiny over whether North Korea might sell Burma a reactor or other nuclear industrial equipment and facilities, or the means and guidance to manufacture nuclear facilities. When one adds Burma’s own efforts to acquire abroad sophisticated dual-use goods that can be used for nuclear purposes, it becomes essential to determine and constrain as necessary the military junta’s nuclear intentions.

Another dimension is whether Burma is helping North Korea obtain items for its nuclear programs. Burma could act as a cooperative transshipment partner for goods ultimately destined for North Korea’s gas centrifuge uranium enrichment program.

The military regime’s lack of transparency and repressive actions complicate any effort to investigate suspicions about its nuclear program. A priority is getting the military government to accept greater transparency of its activities.

Because Burma is buying a wide variety of suspicious dual-use goods internationally, governments and companies need to be more vigilant in examining Burma’s enquiries, or requests for equipment, whether via
Burmese governmental entities, Burmese trading companies, or other foreign trading companies. Companies should treat enquiries from Burma no differently than those from Iran, Pakistan, or Syria.

Minimal Nuclear Capability

Currently, Burma has little known indigenous nuclear infrastructure to support the construction of nuclear facilities. Nonetheless, it has sought to purchase a nuclear research reactor for about a decade.

In September 2000, Burma asked the International Atomic Energy Agency (IAEA) for assistance in acquiring a research reactor. The IAEA said that it would assist in such an endeavor once Burma achieved a set of milestones, including bringing its reactor safety and regulatory infrastructure up to a minimally acceptable standard. Meanwhile, without telling the IAEA, Burma started negotiations with Russia over the supply of a ten megawatt-thermal research reactor. A draft cooperation agreement was approved by Russia in May 2002 for the construction of a nuclear research center that would include a ten megawatt-thermal research reactor, two laboratories (believed to include hot cells for radioisotope production), and facilities for the disposal of nuclear waste. However, the draft agreement did not represent an approved sale. The two countries finally signed a nuclear cooperation agreement in 2007 for the sale of the reactor complex, but no construction of the research center had started as of September 2009. In addition, neither side has publicly announced the planned location of this reactor project. Under the terms of its cooperation, Russia has reportedly conducted training of Burmese in fields related to the building and operation of research reactors.

Burma receives a relatively small level of technical assistance from the IAEA in nuclear medicine, agriculture, and fields related to research reactors. It also receives nuclear energy training in South Korea with other members of the Association of Southeast Asian Nations (ASEAN).

According to a European intelligence official, Russia assists Burma’s uranium exploration and mining efforts, but this effort is relatively small-scale and has not extended into the construction of a uranium mill to process uranium ore. The Myanmar Ministry of Energy lists five areas with potential for uranium mining: Magwe, Taungdwingyi, Kyaukphygon (Mogok), Kyauksin, and Paongpyin (Mogok).

Minimal Nuclear Transparency

Burma joined the Nuclear Non-Proliferation Treaty (NPT) in 1992. It insists it is in compliance with all its obligations under the NPT. Evidently in reaction to published reports in the summer of 2009, a Burmese official denied seeking nuclear weapons to Senator Jim Webb on his trip to Burma in August 2009, which was the first visit by a senior U.S. official in a decade.

Burma has a traditional INFCIRC 153 comprehensive safeguards agreement with the IAEA supplemented by a Small Quantities Protocol (SQP) that it signed in 1995. The SQP is in effect since Burma has declared it has no major nuclear facilities and only small quantities of nuclear material. Under the SQP, the IAEA has agreed not to implement safeguards with a few exceptions, mainly conditions aimed at determining when to implement the safeguards procedures in the comprehensive agreement. These conditions include Burma agreeing to report if it imports or exports nuclear material, acquires more than a minimal amount of nuclear material, or has built a new nuclear facility that is within six months of receiving nuclear material. In the case of the reactor from Russia, Burma would implement the full safeguards agreement, no later than six months before receiving nuclear reactor fuel.

Burma has discussed improving safeguards with the IAEA in the context of the reactor purchase. However, Burma has not agreed to update its commitments under the SQP. In particular, it has not agreed to report a nuclear facility when it decides or authorizes its construction rather than six months before Burma introduces nuclear material in the facility. Moreover, it has not agreed to the Additional Protocol, which would obligate
Burma to provide far greater information about its nuclear activities and plans and allow the IAEA much greater access to Burmese sites. Implementation of the Additional Protocol could go far in reducing suspicions about reports of undeclared nuclear facilities or materials.

In a new development, it is understood that Burma has indicated an interest in joining the Asia/Pacific Safeguards Network, an Australian initiative which came into operation in October 2009. This network, which comprises authorities and agencies working in safeguards, has yet to consider if Burma should be invited to join.

A new constraint on Burma’s cooperation with North Korea is United Nations Security Council Resolution 1874, which was passed in mid-2009. It prohibits member states from engaging in trade with North Korea in almost all conventional weapons and in sensitive areas, including those related to ballistic missiles and nuclear. Although the Burmese leadership has stated its commitment to fully comply with UNSC Resolution 1874, U.S. officials have expressed worries about the “nature and extent” of Burma’s ties with North Korea.9

Because transparency remains so minimal, the fundamental question remains: has Burma decided to embark on a covert route to nuclear weapons on its own or with the help of North Korea? Burma’s lack of transparency complicates efforts to understand a range of suspicious procurements and reports. These claims can be separated into two broad areas—alleged undeclared nuclear activities or facilities and suspicious or illegal procurement activities.

**Alleged Undeclared Nuclear Activities or Facilities**

Various dissident groups, researchers, and news reports have claimed that there are covert nuclear sites in Burma, including reactors, uranium mines and mills, reprocessing plants, and uranium enrichment facilities. As far as could be determined, the evidence behind many of these claims is largely based on interviews with defectors or analysis of ground photos and overhead imagery of suspected sites.

The opposition group Dictator Watch (dictatorwatch.org) has published a range of sites it says are nuclear.10 Another researcher, Bertil Lintner, has published a series of photographs taken in the mid-2000s of an extensive series of tunnels built with North Korean assistance.11 He has suggested that some of these might be nuclear-related. More recently, Australian researcher Desmond Ball and Thailand-based Irish-Australian journalist Phil Thornton, citing defector accounts, claimed in the Sydney Morning Herald that Burma is building two secret nuclear reactors; one already built with Russian assistance, (a claim Ball later backed away from in an article in the Australian journal Security Challenges where he instead details the plans to build it12) and another one being built with the help of North Korea, which will be secret and used for military purposes.13 In addition, Ball and Thornton reported that based on the defectors’ statements Burma is building or plans to build secret plutonium separation plants, uranium refining and enrichment plants, and facilities to develop and produce the nuclear weapon itself. Dictator Watch head Roland Watson claims that much of Ball and Thornton’s information was published earlier by Dictator Watch, relying on the same defectors.14

The nuclear allegations in these reports are not in general confirmed. As the Australian researchers admit, any information based on interviews with Burmese defectors must be approached cautiously.15 The sheer number of alleged secret sites posited by these defectors by itself raises doubts about their claims.

Only in a few cases do the reports listing nuclear sites have enough information to assess their veracity using satellite imagery. In these cases, however, where ISIS could identify specific sites claimed to be nuclear, it assessed that the sites were not in fact nuclear facilities. ISIS reviewed the ground photographs of suspected tunnel facilities in Burma obtained by Bertil Lintner and published on YaleGlobal Online and determined that at least one of the purported tunnel entrances is a dam penstock (see figure 1).16 Other photographs do indeed depict tunnel entrances and indoor storage facilities, but are likely not nuclear industrial facilities. ISIS could not identify any nuclear industrial characteristics in the photos.
ISIS assessed claims made by DictatorWatch.org and cited by the Sydney Morning Herald of a covert uranium mine and mill near Mandalay in Burma. After an analysis of available satellite and ground imagery and relevant open source information, ISIS assessed that the suspected uranium mill was too large to be a small clandestine uranium operation, and ground photographs of an established commercial cement plant matched very closely with the overhead imagery claimed by DictatorWatch to depict the uranium mill. ISIS also assessed that the suspected uranium mine was probably a quarry, judging by the piecemeal scraping marks in the mountain. A covert uranium mine would likely utilize modern open-pit or underground mining techniques.

ISIS does not want to overweigh the importance of debunking a few claims about secret nuclear facilities in Burma. There remain legitimate reasons to suspect the existence of undeclared nuclear activities in Burma, particularly in the context of North Korean cooperation. But the methods used in the public domain so far to identify existing suspect Burmese nuclear facilities are flawed. Identification of suspect nuclear sites requires a more rigorous basis than is currently evident.

**Suspicious or Illegal Procurement Activities**

Burma is judged as unable to build nuclear facilities on its own. As a result, it must depend on outside suppliers for nuclear technology, equipment, materials, and facilities. Therefore, detecting suspicious Burmese procurements is potentially an important indicator of undeclared nuclear materials and facilities.

Burma is seeking abroad a large quantity of top-notch, highly sophisticated goods with potential missile and nuclear uses. Yet, no pattern has emerged in these procurements that lead to a specific missile or nuclear end use. Nonetheless, the procurements are often suspicious or highly enigmatic, according to one senior European intelligence official.

The Burmese military regime might use North Korean trading entities to acquire overseas sensitive nuclear and nuclear dual use goods. Its military cooperation with North Korea has increased over the last several years, fueling concerns about nuclear cooperation. North Korea could also supplement Burma’s own foreign procurement networks, and it could sell nuclear goods made in North Korea.

For its part, North Korea would find such an arrangement lucrative, and it could use Burma as a willing transshipment point, or turntable, for illicit sales for itself or others. Another, albeit less likely, possibility is that North Korea could build sensitive facilities in Burma for its own use.

There are lingering questions about two Pakistani nuclear scientists who reportedly went to Burma in late 2001, during a time of intense interest over any help these same Pakistani nuclear scientists could have provided al Qaeda in Afghanistan before the fall of the Taliban. The two, Suleiman Asad and Muhammed Ali Mukhtar, reportedly left Pakistan with the agreement of the Pakistani government to elude questioning by the United States. Burmese officials subsequently denied giving sanctuary to any Pakistani nuclear scientists. Their whereabouts or activities since then remain unknown.

**Namchongang**

Evidence of North Korean/Burmese cooperation includes the reported presence in Burma of officials from Namchongang Trading (NCG), a North Korean trading company that is sanctioned by U.N. Security Council. Syria’s reactor project depended on assistance from NCG.

The nature of the Burmese/NCG cooperation remains largely unknown, but NCG has reportedly sold equipment to Burma or provided some type of technical assistance. As mentioned above, there is no concrete evidence that North Korea is supplying Burma a reactor, but any involvement by NCG in Burma is bound to increase suspicions about such a sale.
Reports of North Korea selling a reactor to Burma date back to at least 2004, a time when NCG was helping Syria acquire its reactor.\textsuperscript{22} According to a 2004 Asia Times article, citing Indian intelligence, Burma approached North Korea in November 2002 as a seller of last resort after the military regime failed to acquire a reactor from Russia, China, and India.\textsuperscript{23} Russia at the time had signed only a draft reactor sales agreement. India turned down Burma’s request for a reactor in 2000, according to the article, because of India’s view that Burma did not need such a reactor and was concerned about riling the United States which had sanctions on Burma. The Asia Times article makes the additional claim that a reactor deal was signed between Burma and North Korea in early 2004.\textsuperscript{24} But all these claims remain unconfirmed.

\textbf{New East International Trading}

In June 2009, Japan arrested three individuals for attempting to illegally export a magnetometer to Burma via Malaysia,\textsuperscript{25} under the direction of a company associated with illicit procurement for North Korean military programs.\textsuperscript{26} Authorities learned subsequently that this group successfully delivered other nuclear dual-use equipment to Burma.

The original order for the magnetometer came from the Beijing office of New East International Trading, Ltd., which reportedly operates under the direction of North Korea. The company is headquartered in Hong Kong but also has a Pyongyang office, which is flagged by watch lists of the Japanese Ministry of Economy, Trade, and Industry (METI) for its involvement in illicit procurement for North Korean military programs.\textsuperscript{27}

The magnetometer, which is a dual-use instrument that measures magnetic fields, was intercepted before it made its way to Burma. In addition to legitimate commercial uses in archaeological and geophysical sciences, a magnetometer can be employed in making missile control system magnets and gas centrifuge magnets (in magnetizing magnets and measuring strength).\textsuperscript{28} This item is controlled under Japan’s “catch-all” regulations, which ban the export of dual-use items for military applications to countries such as North Korea or Burma. Japanese officials seized the item in January 2009 and launched an investigation which later led to the arrests.

The three individuals, one of North Korean nationality and two of Japanese nationality, were the heads of three separate Japanese entities: Li Gyeong Ho, a North Korean national was president of the Toko Boeki trading company; Hirohiko Muto was president of Taikyo Sangyo trading company (internet searches indicate this may be a clothing company); and Miaki Katsuki, was president of Riken Denshi Company. Riken Denshi was the manufacturer of the magnetometer.

In September 2008, Li Gyeong Ho, under direction of the Beijing office of New East International Trading, asked Muto at Taikyo Sangyo to submit documents to the local customs authorities for the purpose of exporting the device. METI informed the company that an export license was required and the export could not be authorized.\textsuperscript{29}

At this time, the accused conspired to export the item to Burma via Malaysia without a license. In January 2009, the three conspired to replace the name on the customs documents to that of Riken Denshi and tried to export the item for seven million yen, or about $72,500, without a license from METI.\textsuperscript{30} The export was stopped by customs agents in Japan, and METI confirmed the company had not applied for an export license.\textsuperscript{31} In February, the premises of Toko Boeki were searched.\textsuperscript{32} The individuals were charged with violating Japan’s Foreign Exchange and Foreign Trade Law by attempting to export the magnetometer without a license.

The magnetometer was not the only item ordered by New East International Trading for shipment to Burma by Toko Boeki. In August 2008, Toko Boeki exported to Burma two small cylindrical grinders, each valued at 2.5 million yen, or about $28,000, without permission of Japanese authorities; this type of grinder, which was produced by Manba Seisakusho Co. Ltd, can be used to make missile control systems and to grind magnets for gas centrifuges.\textsuperscript{33} In November 2008, Toko Boeki exported another cylindrical grinder to Burma. Burma’s Ministry of Industry No. 2 reportedly received the grinders.\textsuperscript{34}
In November 2009, Li Gyeong Ho of Toko Boeki trading company was found guilty and given a two year suspended sentence and a fine of six million yen (about $67,000). In his ruling, the judge said that all these exports or attempted exports involved “all dangerous equipment used to develop and/or manufacture nuclear weapons.”\(^\text{35}\) The judge concluded that there was “thus a risk of greatly affecting the peace and security of Japan and the world.”\(^\text{36}\)

Although this case implies that North Korea was purchasing dual-use equipment for Burma, the investigation did not confirm whether the items were intended for use in Burma in a missile or nuclear program or for shipment onward to North Korea or another country.

**Suspicious Procurements by Burmese Educational Entity**

According to a European intelligence official, in 2006 and 2007 Burma made a series of procurements of extremely high precision, expensive dual-use industrial equipment, including computer-numerically controlled (CNC) machine tools, from companies located in Switzerland, Germany, and Japan. An official from another government knowledgeable about the case confirmed to ISIS these top-of-the-line procurements.

The equipment was ordered by an agency of the Burmese government ostensibly responsible for technical education programs in the country, the Department of Technical and Vocational Education (DTVE) under the Ministry of Science and Technology. However, the equipment is too sophisticated for normal teaching and student endeavors. At the time of the orders, according to a European government official, the head of the DTVE was Dr. Ko Ko Oo, who was also the head of Burma’s Department of Atomic Energy (DAE), also under the Ministry of Science and Technology. Officials in the DTVE have significant personnel links and associations with the DAE.\(^\text{37}\) In 2003, both entities shared a physical address at the Ministry of Science and Technology, and an official at the DTVE had an e-mail address at the Department of Atomic Energy, dae.myatom@mptmail.net.mm. Both entities have since moved to the new capital of Naypyidaw.

In such a small country, officials might wear more than one “hat,” and nuclear officials might do more than just nuclear. But the connection raises the issue of whether the equipment is intended for a nuclear purpose or whether the DTVE acts as a procurement front for the Department of Atomic Energy or a military entity.

It is unclear if the procurements in Europe were legal—though if the equipment were ultimately used in a military or nuclear program, these procurements should be against the law in most European countries. The procurement route and the export’s legality are unknown for the equipment sent from Japan to Burma.

Upon closer examination by European officials, the declared end use of the computer-numerically controlled (CNC) machine tools did not look credible. According to one European intelligence official, the declared end use had too many inconsistencies to believe what was claimed. Some of the CNC equipment was very large, with a base of about eight meters, and declared for use in manufacturing sophisticated locomotive diesel engine parts. But designs of parts given to suppliers appeared incomplete; they were missing key tolerances. Officials suspected that the designs were phony and the equipment would actually be used to manufacture other parts. In addition, the quality and price of the equipment is beyond what Burma would be expected to purchase or need, given its relatively primitive diesel locomotive manufacturing base and its modest plans for expanding this manufacturing capability.\(^\text{38}\)

European intelligence services yielded that the equipment was multi-purpose, running the gamut of possible uses, including turbines in aircraft, high-technology civilian manufacturing, missile parts, or nuclear component manufacturing. The equipment appeared oversized for gas centrifuge manufacturing. It could still be used to make centrifuge parts, but it is uneconomical to buy such large equipment for this end use. In addition, the equipment appeared too precise for missile manufacturing, but it could still be dedicated to such a purpose.
ISIS has learned that two sets of this high precision equipment were sent to two separate industrial buildings, at least one of which was recently built. Both buildings are said to be similar-looking; they are located a distance from any major city and have extensive security.

Figure 2 shows one of the buildings, which is a large, blue-roofed structure located ten miles northeast of the town Pyin Oo Lwin, [22.0513 N, 96.6294 E] where Burma’s Defense Services Academy training facility and other military installations are located, and about 35 miles from Mandalay, the nearest major city. This building is at the end of a long road set back from the main highway and appears remote.

Figure 3 shows the second building. It is located approximately 80 miles west of Mandalay (21.723862, 94.766464) (see figure 4). It has very similar characteristics to the first building near Pyin Oo Lwin. The building is located on an isolated compound and sits on a wide foundation; its side lengths are essentially identical to the first building (~80 meters), the roof is vaulted and it appears to be blue in color (see figure 5). A European intelligence agency confirmed to ISIS that this is indeed the second building.

The buildings’ distance from a major city is odd because one would expect facilities that make locomotive engines or sophisticated parts to be near a major city and a skilled civilian work force. In contrast, a workforce operating at the first building in figure 2 would need to travel about one hour by bus from Mandalay to reach it. In fact, the equipment would be expected to go to existing diesel locomotive manufacturing facilities, in particular the Insein Locomotive Shed and the Ywahtaung Diesel Locomotive Shed, both of which were being upgraded in 2006 to make diesel locomotives and are located near Yangon and Mandalay, respectively (see figures 6 and 7).

The building in figure 2 was built inside a deep hole, according to an intelligence official. It appears to be a large industrial building (270 feet on each side) with a 40-foot wide road leading to the building. The width of the road would imply the use of long trucks or trucks hauling wide or long objects.

Commercial satellite images of the building seen in figure 2 dating to 2005, early in its construction phase, show large, sturdy foundations, but the building judged as unsuitable to support a nuclear reactor. Additionally, no railroad tracks are visible in figure 2, which suggests the building is not for assembling locomotives.

At first, European analysts believed that Burma was not the actual end user of these sophisticated imports, and thought perhaps North Korea was the hidden buyer. The buildings lacked vital climate control equipment, including air conditioning. Because excess humidity can damage the dual-use equipment, initial assessments assumed that Burma intended to ship the equipment elsewhere. But as of mid-2009, the equipment was still in Burma. In addition, no connection to another country has been established.

Some speculate that North Korea could locate military industries inside Burma. But is the Burmese workforce sufficiently trained to operate them for North Korea? The workforce in North Korea is more highly skilled, and North Korea can procure CNC machines for itself. Nonetheless, a joint Burmese/North Korean military or nuclear enterprise might make sense.

The question that remains is what is Burma planning to do with the equipment in these buildings? Is the planned use really for making locomotive diesel engine parts or is it related to nuclear, missile, or conventional weapons? A key challenge is how to determine the true purpose of these imports of sophisticated machinery and ensure that future ones are subject to more scrutiny by supplier states.

Conclusion and Policy Recommendations:

There remain sound reasons to suspect that the military regime in Burma might be pursuing a long-term strategy to make nuclear weapons. Despite the public reports to the contrary, the military junta does not appear to be
close to establishing a significant nuclear capability. Information suggesting the construction of major nuclear facilities appears unreliable or inconclusive.

Assigning a purpose to suspicious procurements likewise remains uncertain. The procurements are multi-purpose and difficult to correlate conclusively with a secret missile or nuclear program. Although Burma and North Korea appear to be cooperating on illegal procurements, who is helping who cannot be determined with the available information. Is North Korea helping Burma acquire nuclear, conventional weapon, or missile capabilities or is Burma assisting North Korea acquire this equipment?

Nonetheless, the evidence supports that the regime wants to develop a nuclear capability of some type, but whether its ultimate purpose is peaceful or military remains a mystery. The outstanding questions about the regime’s activities require that there be more scrutiny of Burma to ascertain if there is an underlying secret nuclear program. Because Burma’s known nuclear program is so small, the United States and its allies have an opportunity to both engage and pressure the military regime in a manner that would make it extremely difficult for Burma to acquire a nuclear weapons capability, let alone nuclear weapons.

A priority is to establish greater transparency over Burma’s and North Korea’s activities and inhibit any nuclear or nuclear dual-use transfers to Burma. A related problem is ensuring that Burma is not helping North Korea acquire nuclear and other military goods illegally. Vigorous implementation of the recent U.N. Security Council Resolution 1874 on North Korea is helpful to these goals. The U.S. and other governments should continue to press Burma’s military regime to abide by this resolution. To reinforce this message, Burma should be made more aware of the penalties of being labeled a pariah state.

The United States and its European allies have strained relations with the military dictatorship with few opportunities to appeal to Burma’s military regime. At the same time, the regime has demonstrated little interest in breaking out of its isolation, although it has shown a recent interest in engaging with the United States. The Obama administration is right to try to exploit this interest by attempting to engage with the regime, despite the obvious difficulties. A stated U.S. goal is to induce the regime to break or diminish its relationship with North Korea.

Russia should be privately encouraged that before it provides Burma with a research reactor, the regime needs to meet a set of specific conditions. More effective safeguards would be the principal condition, including the Additional Protocol along with upgraded safety and security infrastructure. Also necessary are verifiable commitments by the Burmese regime to not procure equipment illicitly and to abide by U.N. Security Council Resolution 1874, which would mean Burma would not buy any nuclear facilities, equipment, or materials from North Korea.

Burma’s suspicious procurements as well as its cooperation with North Korea should cause suppliers to be more vigilant. Suppliers need to exercise greater caution about enquiries from Burmese entities or companies in other countries where there is an indication that goods are destined for Burma.

Governments should warn their companies about possible attempts by Burma to acquire high precision machinery or other sensitive dual use items. The countries that supplied the high-precision equipment in 2006 and 2007 should find a legal justification to press for access to the equipment in order to verify that it is being used for its declared purpose.

The United States is planning to hold more discussions with Burma. In these discussions, the United States should press for access to certain suspicious sites as a way to build confidence.

The Syrian reactor, Iran’s gas centrifuge uranium enrichment program, and Pakistan’s highly enriched uranium program were all enabled in large part because of the failure of the international community to halt the illicit sale of nuclear-related technology. The international community has a unique opportunity to set a new precedent and
prevent Burma from acquiring materials that could eventually be used in an unsafeguarded nuclear program. Burma has no reason to seek nuclear weapons. The international community should convince Burma that pledging not to do so in a truly verifiable manner could provide significant benefits.

Figure 1. Ground photograph obtained by Bertil Lintner at YaleGlobal Online. ISIS assessed that this photograph depicts a dam penstock.
Figure 2. A large, blue-roofed structure located ten miles northeast of the town Pyin Oo Lwin, where Burma’s Defense Services Academy training facility and other military installations are located, and about 35 miles from Mandalay, the nearest major city. ISIS learned that a set of high precision equipment was sent to this building. Upon closer examination by European officials, Burma’s declared end use of the equipment did not look credible.
Figure 3. ISIS learned that another set of the high precision equipment in the first building was also sent to this building.
Figure 4. The buildings are located west and east of Mandalay. The building in Figure 2 is located in the area circled to the east of Mandalay. The building in Figure 3 is in the area circled to the west of Mandalay.
Figure 5. A side-by-side comparison of the two buildings. The building on the left is seen in figure 2, the building on the right is seen in figure 3. The buildings both have nearly identical side lengths of approximately 80 meters. Both have vaulted roofs, which appear to be blue in color. Both are located on isolated compounds and both buildings are placed on top of wide foundations.
Figure 6. A wide-view image of the city Yangon in Burma. The Insein Locomotive Shed is likely located within Insein Township, circled in blue.
Figure 7. Wide-view of Mandalay in Burma. The Ywahtaung Diesel Locomotive Shed is likely located in the area circled in blue.

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2 Ibid.

3 Briefing to ISIS staff by IAEA officials, January 28, 2002.
4Ibid.


8“Statement of the Leader of the Myanmar Delegation to the IAEA General Conference.”

9Kurt Campbell, Assistant Secretary, Bureau of East Asian and Pacific Affairs, Statement Before the House Committee on Foreign Affairs, Washington, D.C., October 21, 2009.

10For an example of an alleged uranium mine and mill, see DictatorWatch.org, March 2007, http://www.dictatorwatch.org/phshows/burmafacility.html.


15“Burma’s Nuclear Programs: The Defectors’ Story.”


Ibid.

Ibid.


“Japan Holds 3 Accused.”


Ibid.

“3 Held Over Export Bid.”

“Japan Holds 3 Accused.”


Ibid.

Summary of Judgment.

Ibid.

Andrea Scheel Stricker, Deep Connections between Myanmar’s Department of Technical and Vocational Education and Department of Atomic Energy, ISIS, January 28, 2010.


Information Sheet, Myanmar Information Committee, Yangon, September 27, 2006: http://www.myanmar-information.net/infosheet/2006/060927.htm

The Obama administration is concerned that Burma is expanding its military relationship with North Korea and has launched an aggressive campaign to convince Burma's junta to stop buying North Korean military technology, U.S. officials said.

Concerns about the relationship -- which encompass the sale of small arms, missile components and, most worryingly, possible nuclear-weapons-related technology -- helped prompt the Obama administration last October to end the Bush-era policy of isolating the military junta, said a senior State Department official, speaking on the condition of anonymity because of the sensitivity of the subject.

So far, senior U.S. officials have had four meetings with their Burmese counterparts, with a fifth one expected soon. "Our most decisive interactions have been around North Korea," the official said. "We've been very clear to Burma. We'll see over time if it's been heard."

Criticism and questions have mounted from Congress and human rights organizations over the administration's new policy toward the Southeast Asian nation, which is also known as Myanmar. Rep. Howard L. Berman (D-Calif.), chairman of the House Committee on Foreign Affairs and generally a supporter of the administration's foreign policy, has recently called for the administration to increase the pressure on Burma, including tightening the sanctions that the United States has imposed on the regime.

"Recent events have raised the profile of humanitarian issues there," Berman said Friday. "Support is growing for more action in addition to ongoing efforts."

Thus far, the engagement policy has not yielded any change in Burma's treatment of domestic opponents. On Friday, Burma's supreme court rejected opposition leader Aung San Suu Kyi's latest bid to end more than a decade of house arrest. The Nobel Peace prize laureate's National League for Democracy won elections in 1990, but the military, which has ruled Burma since 1962, did not cede power.

In recent months, the junta has also ramped up repression against political dissidents and ethnic groups, although it has released one aging dissident -- U Tin Oo -- after almost seven years in detention. Thousands of people have fled Burmese military assaults into China, Bangladesh and Thailand in the months following the U.S. opening. A report issued this week by the Karen Women Organization alleged that Burmese troops have gang-raped, murdered and even crucified Karen women as the soldiers have attempted to root out a 60-year-old insurgency by guerrillas of that ethnic minority.

On Feb. 10, a Burmese court sentenced a naturalized Burmese American political activist from Montgomery County to three years of hard labor, and allegedly beat him, denied him food and water, and placed him in isolation in a tiny cell with no toilet. Burma recently snubbed the United Nations' special envoy on human rights, Tomas Ojea Quintana, denying him a meeting with Suu Kyi and access to Burma's senior leadership.
"The bad behavior has increased," said Ernie Bower, an expert on Southeast Asia at the Center for Strategic and International Studies.

Nevertheless, U.S. officials argue -- and Bower and others agree -- that talking with Burma still is the best way forward, especially given the concerns about Burma's deepening military relationship with North Korea. It is also important to keep talking with Burma, said Sen. James Webb (D-Va.), because China is more than willing to replace U.S. influence in Burma and throughout Southeast Asia. Webb's trip to Burma last August -- the first by a member of Congress in a decade -- has been credited with giving the Obama administration the political cover to open up talks with the junta.

Underlining the administration's concerns with Burma is a desire to avoid a repeat of events that unfolded in Syria in 2007. North Korea is believed to have helped to secretly built a nuclear reactor there capable of producing plutonium. It was reportedly only weeks or months away from being functional before Israeli warplanes bombed it in September of that year.

"The lesson here is the Syrian one," said David Albright, president of the non-governmental Institute for Science and International Security and an expert on nuclear proliferation. "That was such a massive intelligence failure. You can't be sure that North Korea isn't doing it someplace else. The U.S. government can't afford to be blindsided again."

Burma is believed to have started a military relationship with North Korea in 2007. But with the passage of a U.N. Security Council resolution last June banning all weapons exports from North Korea, Burma has emerged "as a much bigger player than it was," the senior American official said.

In a report Albright co-wrote in January titled "Burma: A Nuclear Wannabe," he outlined the case for concern about Burma's relations with North Korea. First, Burma has already signed a deal with Russia for the supply of a 10-megawatt thermal research reactor, although no construction of the research center had started as of September 2009. Second, although there are many unverified claims from dissident groups about covert nuclear sites in Burma, the report said "there remain legitimate reasons to suspect the existence of undeclared nuclear activities in Burma, particularly in the context of North Korean cooperation."

The report noted that the same company that aided the Syrians in constructing their nuclear facility is active in Burma. The company, Namchongang Trading (NCG), is sanctioned by U.N. Security Council. It is unclear what exactly NCG is doing in Burma, the report said, but its presence there "is bound to increase suspicions about such a sale."

In June 2009, Japanese authorities cracked a case that involved the sale of a magnetometer and other sensitive equipment that could be used to develop or manufacture nuclear weapons -- from a Beijing-based North Korean trading company to Burma.

Finally, the senior U.S. official noted that starting about eight years ago, a large number of Burmese students were going to Russia to study in nuclear-related fields. "It's not just dozens, it's hundreds," he said.
QUESTION: Do you have any comment on the report that the U.S. Government is concerned about a possible nuclear weapons technology to Myanmar by North Korea?

MR. CROWLEY: As we’ve said at the podium many times, we are concerned about the potential contacts with North Korea and Burma. Are – we do have concerns about nuclear cooperation. That’s one of the reasons why we worked with the international community to pass Resolution 1874. And we also note that, as we discussed last fall, that Burma itself has taken steps in support of 1874. But this is something that we will continue to talk to Burma about in our bilateral dialogue.

QUESTION: And do you have any plan to have another meeting with Burmese officials on that issue?

MR. CROWLEY: I have nothing to forecast in terms of the next step in our bilateral dialogue.
Burma-North Korea Ties Pose a New Headache for US
By AUNG ZAW
Wednesday, March 3, 2010

The US has been a leading critic of the Burmese regime's appalling human rights violations and repression of the country's opposition and ethnic minorities. Now, however, a shift in Washington's Burma policy can be discerned as the Obama administration seeks to engage with the regime.

The engagement policy is not only about promoting democracy and human rights in the military-ruled country. The most pressing issue is the warming relationship between Burma and North Korea.

During his first visit to Burma last year, US Assistant Secretary of State Kurt Campbell told the junta leaders of Washington's concern about the increasing military ties between Burma and North Korea. It isn't clear whether Burma gave assurances to the US.

The US wants to see the Burmese regime sever its military ties with North Korea, but it won't have an easy task convincing the reclusive generals.

The Washington Post, quoting US officials, reported this week that the Obama administration had launched an aggressive campaign to convince Burma's junta to stop buying North Korean military technology.

A senior US State Department official, speaking on condition of anonymity, told the newspaper: “Our most decisive interactions have been around North Korea. We've been very clear to Burma. We'll see over time if it's been heard.”

Burma’s neighbors, as well as the US, will need to carefully monitor the strengthening ties between Naypyidaw and Pyongyang.

Last month, alarm bells rang when Burma's state-run media reported that several high-ranking Burmese military officials, including Lt-Gen Tin Aye, ranked No 5 in the Burmese armed forces hierarchy, participated in a Rangoon ceremony to mark the 68th birthday of North Korean leader Kim Jong Il.

The New Light of Myanmar ran a front-page story with a photograph of Tin Aye and North Korean Ambassador Kim Sok Chol holding hands together at a welcoming reception.

An interesting development was a full-page birthday tribute to Kim Jong II, published in the Burmese language “Popular Journal” and praising Kim as a true patriotic leader. The article hailed Kim's creation of nuclear and guided missile programs, saying he had stood up against the West and sacrificed his life for the future of North Korea.

There is no doubt that the regime’s notorious censorship board approved the article after receiving the green light from top leaders in Naypyidaw.

Burma and North Korea have developed a military relationship since the two countries restored diplomatic ties in 2007.
Analysts believe that clandestine military ties between the two countries may have been reestablished as early as 1999, when Burmese officials paid a low-profile visit to the North Korea capital.

Last year, The Irrawaddy exposed a leaked report of a clandestine visit by Gen Shwe Mann to military facilities and missile factories in North Korea.

As chief of staff of the army, navy and air force, and the coordinator of Special Operations, Shwe Mann led a 17-member, high-level delegation on a seven-day visit to Pyongyang. Among the sites they visited were secret tunnel complexes built into the sides of mountains to store and shield jet aircraft, missiles, tanks and, possibly, nuclear and chemical weapons.

Accompanied by air defense chief Lt-Gen Myint Hlaing and other senior army leaders from heavy industries, the delegation was clearly on a mission to cement stronger military ties with the hermit state.

During the visit, Shwe Mann and his North Korean counterpart, Gen Kim Kyok-sik, signed a memorandum of understanding, officially formalizing military cooperation between Burma and North Korea.

In July 2009, US Secretary of State Hillary Clinton expressed concern over military links between North Korea and Burma.

“We know that there are also growing concerns about military co-operation between North Korea and Burma, which we take very seriously,” Clinton told journalists in Bangkok during a visit to Southeast Asia. “It would be destabilizing for the region. It would pose a direct threat to Burma's neighbors.”

Military analysts say the North Korean regime has provided Burma with weapons, military technology transfers and expertise in underground tunneling used for concealing secret military installations. Since 2002, they say, dozens of North Korean technicians have assisted the Burmese armed forces.

Under the terms of the memorandum, North Korea would build or supervise the construction of special Burmese military facilities, including tunnels and caves in which missiles, aircraft and even naval ships could be hidden.

Burma would also receive expert training for its special forces, as well as air and defense training.

The Burmese officials who alerted the outside world to these developments were hunted down, brought to trial and sentenced to death.

Some army officials still at large insisted that the Burmese regime plans to acquire nuclear weapons. A former army official who still has connections within the army told The Irrawaddy recently that top army leaders believe that the possession of nuclear weapons will gain Burma more bargaining chips with the West and neighboring governments.

The official said, “They (Burmese leaders) look up to North Korea and Pakistan as role models and they are not out of touch and they always study the regional and international landscape with keen interest.”
Burma's nuclear program includes the acquisition of a 10-megawatt light water nuclear reactor from Russia. Its secret location is in Magwe, central Burma.

In 2006, nuclear physics departments were established in the universities of Rangoon and Mandalay, with enrollment controlled by the government.

In 2007, Russia’s ambassador to Burma, Dr Mikhail M. Mgeladze, confirmed that about 2,000 Burmese students had been admitted to 11 academic institutions in Russia under a bilateral agreement, and about 500 had returned to Burma with bachelor, master’s or doctorate degrees.

In May 2007, Russia and Burma signed a new agreement in Moscow “on the establishment of a nuclear research center in Myanmar.”

The signatories were Burma’s science and technology minister U Thaung and the head of Russia’s Nuclear Power Agency (Rosatom), Sergey Kiriyenko.

Russia is not on the US nuclear watch list.

“If it was just the Russian reactor, under full international energy supervision, then the likelihood of them being able to do something with it in terms of a bomb would be zero,” according to Prof Desmond Ball, who specializes in security issues in the region. “It's the North Korean element that adds danger to it.”

Aung Zaw is founder and editor of the Irrawaddy magazine. He can be reached at aungzaw@irrawaddy.org.
U.S. envoy denies bid to change N.K. regime
By Kim So-hyun  (sophie@heraldm.com)
Thursday, March 11, 110 [Accessed 2010-03-11T14:50Z]

[EXCERPT]

U.S. ambassador to South Korea Kathleen Stephens said yesterday her country has no intention of toppling the North Korean regime by force, a day after Pyongyang called the ongoing South Korea-U.S. military drill "a rehearsal for nuclear attack."

"The United States has no hostile intent toward the people of North Korea nor are we threatening to change the North Korean regime through force," Stephens told a forum in Seoul hosted by a group of nongovernmental organizations dedicated to unification.

"Our aim is to find diplomatic solutions to working with North Korea."

North Korea claims the Key Resolve and Foal Eagle exercise, an annual South Korea-U.S. joint military drill that began Monday across the South for an 11-day run, demonstrates persisting U.S. hostilities against the communist country. The North said it would continue to bolster its nuclear arms development if the United States does not drop what Pyongyang called military threats and provocations.

Stephens said Washington would not accept North Korea as a nuclear weapons state and that it was concerned about the North exporting nuclear or ballistic missile-related parts to Myanmar or Iran.
Burmese Reactors Close to Completion: Military Sources
By MIN LWIN
Saturday, March 13, 2010

Burma's ruling junta has finished construction work on three nuclear reactors in the country's north and will soon be ready to put them into operation, according to military sources at the elite Defense Services Academy (DSA) in Maymyo, Mandalay Division.

![A map showing the Pon Taung Pon Nya mountain range, the site of one of three nuclear reactors recently constructed by the Burmese junta.](image)

The nuclear reactors, which the regime claims are for research purposes, are located at Kyauk Pa Htoe, a village in Thabeikkyin Township, northern Mandalay Division; Maymyo Fifty Miles, an area some 80 km from the setting of the DSA; and Pon Taung Pon Nya, a mountainous area on the border between Magwe and Sagaing divisions.

“They [military leaders] chose Pon Taung Pon Nya because it is a safe distance from highly populated cities,” said a military official in Maymyo, also known as Pyin Oo Lwin.

According to local residents, the site is about 30 km from the village of Kyaw in Gantgaw Township, situated on the Pakokku-Kalay railway line in Magwe Division.

“Since the project started in 2007, there have been many foreigners who look like they might be Chinese coming and going,” said a local source living in Kyaw.

“We are not allowed to go anywhere near this area built for military use,” the source added.

Although there has been confirmation that construction work on the projects has been completed, it remains unclear how soon the reactors will be ready to go online. However, a recent flurry of activity, including high-
level visits by senior members of the ruling regime, suggests that the reactors will soon be ready for use, according to military sources.

The sources say that Vice Sen-Gen Maung Aye, the junta's No. 2, has made frequent trips to the DSA in Maymyo in recent months to meet with Maj-Gen Sein Win, the head of the Directorate of Defense Services Science and Technology Research, which is responsible for Burma’s nuclear program.

According to Ye Htet, a former lieutenant who defected from the Burmese military while studying for a graduate degree at the DSA, the regime has invested heavily in the project with an eye to early completion. He said the junta has sent around 60,000 military officials to Russia to study nuclear technology.

“The project is at least half finished,” said Ye Htet, who fled to Mae Sot, on the Thai-Burmese border, earlier this year.

The technology for Burma’s nuclear research project was provided by Russia’s Federal Atomic Energy Agency (RFAEA), which agreed in May 2007 to help design and build a 10-megawatt light-water reactor using 20 percent enriched uranium-235 fuel.

However, the Russian agency has since distanced itself from the Burmese nuclear program. This has led to fears that the regime has turned to North Korea for assistance in achieving its nuclear ambitions.
MR. CROWLEY: Assistant Secretary Kurt Campbell was busy over the weekend. Today, he met with opposition leaders in Burma, including Aung San Suu Kyi, and members of the NLD Central Executive Committee. He also met with representatives of some of Burma’s largest ethnic groups. Prior to that, he was in Nay Pyi Taw and meetings with Burmese officials, including Minister for Science and Technology U Thaung, his designated counterpart in our senior-level dialogue with Burma.

The key objective of his trip to Burma was to underscore the purposes and the principles of our engagement and to make clear our profound disappointment in the regime’s failure to make progress on any of our core concerns.

[deletia]

QUESTION: P.J., given the somber note in Kurt Campbell’s statement, does this kind of mean the end of efforts to engage the Burmese Government? And does the United States feel there’s any further opportunity to influence them on the rules of the election?

MR. CROWLEY: The upcoming elections will carry no international legitimacy. We have made that clear to Burma. As to our efforts to continue to engage, it is why Kurt Campbell went. And in fact, on the course of his conversation with Aung San Suu Kyi, she shared his disappointment that the government was not more forthcoming, was not willing to expand political space, was not willing to have meaningful dialogue with its ethnic groups. But she also continued to support U.S. efforts, international efforts to engage the Burmese Government.

QUESTION: So is there a possibility then that he’ll go back?

MR. CROWLEY: Well, our engagement will continue. In what form and at what point, we’ll evaluate as we go along.

QUESTION: And to what end? I mean, what benchmarks are you using? I mean, is this an open-ended engagement for the rest of the Obama Administration’s term, or are you going to at a certain point review whether engagement is the best course?
MR. CROWLEY: We review at all times. But isolation has not worked either.

QUESTION: Well, it doesn't seem that – but it doesn't seem that engagement worked so far.

MR. CROWLEY: Well, we’re about 15 months into an administration. I think we’re willing to say – and after maybe three meetings, we’re willing to say that, so far, the Burmese Government has disappointed us. We will continue to evaluate. We’ll continue to make clear to Burma what it should be doing. The only – within its own – not only in terms of how it relates to its own people, but also another message that Kurt Campbell delivered to them today was to reaffirm that we expect Burma to live up to its international obligations, including full support of UN Security Council Resolution 1874.
Remarks on Burma
Kurt M. Campbell
Assistant Secretary, Bureau of East Asian and Pacific Affairs
Rangoon, Burma
May 11, 2010

AP SOUNDBITE of Assistant Secretary of State for East Asia Kurt Campbell [Video soundbite at above URL]

"During various discussions with Burma's senior leadership, we have outlined a proposal for a credible dialogue, among all the stakeholders in Burma, that would allow all sides to enter into such a dialogue with dignity. Unfortunately, the regime has choose[n] to move ahead unilaterally, without consultation from key stakeholders - towards elections planned for this year. As a direct result, what we have seen to date leads us to believe that these elections will lack international legitimacy. We urge the regime to take immediate steps to open the process in the time remaining before the elections."

"Finally, we have urged Burma's senior leadership to abide by its own commitment to fully comply with UN Security Council Resolution 1874. Recent developments call into question that commitment. I have asked the Burmese leadership to work with the United States, and others, to put into place a transparent process to assure the international community that Burma is abiding by its international commitments. Without such a process, the United States maintains the right to take independent action within the relevant frameworks established by the international community."
QUESTION: Lalit Jha from Press Trust of India. In March, you went to Delhi to talk with the Indian Government on China and Asisn-related issues. And in April, Assistant Secretary Blake went to Beijing for U.S.-China Sub-Dialogue on South Asia. So can you give us a sense of the dynamics between U.S., China, and India as you try to make moves on regional and global issues?

And secondly, where do we stand on U.S.-Burma relations after your second trip to Burma? Have you seen anything moving forward in that?

ASSISTANT SECRETARY CAMPBELL: Let me answer the first question first. And I can talk to you primarily about my own engagement with India. I took a delegation to Delhi for discussions with Indian friends about developments in Asia generally. We talked about Southeast Asia, China, Northeast Asia and developments there. And I think our desire is to continue a strong dialogue with India about their so-called “Look East” strategy, which obviously involves India playing a larger role economically, politically, strategically in the Asian-Pacific region. We welcome that, we support that, we think that’s an important development in the next phase of Asia’s growth. We talked about regional architecture and the desire to see India play a larger role in the emerging architecture of the Asian-Pacific region. And I must say we were quite satisfied by our discussions and we, I think, look forward to continuing deeper discussions with Indian friends about developments in the wider Asian-Pacific region.

As you just suggested, I returned from a trip to Burma last week. It was my second trip. While I was there, I had the opportunity to interact directly with the government, also with elements of the opposition ethnic groups, key groups that are going to be competing in the upcoming election, the NLD, and also I had a chance to meet Aung San Suu Kyi. In my statement at the conclusion of my visit, I did underscore that the United States remains quite dissatisfied with what we’ve seen to date in terms of movement on the part of the government on the specific issues that we’ve laid out. We were hoping to see an internal dialogue among the key parties in advance of the upcoming election. We sought movement on issues associated with political prisoners inside the country. We had hoped for more specific steps to ease tensions between the government and ethnic minority groups. And lastly, we wanted to see more progress on issues associated with UN Security Resolution 1874. On each of these issues, we are troubled by developments and we are calling on the government to follow through on specific steps to allow not only a better relationship with the United States and the international community but a better future for its people overall.
QUESTION: P.J., there’s a new UN report out that says North Korea is illegally exporting nuclear and ballistic materials and technology despite UN sanctions. Is this – what’s your reaction to this? And is this a sign that the UN is finally coming around to things that the U.S. has long suspected?

MR. CROWLEY: Well, go back to last summer when the UN Security Council passed Resolution 1874 expressly because we have longstanding concerns about North Korea’s proliferation activities and its export of dangerous materials to unsavory countries and characters around the world. I don’t think that this is a stark revelation. We’ve had concerns some of the countries named in that report. We’ve had concerns about relations and exports to, among others, Burma. And – but we’ve come – came together a year ago, passed 1874. We have been aggressively doing our part and other countries have done the same to implement 1874, try to restrict the kinds of exports which can have destabilizing impact both inside the immediate region and other places in the world. We’ll continue to do that.

And as we consult and then come – at some point in the coming days, we expect that South Korea will bring North – issues regarding North Korea’s behavior back before the Council. And we’ve pledged we will support fully South Korea and that we’ll see what other steps are appropriate so we can further restrict and minimize the threat that North Korea poses to the region and the world.

QUESTION: So there is evidence to support, since that last UN resolution, that there – that North Korea continues to export these materials.

MR. CROWLEY: Well, North Korea is – I mean, again, this is not a revelation. The ongoing activity of North Korea is destabilizing within its own neighborhood and elsewhere. It is an exporter of counterfeit material, it’s an exporter of illegal material, it’s an exporter of dangerous hardware and materials. And we’ve long recognized that, unfortunately, this is the export of missiles, nuclear technology and other things are the cash crop of North Korea. It’s expressly why we have offered North Korea a different relationship, so that it can actually go about building a legitimate economy, one that is far more constructive and conducive to stability and peace in the region. But as long as we recognize the danger posed by South Korea, we’ll continue to take appropriate steps --

QUESTION: North Korea.

MR. CROWLEY: I’m sorry, North Korea – continue to take appropriate steps to minimize the danger that – and risk that North Korea poses to its neighbors and to the United States.
QUESTION: To which countries is North Korea exporting these materials?

MR. CROWLEY: I haven’t read that full report so – but I know Burma is one of those countries mentioned and we have mentioned from this podium before.

QUESTION: Is Iran one?

MR. CROWLEY: Hmm?

QUESTION: Is Iran --

QUESTION: Iran and Syria are also mentioned.

MR. CROWLEY: I mean, to the – I mean, in implementation of 1874, countries that intercept shipments – illegal shipments from North Korea, should investigate those and report those to the UN. I suspect that this report is a culmination of some of that reporting in terms of the implementation of sanctions by a variety of countries. We are fully supportive of those efforts.
Myanmar's military ambitions

Myanmar's ruling generals have started a programme to build nuclear weapons. They are trying to develop long-range missiles.

Elections later this year are aimed at convincing the world they are moving towards democracy. But fearing attack from the US and an uprising by their own people, Myanmar's generals are instead digging themselves in with a nationwide network of bunkers.

With top-secret material gathered over five years, this film reveals how Myanmar is trying to become the next nuclear-armed North Korea.

Key files and other information has been smuggled out by defecting army Major Sai Thein Win, a former deputy commander of a top-secret military factory at a town called Myaing.

Before leaving, he smuggled out thousands of files detailing a secret programme by Myanmar's ruling generals to build nuclear weapons.

To check Sai Thein Win's claims, the Democratic Voice of Burma had him show the files to Bob Kelley, a former intelligence officer at North America's nuclear facility Los Alamos and an ex-director of the International Atomic Energy Agency (IAEA).

Files and photos were also shown to Geoff Forden, a military research scientist from the Massachusetts Institute of Technology.

The experts agree Myanmar is a long way from achieving its goals.

But many believe that with its stated intent to one day acquire nuclear weapons, Myanmar's military ambitions should be taken seriously.

Myanmar's military ambitions can be seen from Friday, June 4, at the following times GMT: Friday: 0600; Saturday: 1900; Sunday: 0300; Monday: 1400; Tuesday: 0530; Wednesday: 1900; Thursday: 0300.
The Democratic Voice of Burma (DVB): Top-secret photographs and eye witness testimony gathered over five years provides powerful evidence of Burma’s plans to develop a nuclear capability. Are they modelling themselves on North Korea?

With elections set to take place in Burma later this year you might assume that the country is making steps towards democracy. But in this exclusive investigation we reveal that Myanmar’s ruling Generals are developing a nuclear weapons programme, their paranoia at an all-time high.

“They really want to build nuclear bombs. That’s their main objective”, claims army defector, Sai Thein Win. A Major in the Burmese Army, Sai was deputy commander of a secret military factory. Before leaving Burma he leaked thousands of files to an expatriate NGO, detailing the secret programme he worked on.

Fearing Western Air Strikes, Burma’s military elite have carved out a nation-wide network of bunkers and tunnels to protect themselves and their budding nuclear infrastructure. “I’ve never seen anything like that come out of Burma before”, comments long-time Burma analyst Bertil Lintner.

According to the leaked files, around $3.5 billion of state revenue has been channelled into the bunker project alone. This, in the country which spends the lowest percentage of GDP on healthcare of any government in the World. Even in the army there is discontent about the amount spent on the bunkers; “we want to do things which support people and improve their lives”, a serving army engineer confides in a secret interview.

In a safe house in Thailand, Sai Thein Win unpacks the few possessions he fled the country with. Amongst them is his uniform, and photos of himself amongst the machinery: vivid proof of his frightening story. He explains that the German machinery bought for educational purposes was actually being used for Uranium enrichment, and to produce parts for warheads. Bob Kelly, former intelligence officer at Los Alamos and ex-director of the IAEA, analyses Sai’s evidence: “there’s no conceivable use for this for anything other than a nuclear weapons program”. Geoff Forden, a military researcher at M.I.T., claims that parts shown in Sai’s photographs could be used in long-range missiles, extending the threat beyond national boundaries.

Both experts believe Myanmar is years from detonating a nuclear bomb. But commentators believe these ambitions should be taken seriously. If not, “they will surprise the international community”, warns Army defector Myat Noe.
Senator scraps Myanmar trip over nuclear claim
BANGKOK
Thu Jun 3, 2010 7:06am EDT

BANGKOK (Reuters) - U.S. Senator Jim Webb abruptly canceled a planned visit to military-ruled Myanmar on Thursday [2010-06-03] because of concern about the country's alleged nuclear cooperation with North Korea.

Webb, chairman of the Senate subcommittee on East Asia and Pacific, said his visit would be "unwise" having learned of a report containing new allegations that Myanmar was seeking North Korea's help in developing a nuclear program.

"News reports published today contain new allegations regarding the possibility that the Burmese government has been working in conjunction with North Korea in order to develop a nuclear program," Webb said in a statement.

"It is unclear whether these allegations have substantive merit. Until there is further clarification on these matters, I believe it would be unwise and potentially counterproductive for me to visit Burma," he said, referring to Myanmar by its former official name.

The United States believes North Korea has previously shipped conventional arms to Myanmar, in defiance of United Nations Security Council Resolution 1874.

Webb, a Vietnam War veteran, issued the statement from neighboring Thailand. He had been due to arrive in Myanmar on Thursday afternoon.

JUNTA Favorite

His visit to the country in August last year was hailed as a success for Myanmar's reclusive junta, which normally chides outsiders and accuses them of interference.

He met detained Nobel laureate Aung San Suu Kyi and junta supremo General Than Shwe, who often shuns visiting diplomats. It was not known who Webb had planned to meet this time.

U.S. Assistant Secretary of State Kurt Campbell, Washington's top official for East Asia, visited Myanmar on May 10 and expressed "profound disappointment" at the regime's approach to its much-derided election scheduled this year.

The visit was Campbell's first since November last year. That trip was the first in 14 years by a top U.S. official, signifying Washington's new policy of deeper engagement with a regime it has for years been trying to pressure into change.

Webb said it was important Myanmar and the United States continued to engage with each other, but called for clarification from about the nuclear issue, about which the junta has made no official comment.

"I strongly believe that a continuation of dialogue between our two countries is important for the evolution of a more open governmental system and for the future strategic balance in Southeast Asia," Webb added.

"However, a productive dialogue will be achievable only when these two matters are further clarified."

(Reporting by Martin Petty; Editing by Robert Birsel and Sugita Katyal)
Senator Jim Webb Postpones Burma Stop After Visits to Korea, Thailand

June 3, 2010

Senator Webb, chairman of the Senate Foreign Relations Committee Subcommittee on East Asia and Pacific Affairs, issued the following statement today. He has just concluded visits to Korea and Thailand:

“News reports published today contain new allegations regarding the possibility that the Burmese government has been working in conjunction with North Korea in order to develop a nuclear program. From the initial accounts, a defecting officer from the Burmese military claims direct knowledge of such plans, and reportedly has furnished documents to corroborate his claims.

“It is unclear whether these allegations have substantive merit. However, given the fact that Assistant Secretary of State Kurt Campbell recently accused Burma of violating UN Security Council Resolution 1874 with respect to a suspected shipment of arms from North Korea, there are now two unresolved matters related to activities of serious concern between these two countries. Until there is further clarification on these matters, I believe it would be unwise and potentially counterproductive for me to visit Burma.

“I strongly believe that a continuation of dialogue between our two countries is important for the evolution of a more open governmental system and for the future strategic balance in Southeast Asia. However, a productive dialogue will be achievable only when these two matters are further clarified.

“In the interim period, I intend to strongly suggest to the President that he fulfill the requirements of Public Law 110-286 and immediately appoint a special envoy to address the entire range of issues regarding relations between the United States and Burma.”
QUESTION: P.J., do you have any comment on Senator Webb’s cancellation of trip to Myanmar (inaudible)?

MR. CROWLEY: Obviously, we’re aware that he chose not to go to Burma, but we’ll defer to his office for comment.

QUESTION: How about the press allegations on Myanmar’s nuclear connection to North Korea?

MR. CROWLEY: What?

QUESTION: Press allegation.

MR. CROWLEY: Of?

QUESTION: Nuclear cooperation between Burma and North Korea.

MR. CROWLEY: Well, we are – we have been concerned about Burma’s relationship with North Korea, the transactions that occur between Burma and North Korea. We are very conscious that North Korea is a serial proliferator of dangerous materials and weapons, and this is something that we have expressed directly to Burma and that continues to be a major concern of ours.
Expert says Burma ‘planning nuclear bomb’
Burmese defector Sai Thein Win in a factory in Burma (DVB)
By ROBERT KELLEY
Published: 3 June 2010

A five-year investigation by DVB has uncovered evidence that Burma is embarking on a programme
to develop nuclear weaponry. At the centre of the investigation is Sai Thein Win, a former defense
engineer and missile expert who worked in factories in Burma where he was tasked to make
prototype components for missile and nuclear programs.

Sai contacted DVB after learning of its investigation into Burma’s military programmes, and supplied
various documents and colour photographs of the equipment built inside the factories. The
investigation has also uncovered evidence of North Korean involvement in the development of
Burmese missiles, as well as Russia’s training of Burmese nuclear technicians.

In collaboration with DVB, American nuclear scientist and a former director in the International
Atomic Energy Agency (IAEA), Robert Kelley, has spent months examining this material. Here he
writes in an exclusive report for DVB that Burma is probably mining uranium and exploring nuclear
technology that is only “useful only for weapons”. For the full 30-page report, click here
[http://www.dvb.no/burmas-nuclear-ambitions/burmas-nuclear-ambitions-nuclear/expert-
analysis/9297].

A remarkable individual has come out of Burma to describe nuclear-related activities in that secretive country. DVB
has interviewed this man at length and is presenting his evidence here for all to see. His name is Sai Thein Win, and
until recently he was a major in the Burmese army. He was trained in Burma as a defense engineer, and later in
Russia as a missile expert. He returned to Burma to work in special factories, built to house modern European
machining tools, to build prototypes for missile and nuclear activities.

Sai brought with him some documents and colour photographs of equipment built in these factories. DVB is
publishing these photos and has arranged with experts to analyze what they have discovered. Some will no doubt want
to weigh in and add their conclusions – no doubt there will be detractors who do not agree with the analysis and our
conclusion that these objects are designed for use in a nuclear weapons development program. We invite their
criticism and hope that any additional analysis will eventually reinforce our view that Burma is engaged in activities
that are prohibited under international agreements.

DVB has hundreds of other photos taken in Burma inside closed facilities, as well as countless other information
sources and documents. Background information is given for the very specific information Sai is providing.

In the last two years certain “laptop documents” have surfaced that purport to show that Iran is engaged in a
clandestine nuclear program. The origin of these documents is not clear but they have generated a huge international
debate over Iran’s intentions. The Burmese documents and photographs brought by Sai are much closer to the
original source materials and the route of their disclosure is perfectly clear. The debate over these documents should
be interesting in the non-proliferation community.
Who is Sai Thein Win?

Sai was a major in the Burmese army. He saw a DVB documentary about special factories in Burma that had been built by the regime to make components for Weapons of Mass Destruction (WMD). He worked in two of these factories and felt there was more that needed to be conveyed outside Burma. Sai came out to Thailand to tell the world what he has seen and what he was asked to do. What he has to say adds to the testimony of many other Burmese defectors, but he supplements it with many colour photographs of the buildings and what they are building inside them. In addition he can describe the special demonstrations he attended and can name the people and places associated with the Burmese nuclear program that he visited.

Sai Thein Win reminds us of Mordecai Vanunu, an Israeli technician at the Dimona nuclear site in the Negev desert. Vanunu took many photographs of activities in Israel that were allegedly related to nuclear fuel cycle and weapons development. These photos were published in the Sunday Times in London in 1986. They purportedly showed nuclear weapons activities in Israel at the time. Israel has never confirmed that the images were taken in their facilities; much less that Israel even has a nuclear weapons program. But Vanunu was abducted, tried in an Israeli court and sentenced to many years in prison for divulging state secrets. Sai is providing similar information.

![Sai Thein Win holding an impeller for a ballistic missile engine. He designed the program to manufacture it on CNC machines from Europe (DVB)](image)

What is the Program that Sai Describes?

Sai tells us that he was tasked to make prototype components for missile and nuclear programs. He is an experienced mechanical engineer and he is capable of describing machining operations very accurately.

Sai has very accurately described a missile fuel pump impeller he made because he is trained as a missile engineer. His information on nuclear programs is based upon many colour photographs and two visits to the nuclear battalion at Thabeikkhyin, north of Mandalay. The Nuclear Battalion is the organization charged with building up a nuclear weapons capability in Burma. The Nuclear Battalion will try to do this by building a nuclear reactor and nuclear enrichment capabilities.
Buildings under construction at the Thabeikkyin Nuclear Battalion (DVB)

It is DVB consultants’ firm belief that Burma is probably not capable of building the equipment they have been charged to build: to manufacture a nuclear weapon, to build a weapons material supply, and to do it in a professional way. But the information provided by Sai and other reporters from Burma clearly indicates that the regime has the intent to go nuclear and it is trying and expending huge resources along the way.

Factories filled with European equipment

Two companies in Singapore with German connections sold many machine tools to the Burmese government, notably the Department of Technical and Vocational Education (DTVE). DTVE is closely associated with the Department of Atomic Energy (DAE) which is subordinate to the Ministry of Science and Technology (MOST). A great deal of information is known about people and organizations in this chain. DTVE is probably a front for military purchasing for weapons of mass destruction; that is to say nuclear, chemical and biological weapons and the means to deliver them, largely missiles.

The German government did not have derogatory information about DTVE when the tools were sold and allowed the sale. Fortunately, although the machine tools were very expensive and capable, they were sold without all of the accessories to make the very precision parts required for many missile and nuclear applications. These factories are only making prototypes and first models of equipment for other research organizations. They are not making serial copies for a production program and they do not do research themselves.

The companies believed the machines were to be used for educational and vocational training, but the German government, suspicious about the end use, sent a diplomat and an expert to examine the machines that were installed in two special factories in Burma. The expert was suspicious that the machines would be used for uses other than training; there were no students and no universities nearby, and there were no women students. The expert noted that none of the male students wore military uniforms. DVB has examined the photos and some of the “students” who wore civilian clothes during the expert visit wear military uniforms when the Europeans are not there.

Sai provided recognizable photos of the equipment installers and the Germans during their site visit. This is one of many indications that he was at the factories and that his story is very credible. It is also fortunate that the German government was diligent and visited these factories to verify the end use. The Burmese were probably not telling the whole truth, but the visits allow serious verification of the facts.
Sai describes equipment the Nuclear Battalion is building

Sai has provided DVB with many photos of material that the Nuclear Battalion at Thabeikkyin is requesting. One of the most obvious ones is requested in an accompanying secret memo from the No (1) Science and Technology Regiment at Thabeikkyin to the Special Factory Number One near Pyin Oo Lwin. It is for a “bomb reactor” for the “special substance production research department” and there are some sketches of what is wanted as well as pictures. A bomb reactor in a nuclear program is a special device for turning uranium compounds into uranium metal for use in nuclear fuel or a nuclear bomb. The pictures and sketches are of such a bomb reactor and one of the pictures has been subjected to high temperature. The paint is burned off and it has been used. It may be a design from a foreign country or a Burmese design. But the need for a bomb reactor in a Burmese Nuclear Battalion is a strong signal that the project is trying to make uranium metal. Whether the uranium metal is used in a plutonium production reactor or a nuclear device, Burma is exploring nuclear technology that is useful only for weapons.
Sai also provided photos of chemical engineering machinery that can be used for making uranium compounds such as uranium hexafluoride gas, used in uranium enrichment. He describes nozzles used in advanced lasers that separate uranium isotopes into materials used for bombs. He provides pictures of a glove box for mixing reactive materials and furnaces for making uranium compounds. All of these things could have other uses, but taken together, in the context of the Nuclear Battalion, they are for a nuclear weapons program.

A group of Burmese military and civilian workers pose with a glove box they built at Factory 1 near Pyin Oo Lwin (DVB)

Sai has been told that the regime is planning to build a nuclear reactor to make plutonium for a nuclear bomb. He has seen a demonstration of a reactor component called a “control rod” that fits this story. He has been told that the regime plans to enrich uranium for a bomb and he has seen a demonstration of a carbon monoxide laser that will be part of this enrichment process. He has named the individuals he met and heard from at Thabeikkyin and they can be correlated through open source information with their jobs for the Burmese Department of Atomic Energy. Many are frequent visitors to IAEA grant training projects. He himself was tasked to make nozzles for the carbon monoxide laser. He actually knows less about the chemical industrial equipment seen in his photos than we can judge, but his overall story is quite interesting. It is also clear that the demonstrations and explanations that he has seen are quite crude. If they are the best Burma can do they have a long way to go.

How does Sai fit into the overall Burma story?

Sai is a mechanical engineer with experience in machining parts on highly specialized and modern machine tools. These machine tools make items that are very precise and can be used in nuclear energy programs or to make missiles. Sai is not a nuclear expert and he has little to say about the things he made, or that his factory made other than what he was told about their uses. He does provide photos of items that would be used in the nuclear industry to process uranium compounds into forms used in the nuclear weapons development process. These photos or his descriptions could be faked, but they are highly consistent with the uses he suggests.

Sai received a degree as a defense engineer in Burma. He then went to Russia to train in missile technology at the prestigious Bauman Institute in Moscow. He can document all of this. His friends went to Russia as well and studied nuclear and chemical technology at the Moscow Institute of Engineering Physics (MIFI) and the Mendeleev Institute of Chemical Technology. MIFI was the main training institute for Soviet nuclear weapons designers for many years.
The ones who studied chemistry at Mendeleev are probably the ones who are most important in building the special equipment that Sai knew about.

**Stories about a nuclear reactor in Burma**

There have many wild stories about a nuclear reactor in Burma. It is clear that Burma and Russia considered building a 10 Megawatt (10 MW) research reactor in Burma in 2000. It is also clear that this deal was not closed and that Russia announced only intent to build a 10 MW reactor around 2008. This reactor has not been built and Russia is highly unlikely to approve such a deal unless Burma signs a new special agreement with the IAEA. This agreement is called an Additional Protocol and Burma is very unlikely to sign it because it would give the IAEA the access it needs to discover a clandestine nuclear program in Burma.

Furthermore, a 10 MW nuclear reactor is a very small concern for proliferation. Such reactors are common in the world and they are simply too small to be of serious proliferation concern. They can be used to teach students how to work in the nuclear area, but they are not appropriate to rapidly make any serious quantities of plutonium for bombs. IAEA has standards for which reactors are especially suitable for plutonium production and this proposed reactor is below that limit. It is appropriate only for nuclear technology training and the production of medical radioisotopes. Local production of medical isotopes is one of the main reasons for reactors in the 10 MW class around the world. Burma could use this reactor for training, but reports that it bought a 10 MW reactor from Russia are clearly untrue, and stories that they want to build one of their own for a bomb program are nonsense.

The idea that Burma is building a larger reactor, like the alleged one Israel destroyed in Syria, is more interesting. This could be a plutonium production reactor, like the 25 MW (thermal) one that North Korea operated in Yongbyon. The fact that North Korea would consider supporting nuclear programs outside its own borders, in client states like Syria, is of serious concern when evaluating Burma. North Korea does have a memorandum of understanding to help Burma build intermediate range ballistic missiles but their role in the nuclear program is only anecdotal.

**Is Burma violating its international agreements?**

The most important agreement that Burma must satisfy is its agreement with the IAEA. It signed an agreement with the IAEA in 1995 that it would not pursue nuclear weapons under a carefully defined standard international legal agreement. A supplement to this agreement, a so-called Small Quantities Protocol, said that Burma had no nuclear facilities and very small amounts of nuclear materials, which it did not even have to itemise. As a result of this declaration, which was accepted by the IAEA, there are no nuclear safeguards inspections in Burma. There are some IAEA visits to Burma, because Burma is a recipient of IAEA scientific grant money for humanitarian purposes. Some of these grants train Burmese scientists for nuclear activities that could enable them to produce nuclear materials, but these are not the majority of the grants.

Burma has certified that it has no nuclear facilities, has minimal nuclear materials, and has no plans to change this situation. The information brought by Sai suggests that Burma is mining uranium, converting it to uranium compounds for reactors and bombs, and is trying to build a reactor and or an enrichment plant that could only be useful for a bomb. There is no chance that these activities are directed at a reactor to produce electricity in Burma. This is beyond Burma’s engineering capabilities. It is up to Burma to notify the IAEA if these conditions have changed. Clearly, if it is trying to secretly build a bomb and is breaking these rules it will not be voluntarily notifying the IAEA.

Burma has also purchased high quality machine tools from a German machine tool broker in Singapore that can be used for weapons of mass destruction manufacture. These tools could be used to make many things but they are of a size and quality that are not consistent with student training, the declared end use.

The Department of Technical and Vocational training is a front for weapons procurement and is associated with the DAE and MOST. All of these departments, programs, and people associated with them, should be sanctioned and prohibited from buying anything that could contribute to weapons programs.
What is the state of Burma’s nuclear program?

We have examined the photos of the Burmese nuclear program very carefully and looked at Sai’s evidence. The quality of the parts they are machining is poor. The mechanical drawings to produce these parts in a machine shop are unacceptably poor. If someone really plans to build a nuclear weapon, a very complex device made up of precision components, then Burma is not ready. This could be because the information brought by Sai is not complete or because Burma is playing in the field but is not ready to be serious. In any case, nothing we have seen suggests Burma will be successful with the materials and component we have seen.

What is significant is intent. Burma is trying to mine uranium and upgrade uranium compounds through chemical processing. The photos show several steps in this intent. Burma is reported to be planning and building a nuclear reactor to make plutonium and is trying to enrich uranium to make a bomb. These activities are inconsistent with their signed obligations with the IAEA.

Even if Burma is not able to succeed with their illegal program, they have set off alarm bells in the international community devoted to preventing weapons of mass destruction proliferation. The IAEA should ask Burma if its stated declarations are true. If these allegations appear real there should be follow-up questions and inspections of alleged activities. This effort will be hampered by Burma’s failure to sign the Additional Protocol. Under the current Small Quantities Protocol Agreement, IAEA has no power to inspect in Burma.

Burma is also trying to build medium-range missiles such as SCUDs under a memorandum of understanding with North Korea. SCUDs are not likely to carry a Burmese nuclear warhead because first generation nuclear warheads are usually too heavy and large for the SCUD missile. But there is little reason to embark on SCUD missiles and nuclear weapons other than to threaten ones near-neighbours. Burma is ruled by a junta that has no real political philosophy other than greed. The junta rules for the purpose of enriching a small cadre with the rich resources of the country: teak, gold, jade, other minerals and the labour of the people. Like their model, North Korea, the junta hopes to remain safe from foreign interference by being too dangerous to invade. Nuclear weapons contribute to that immunity.

Conclusions

DVB has interviewed many sources from inside Burma’s military programs. Many other researchers are interviewing former Burmese military people, for example Dictator Watch and Desmond Ball with Phil Thornton. They have provided anecdotal evidence pointing to a Burmese nuclear weapons program. Sai has clarified these reports and added to them with colour photos and personal descriptions of his visits to the Nuclear Battalion. He trained in Moscow in missile technology along with friends who trained in nuclear technology who later vanished into the Nuclear Battalion of Thabeikkyin. All were trained in some of Russia’s first quality institutes.

The total picture is very compelling. Burma is trying to build pieces of a nuclear program, specifically a nuclear reactor to make plutonium and a uranium enrichment program. Burma has a close partnership with North Korea. North Korea has recently been accused of trying to build a nuclear reactor inside Syria to make plutonium for a nuclear program in Syria or North Korea. The timeframe of North Korean assistance to Syria is roughly the same as Burma so the connection may not be coincidental.

If Burma is trying to develop nuclear weapons the international community needs to react. There needs to be a thorough investigation of well-founded reporting. If these reports prove compelling, then there need to be sanctions of known organizations in Burma and for equipment for any weapons of mass destruction.

Kelley, 63, a former Los Alamos weapons scientist, was an IAEA director from 1992 to 1993, and again from 2001 to 2005. Based in Vienna, Austria, he conducted weapons inspections in Libya, Iraq, and South Africa, and compliance inspections in Egypt, Turkey, South Korea, Taiwan, Syria, Tanzania, Pakistan, India, and Congo, among others.
Introduction

The Democratic Voice of Burma has been accumulating information about a nuclear program in Burma for years, but recently they have come across a source with truly extraordinary information. He worked in special factories making prototype components for missile and nuclear programs. Like the Israeli technician, Mordecai Vanunu, he has brought hundreds of color photographs of the activities inside these factories. DVB has asked us to organize this information and analyze what it means. The goal of this report is to report our findings to DVB in support of their documentary film on Al Jazeera. We are also providing a great deal of raw data for the nonproliferation community to assess.

Burma is one of the world’s most repressive regimes. It is ruled by a junta of generals who have been in power for decades. These generals seem to have no political philosophy, such as socialism or fascism, only pure simple greed. To remain in power they depend on a brutal secret police and suspension of most human rights. With the passage of time they seek more ways to hang onto power as their wealth grows ever larger and the dissatisfaction of the population threatens to oust them.

There are many signs that Burma looks to maintain power by having military power that would make foreign intervention very painful for an aggressor. The power may not be necessarily aimed at aggression by Burma on its neighbors; rather it is a defensive power that signals its neighbors to leave them alone. The model for this is the Democratic People’s Republic of Korea, DPRK, commonly known as North Korea. North Korea is too poor to threaten anyone except its immediate neighbors but its possession of nuclear weapons inhibits any outside intervention in its repressive regime.

There are many reports of a nuclear program in Burma.(3) Most of them have been sketchy and in some cases technically incredible. Now the Democratic Voice of Burma (DVB) has assembled a huge new body of information that confirms many sources that Burma is investigating nuclear technology. The majority of the new information comes from one source, which is always a concern for credibility. This source is an educated man, a former Burmese Army Major, Sai Thein Win (STW), who understands what he knows and separates his information into what he knows well and what is hearsay. He has a good sense of the organization of Burma’s special military programs and is much more of an expert on their missile projects than he is on nuclear matters. His information on nuclear program organization is impressive and it correlates well with information from other published and unpublished sources. But the most important thing he has brought forth is hundreds of color photographs taken inside critical facilities in Burma. Photographs could be faked, but there are so many and they are so consistent with other information and within themselves that they lead to a high degree of confidence that Burma is pursuing nuclear technology. Our analysis leads to only one conclusion: this technology is only for nuclear weapons and not civilian use or nuclear power.

Background and Organization of a Program

There is very little doubt that Burma has a nuclear program. It is headed by Dr. Ko Ko Oo who has attended meetings abroad and openly asserts his interest in nuclear matters. This program has a small connection to the International Atomic Energy Agency (IAEA) in Vienna. The ties to IAEA are in mostly in civil matters such as the use of isotopes
in medicine and agriculture, but there are also training courses for Burmese scientists in nuclear technology. Burma does not have any declared nuclear facilities and it claims to have little or no nuclear material. This situation means that the IAEA does not conduct any inspections in Burma because both sides have agreed there is nothing to inspect. The situation with IAEA will be explained in more detail later in this paper.

Currently Burma’s nuclear effort is managed by the Directorate of Defence Services Science and Technology Research Center (DDSSTRC). This organization is located in May Myo, also called Pyin Oo Lwin at the Defense Services Technological Academy (DSTA). It is a large complex for the education of military officers and for research. It is primarily a headquarters site and probably does not conduct experimental research, at least with nuclear materials or explosives.

![Figure 1. Defense Services Technological Academy at Pyin Oo Lwin](image)

The scientific side of the nuclear program is run by the Ministry of Science and Technology (MOST), headed by Minister U Thang. Beneath Thang is the Director General of MOST, Dr. Ko Ko Oo. Dr. Ko Ko Oo is the most public face of MOST and its nuclear activities. An example is an invitation to a June 2010 training course sponsored by IAEA where Dr. Ko Ko Oo is the addressee to choose participants from Burma. It is vital to note that Dr. Ko Ko Oo has also served as director of the Department of Technical and Vocational Education (DTVE), which is a front for military procurement activities. It will become clear later in this report that DTVE has been purchasing equipment for the nuclear and missile programs. There is also a Department of Atomic Energy (DAE) in Burma. The DTVE and DAE at one point shared an address, phone number and fax number according to an excellent and detailed report by Andrea Stricker of ISIS. In 2002 Dr. Ko Ko Oo gave his email address at DAE in his personal data at a conference. (7)

The DDSSTRC is responsible for a program, which according to sources, is charged with building a nuclear reactor, enriching uranium, and building a nuclear weapon. It is clear that this is a very difficult task for Burma to successfully accomplish. Much of what STW is providing suggests Burma has little chance of succeeding in its quest, but that does not change the fact that even trying to build a bomb is a serious violation of its international agreements. It would also seem that the very act of trying to build nuclear weapons is a sign of desperation and fear, no matter how unlikely it is to succeed.

**Thabeikkyin**

Our assessment of multiple sources is that Burma is really developing nuclear technology, that it has built specialized equipment and facilities, and it has issued orders to a cadre to build a program. The cadre in charge is known as the
Number 1 Science and Technology Regiment at Thabeikkyin. It is colloquially referred to as the “Nuclear Battalion” and we will adopt that term as well. Major General Sein Win and Lt.-Col. Win Ko have signed a document directing a special factory to produce a part for the No. (1) Scientific and Technology Regiment.

This document is important and will surface again when we look at equipment that is needed for the Nuclear Battalion. There are many reported activities at Thabeikkyin. Previous reports have associated it with mining or ore concentration. This latest source goes further and describes it as a site where “dangerous” ore is brought and stored. He also believes that the site is involved in trying to produce “yellowcake” but he is not sure what this material is or if they have been successful.

In Google Earth imagery we can see a small ore concentration plant and ore reserve about 7 miles east of the Irrawaddy at Thabeikkyin. This is very close to the point he describes. A group of buildings with one thickener and a tailings pond are visible. There is a pile of ore nearby. This could be a uranium ore concentration plant, consistent with multiple source reports of uranium mining in this general area. The mine itself has not been found.

STW visited Thabeikkyin on two occasions, in 2006 and 2007 and reported on the following points. The first and most important is that the mission is to build a nuclear reactor and to enrich uranium for a nuclear bomb. There is considerable research work at the site devoted to this end. It is not clear that either the reactor or enrichment plant would actually be built, possibly only designed here.

He did not visit the ore plant but he did visit laboratories in small buildings for a demonstration to General Mg Aye. He saw two demonstrations of technology. The first was a powerful laser, reportedly a carbon-monoxide (CO) laser that was used to burn a hole in a stick. The beam was a small red spot. One of his colleagues later confided to him that CO laser beams are invisible so the spot was not from that laser, but maybe a guide or pointing laser. The audience of military officers was very impressed.

The top general in the country, Than Shwe attended a second demonstration on a subsequent visit: a “control rod drive.” This consisted of a microprocessor moving a control element up and down in a laboratory. This sounds like an extremely simple task and not very impressive but again the military officers were pleased. Sai, without prompting gave a technically credible explanation of how a control rod affects the criticality of a reactor by absorbing neutrons. Otherwise we would not be so sure that the demonstration he saw had any nuclear application.

**Figure 2. A small ore concentration plant is visible at the location of Thabeikkyin given by the latest source.**
STW told us that Dr. Ni Lar Tin was the scientist who explained to the group how a control rod works. A Dr. Daw(9) Nilar Tin is active and visible in the DAE and MOST.(10)

STW can give the names of a few researchers at Thabeikkyin. Details of the technology are in a later section of this analysis.

The Factories

The Nuclear Battalion controls two important factories. These factories are dedicated to making prototypes and special components for the missile and nuclear programs.

Number (1) Science and Technological Material Production Workshop will be abbreviated as “Factory 1” in this report. It is located east of Pyin Oo Lwin (also known as Maymyo.) It was purposely built for the military research programs. Factory 1 has been more closely associated with the nuclear program than the missile program but has worked for both. It is also known by the name Naung Laing.

![Figure 3. Factory 1 is east of Pyin Oo Lwin](image)

Factory 1 has been the subject of internet discussion in such forums as the Arms Control Wonk, where it was the subject of intense speculation as a reactor.(11) DVB has many pictures of Factory 2 under construction that can be correlated to satellite imagery, as well as the exterior of Factory 1 after completion. It is a certainty that this is a machine tool factory and not a reactor.(12)

Number (2) Science and Technological Material Production Workshop, “Factory 2,” is located near Myaing in the western part of Burma. This factory is supposedly almost identical to Factory 1 but it is more tied to the Burmese missile program. That program is allegedly planning to make prototype parts for SCUD liquid fueled missiles. Burma has a Memorandum of Understanding (MOU) with DPRK on producing SCUDs so it is not unreasonable to consider there is a link between Factory 2 and the DPRK MOU.
Figure 4. Factory 2 near Myaing

Figure 5. Factory 2 under construction in a photo provided by STW
The western world and DVB know a great deal about the equipment and capability inside these two buildings. A great deal of the equipment in the buildings is large scale, precision, Computer Numerically Controlled (CNC) machine tools. These tools are largely of German and Swiss origin, along with some measuring equipment from Japan.

The companies which sold this equipment to Burma presumed it was being sold for educational or civilian purposes. The customer for the purchase was the DTVE. There was no derogatory information about DTVE at the time so the sale was allowed. Nevertheless, the companies did not sell the latest and best 4 and 5 axis machine tools. Instead they removed some of these capabilities. To verify the end-use of the equipment, the German government sent an expert in machine tools along with diplomatic representatives to the factories. The expert examined the tools and made a number of observations, most of which were incompatible with the claim that the factories were just university training centers:

- The factories are far from any universities or students
- There were no females working or studying
- The equipment was extremely large for normal machinist training
- No military personnel were observed

There are multiple correlations between satellite imagery, end-user verification, and photos of equipment being installed by German technicians, and even photos of the expert and the diplomat during end-user verification inspections. STW served one and one half years as an army major and deputy director in Factory 2 and then a few months in Factory 1 in the same capacity.
He indicated that many of the German tools were unusable due to damage and poor maintenance. Photos of equipment show rust, rat droppings and damaged hydraulic and electrical lines.

Training in Russia

STW has an interesting background, according to his interviews with us and with the DVB. He received an engineering degree from the DSTA. He joined the military and later was chosen to go to Moscow for additional training in missile technology in 2001. He was in the first group of students going to Russia, a fact which has been widely reported in other sources. Sai describes how he had to appear to be a civilian for this Russian training, and so he was given a false graduation certificate from Yangon University to show to the Russians. He still has both Burmese certificates as well as a Russian certificate from the N. E. Bauman Institute, Moscow State Technical University (MSTU). This is a respected Russian university where he studied many aspects of missile technology. Upon return to Burma he was assigned to the Headquarters of DDSSTRC for a year. He then was assigned to Factory 2, while it was under construction and worked primarily on missiles. An example is that he programmed the CNC machines to make a prototype impeller designed at DDSSTRC; however, the impeller quality was unacceptable due to the limitations of the machine tool.
Sai was part of a group which received missile training. Another group, where he also had friends, was sent to Russia at the same time, circa 2001, for training in nuclear technology. Many were trained at the Moscow Engineering Physics Institute known by its Russian acronym, MIFI. This university specializes in the nuclear side of technology, such as mathematics, physics, computer codes and theory. At one time it was the primary training school for the Soviet nuclear weapons experts. Other Burmese students went to the Mendeleev Moscow Chemical Engineering Institute. This university trained the Burmese in chemical technologies related to activities such as the production of uranium compounds to be used in the nuclear fuel cycle.

After all of the students returned from Russia, STW lost direct contact with them, but he knew that the mechanical engineers with nuclear training went to Factory 1 and the ones with more specific nuclear training went to the Nuclear Battalion at Thabeikkyin. There are still Burmese military students in Russia today.

The Nuclear Fuel Cycle

All of the new information brought out in photographs pertains to chemical processing. There are no pictures of nuclear bombs or reactors and only a tiny bit allegedly on Laser Isotope Separation (LIS). The information is all related to the chemical side of the nuclear fuel cycle. The technologies of interest are the following.

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<td>Uranium Oxides Production</td>
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<td>8</td>
<td>Reduction of UF6 to UF4</td>
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<td>9</td>
<td>Bomb reduction of UF4 with magnesium to uranium metal</td>
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Equipment Built at Factory 1 for the Nuclear Battalion

(Step numbers refer to the fuel cycle diagram above.)
**Bomb Reactor (Step 9)**

The bomb reactor is easy to recognize from its properties and from the fact that STW supplied a letter from the Nuclear Battalion to Factory 1 requesting a “bomb reactor.” The bomb reactor was to be used by the “special substance production research department.” This group is located at Technological workshop (5), whose location we do not know.

“Bomb Reactor” is an unfortunate pair of words in the nuclear context. The object is not a “nuclear bomb” and it is not a “nuclear reactor.” It is simply a very strong vessel to contain a violent chemical reaction. Hence it is a bomb in its strength and shape, and a reactor for containing the reaction of UF4 and magnesium (or calcium) metal inside. The term bomb reactor is synonymous with “bomb reduction vessel” or even “reduction vessel.” This terminology is much less emotive.

![Original letter from the Nuclear Battalion directing Factory 1 to build a “Bomb Reactor”](image-url)

**Figure 10. Original letter from the Nuclear Battalion directing Factory 1 to build a “Bomb Reactor”**
Secret

[Stamp of No (1) Science and Technology Regiment
Ministry of Defence]

No (1) Science and Technology Regiment
Thabeikkyin

Letter no. 1003/99/research/ Oo 3

Date, 2010 February 4

To

Army Science and Technological Research Department

Subject: Requesting the continuation of supply for materials needed for research

1. 1. Request No (1) Science and Technological material production workshop to make Bomb Reactor needed for research material for the use of special substance production research department at technological workshop (5).
2. 2. Send and report the formation/prototype data of Bomb Reactor needed to be made, as in Appendix (A)

Lt-Col Win Ko

* - (Please) carry it out.
* - Calculate necessity

(Signed)

Chief of HQs (On behalf of)

(Signature)

Secret

Figure 11. Translation of the Letter
One thing that will jump out at the experienced reader is that there are no tolerances or materials listed on this sketch. The source himself noted that the drawings from the Nuclear Battalion were very unprofessional. This factors into our assessment that the Burmese nuclear program is quite primitive.
The finished bomb reactors are pictured side by side in this image from Factory 1. One of the reactors has obviously been subjected to great heat and is discolored and paint has burned off as it would be if it had been used to reduce metal. The other is new. There is an image of the two vessels in a packing crate being received from the Nuclear Battalion, so for some reason an unused vessel is being returned with an older one. STW did not see these vessels, only the photo, so he was not aware of any health and safety precautions. There are no safety precautions such as contamination control in any image of the factories that we have seen.

There is no information about ceramic crucibles, boosters, igniters or such things. The factory simply built the items and shipped them elsewhere for use. A rough estimate of the amount of metal that could be produced in this reactor is about 20 – 25 kg. That would be criticality safe and could be used for natural or enriched metal.

Bomb reduction is done in other industries besides nuclear but it is relatively rare. The technology was widely developed during the Manhattan project to make uranium metal for reactor fuel and for weapons in ton quantities. A bomb reactor built by a special factory, subordinate to the Army Nuclear Battalion is a very good indicator of a nuclear program in the context of many other things.

**Inert Atmosphere Glove Box (Step 9)**

STW described the construction of a simple vacuum glove box produced at Factory 1. The box was used to mix two materials together when one of them was highly susceptible to oxidation. He describes evacuating the box and backfilling it with inert argon for the mixing to take place. Our interpretation for this glove box is that it is used for mixing UF4 with magnesium metal for the bomb reduction to uranium metal.

![Inert Atmosphere glove box. Vacuum pump is behind the man on the right.](image)

Vacuum glove boxes are not an everyday item in industry. This one is quite crude but STW’s description of it being used to mix readily oxidizing chemicals is certainly credible. He also noted it would be cheaper to buy a glove box like this than it would be to make it. Possibly this was because the project was classified.

**Inconel Tube Fluoride Bed Reactor (Step 6)**

Factory 1 put a lot of effort into building a “fluoride bed reactor”. It is shown in the next figures. STW did not know the materials that were used, but the photo was found on a CD in a file marked “Inconel.”
Inconel is a nickel-based alloy used in nuclear industry applications where fluorine or hydrogen fluoride (HF) is used in the process. Fluorine is highly corrosive and destroys steels at high temperatures, such as in furnaces. Inconel is also used in a variety of other applications ranging from the natural gas industry, to turbine blades and even Formula One racing car exhausts. So the use of Inconel is not a unique signature of nuclear fuel cycle use.

The terminology used by this source, “fluoride bed reactor” does offer more clues. It would seem that fluorine is involved and fluorine is a component of the nuclear fuel cycle and a very corrosive one. UF6 can be produced by placing UF4 powder in a fluidized bed reactor and agitating it in a high temperature section by a stream of fluorine gas. It is likely that the assembly shown in the figure is the entire fluidized bed reactor. The can at the bottom collects solids that are not fluorinated and are not wanted in the product. The size of this reactor suggests a prototype or pilot plant size.

Figure 15. The “fluoride bed reactor” assembly. Note the Trumabend V-130 machine on the right and the Trumatic L 3030 laser cutting machine in the background and compare to Figure 6, the shop layout of Factory 1.
Figure 16. Internal components of the “Fluoride Bed Reactor”

Figure 17. Presumed Inconel tube with the section surrounded by the furnace in the previous figures
Tube Furnaces (Step 5)

STW had only seen drawings of these tubes but he believed that they were for the carbon monoxide (CO) laser at Thabeikkyin. That is certainly a possibility but they appear more likely to be tube furnaces for the fluorination of solid uranium oxide powder to solid UF4 powder. They are certainly tubes that have been heated and there are metal “boats” for holding powder to be reacted. Two have been subjected to heat and one appears to be new. This would be step 5 in the fuel cycle diagram above.

Figure 18. Two used tube furnaces and one new one

Nitrogen Tank with steel Collectors (Step 6)

An interesting item fabricated in Factory 1 is a “Steel Collectors and Nitrogen Container” (their terminology). From its design it looks like an attempt to build a cold trap to catch UF6 gas on high surface area plates with very cold liquid nitrogen as the refrigerant.

Figure 19. Possible cold trap assembly for collecting UF6 gas
Other equipment

Other items include a large mixer “Water Reduced Tank”, an “Automatic Autoclave Sterilizer”, and a “Burning Chamber”. These are not particularly unique or part of the nuclear fuel cycle. The burning chamber is shown in the next figure, only because it illustrates the crude workmanship of the items seen.

![Figure 20. This object, described only as a burning chamber is rather crude](image)

![Figure 21. “Water Reduced Tank” which appears to be a simple mixer](image)

Reports of a Nuclear Reactor

The open source literature is filled with reports of a nuclear reactor in Burma. We are tempted to believe that this could be layman’s confusion over a nuclear program in general, because uninformed sources can be very loose with terminology. One thing is clear, that many people have heard of a Russian plan to sell a reactor to Burma around 2001. It is very clear that the reactor was never sold and it seems unlikely that Russia would do so today. Russia’s ROSATOM did announce intent to sell a reactor to Burma in 2007, but this deal has not been consummated owing to financial and practical legal issues.(14) An absolute condition for Russia to sell a 10 MW research reactor would be that Burma sign the “Additional Protocol” with IAEA.(15) The Additional Protocol is a voluntary addendum to an existing safeguards agreement such as the standard INFCIRC type 153 agreement in force with Burma today. The
Additional Protocol provides the IAEA with greater rights to ask for details of existing declared facilities (there are none in Burma so far) and greater rights to probe into undeclared activities of the type we are alleging. 100 countries in the world have agreed to an Additional Protocol.(16) Unfortunately, some critical ones, such as Syria, have not. With the many open source claims that Burma has a covert nuclear program, this might not be the time they would agree to sign. The Russians should not even consider selling a reactor to a state with weak and obsolete IAEA agreements.

In addition, a 10 MW nuclear reactor is a very small reactor, suited mainly for producing medical isotopes, conducting nuclear physics experiments, and training engineers and technicians in nuclear technology that could eventually be used to build a larger reactor. A 10 MW reactor is a very poor source of plutonium and is of little interest in most countries inspected by the IAEA today. It would be inspected and monitored on a routine basis and misuse would be difficult.

Therefore, reports that a reactor has been sold and that Burma is building a 10 MW reactor on its own seem far fetched and pointless.

What is of far greater concern is the possible tie to the DPRK. Some sources, albeit not well-vetted, allege that DPRK technicians are helping to build a reactor in Burma. This immediately brings to mind the 2007 bombing of a facility in Syria that allegedly was a DPRK designed plutonium production reactor. This highlights the fact that DPRK is willing to build at least one reactor outside its own territory. Thus, any rumored activity in Burma should be taken seriously. So far no sources have given adequate coordinates to locate a suspected nuclear reactor in Burma but this is a high priority item for more information.

**Report of Laser Isotope Separation**

The DVB source provided a great deal of information on a Laser Isotope Separation (LIS) program at the Nuclear Battalion. From the outset we will readily agree with critics that a laser isotope separation program is far beyond the capabilities of Burma with its poor technical resources. Nevertheless STW has a lot of details about the program, and if Burma chooses to spend its resources in this way it is heartening to those who wish them to fail.

Laser isotope separation has been a huge research program in many countries, such as the US, UK, France, Russia, Germany, South Africa, Australia and probably others. None of these advanced industrial countries has succeeded in making significant amounts of enriched uranium at anything close to a competitive price.

There are two common approaches to Laser Isotope Separation. This is an overly detailed topic for this paper and will be summarized. STW had been clearly told that he was to make some precision nozzles for a supersonic carbon monoxide (CO) laser that would be used in the LIS process. Carbon dioxide (CO2) and CO lasers are normally associated with the Molecular Laser Isotope Separation (MLIS) process. This process uses UF6 as the chemical working substance, the same as centrifuge enrichment. STW was asked to machine many prototype nozzles for the lasers, in batches of ten or so. He remembers them because they were difficult to make and required electrical discharge machining, one of his special skills. A sketch of a nozzle is seen in the next figure. Note again that the sketch is not a proper engineering drawing, lacking tolerances other information.
Figure 22. Sketch of a proposed nozzle made at Factory 1 allegedly for a supersonic CO laser

It is our view that the LIS process is far beyond the technical capabilities that we have seen elsewhere in Burma. This technology proved too complex and expensive for several industrialized states. It is common, however, in the developing world for scientists educated in universities in industrialized countries, to return home and sell high technology programs to government bureaucrats. The explanation here is probably simply that some academics have foisted this project off on the government so they can do research and publish, knowing that they will not succeed in the programmatic aim.

Report of Gas Centrifuge Program

STW heard reports of a gas centrifuge program. One of his colleagues who studied nuclear technology at MIFI in Moscow said that the Nuclear Battalion was working on centrifuges, and if a plant was built it would be near
Taunggyi. The prototypes were being made of plastic as far as he knew. No further information was available on this topic.

As an aside, when STW was discussing his military training in the 1990s, he mentioned fiber composites. He was aware of a military program to manufacture rocket bodies from some type of fiber. His military instructor had told the students that the process was not reliable because the tubes “vibrated too much”. He had no more information on this topic and he did not tie it to enrichment himself, only as an answer to what kind of materials might be used.

**International Agreements**

**IAEA**

Burma became a State Party to the Nuclear Nonproliferation Treaty in 1992. It acquired rights and obligations under this Treaty. The agreement is known as Information Circular 477 (INFCIRC/477). In particular, Burma signed a Small Quantities Protocol with the IAEA in 1995. This stipulates that Burma has no nuclear facilities and only small quantities of nuclear materials.

Important nuclear facilities are defined by the IAEA as:

A. Power reactors

B. Research Reactors and Critical Assemblies

C. Conversion Plants

D. Fuel Fabrication Plants

E. Reprocessing Plants

F. Enrichment (isotope separation plants)

Nuclear materials are defined essentially as plutonium and uranium, including enriched uranium, uranium-233, and uranium source materials. The precise definitions are complex and are left to the interested reader.

Small quantities are defined as less than:

(a) One kilogram in total of special fissionable material, which may consist of one or more of the following:

(i) Plutonium;

(ii) Uranium with an enrichment of 0.2 (20%) and above, taken account of by multiplying its weight by its enrichment; and

(iii) Uranium with an enrichment below 0.2 (20%) and above that of natural uranium, taken account of by multiplying its weight by five times the square of its enrichment;

(b) Ten metric tons in total of natural uranium and depleted uranium with an enrichment above 0.005 (0.5%);

(c) Twenty metric tons of depleted uranium with an enrichment of 0.005 (0.5%) or below; and

(d) Twenty metric tons of thorium.

These limits appear complex, but the one of main interest is (b), ten metric tons of natural uranium. If Burma is operating an ore concentration plant and producing yellowcake it will have to consider this limit.
Burma is bound to report the import or export of nuclear materials even in small quantities, or if it acquires materials in excess of the limit. If it constructs a nuclear facility it must notify IAEA six months before receiving nuclear material for it. An R&D facility operating a single centrifuge on UF6 gas would have to be reported to the IAEA as an enrichment plant, as would plants for testing uranium conversion.

In addition, “in its efforts to promote wider adherence to the IAEA’s strengthened safeguards system, the IAEA has invited Myanmar [sic] to conclude an additional protocol (AP) to its safeguards agreement and to amend its small quantities protocol in line with the revised text approved by the IAEA Board of Governors in September 2005. Concluding an additional protocol would grant the IAEA expanded rights of access to information and sites.”(20)

In other words, the IAEA conducts no safeguards inspections in Burma at the present time and would have no right or obligation to do so unless Burma notifies the IAEA of a change in status. Clearly Burma has not done that up to this time. Note that other elements of the IAEA do interact with Burma and carry out visits.

These have to do with IAEA Department of Technical Cooperation grant programs in medicine and other civilian nuclear technologies(21) and a program to establish a nuclear science and technical training center for scientists, engineers, technicians and graduate students.(22) In a support program that IAEA ran from 2001 to 2010, IAEA noted:

The Ministry of Science and Technology of Myanmar is interested in promoting the application of nuclear techniques. The development of human resources is one of the top priorities of the Ministry. The nuclear programme in Myanmar depended on a small aging core of foreign trained scientists and engineers, and training provided to local staff was almost entirely through International Atomic Energy Agency (IAEA) assistance.

IAEA’s Department of Nuclear Energy also reportedly visited to give advice on whether Burma had sufficient technical ability to run the nuclear reactor that Russia planned to sell. They reportedly advised that Burma was not ready for this technical challenge. It is also notable that not all training is in the civilian area. Two Myanmar researchers in 2003 and 2005, respectively, participated in six-month programs at the Korea Atomic Energy Research Institute in the fields of research reactor technology and advanced spent fuel management, which is inconsistent with their lack of declared nuclear fuel cycle programs.(23)

End User Certification

The DTVE purchased equipment for two factories and claimed to the vendors that it was for educational, non-military use. Based upon STW’s evidence, military personnel work in the facilities making prototype parts for weapons of mass destruction and delivery systems. It would therefore seem appropriate to sanction the DVTE and entities associated with it such as DAE and MOST from any further purchases of manufacturing, machining and inspection equipment on the basis of a false end-user certification. This would include spare parts and assistance for the machines already acquired. States participating in, for example, the Nuclear Suppliers Group (NSG) and the Missile Technology Control Regime (MTCR) should be advised of these findings.

ASEAN and the Southeast Asia Nuclear Weapon Free Zone

Burma is a signatory to the Southeast Asia Nuclear Weapon Free Zone. Any undertaking to produce nuclear weapons would also be a violation of that agreement.(24)

Conclusions

A single source, a former major in the Burmese Army, has come to the Democratic Voice of Burma with a large volume of information purporting to show missile and nuclear activities in Burma up until the present. The first question that interested observers will ask is about the credibility of the information. The source and DVB have strong feelings about the regime. Their objectivity can be called into question and so they have asked us to do this independent assessment of the information.
The following points show the overall consistency of the information. But each reader will have to make up his or her own mind.

• Sai was well-positioned to acquire information. He was an army major, trained in military science with further training in Russia. He reports credibly about his education at the Bauman Institute in Moscow and on colleagues who studied at MIFI and Mendeleev Institute.

• Many source reports describe the additional training of young military officers in elite Russian universities. This is more quantitative and first-hand than many other open source statements.

• The source was a deputy manager in two factories producing parts for missiles and nuclear programs.

• These factories are well-known. There have been end-user certification visits to both and the details of machine tools dates and customers match. There are photographs of tools and the European installers and inspectors. The German en-user expert did not see military personnel but noted discrepancies in the Burmese story that DTVE operated the factories for student training.

• The source visited Thabeikkyin with two general officers and saw crude demonstrations of alleged nuclear technology.

• A “Nuclear Battalion” at Thabeikkyin has been reported by other sources in sketchy detail. This new information allows more investigation especially using satellite imagery.

• The source reported that uranium ore was being processed at Thabeikkyin and that it was hazardous to health.

• Other sources mention Thabeikkyin in very general terms and also claim that the reactor might be built there. One satellite image shows a small ore concentration plant on a pond and piles of earthen materials nearby. This is not proof of a uranium plant, but consistent.

• The source provided a document about a “bomb reactor” being built for the Nuclear Battalion at Thabeikkyin along with several photos.

• The object certainly looks like a bomb reduction vessel and one of the two seen has been subjected to high temperatures.

• Other equipment, notably an inert atmosphere glove box for mixing reactive chemicals, a “fluoride bed reactor,” UF6 cold trap and tube furnaces are all components of a possible program to make uranium compounds for a weapons development effort.

• This is consistent with a program to make UF6 for enrichment by MLIS or centrifuge and uranium metal for a possible bomb core.

From all of the above we conclude that it is likely that Burma is trying to attempt many of the nuclear program steps reported by previous sources. Unrealistic attempts, such as the Molecular Laser Isotope Separation project, unprofessional engineering drawings and the crude appearance of items in photos, suggest that success may be beyond Burma’s reach.

Nevertheless, the intent is clear and that is a very disturbing matter for international agreements. If experiments with uranium are taking place, or significant quantities of uranium compounds are being produced, then Burma needs to be reporting to the International Atomic Energy Agency, which clearly it is unlikely to do if it is planning a covert nuclear reactor, an enrichment program and a weapon.
The authenticity of the photographs and reports will no doubt be questioned. That is fair and professional. The purpose of this report is to inform and generate thoughtful analysis. The source and chain of custody of this information is clearer than the recent “laptop documents” about Iran’s alleged nuclear weapon program, for example, and that has generated considerable analysis and speculation. Undated and unsourced photos of a reactor under construction in Syria are largely unchallenged. It would seem reasonable to question the authorities in Burma and to hear their explanations.

If, Burma denies the authenticity of this information, then time will be the judge. If the authorities deny the information and then are found to have not told the truth, the international reaction should be swift and severe so that Burma does not reach the immunity that DPRK has acquired with its nuclear weapons program.

End Notes

(1) Consultant to the Democratic Voice of Burma

(2) Editor and Research Assistant, Democratic Voice of Burma


(4) There are legal definitions of “nuclear facilities” and “nuclear materials” in the IAEA statute and IAEA Information Circular INFCIRC/153. Burma has not declared any materials in these categories, and short of allegations that we and others are making, there are no legally declared nuclear facilities or materials in Burma.


(7) MYANMAR Mr. Ko Ko Oo

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(8) Transliterations vary and not all places in this report will be written multiple ways. Thabeikkyin is such an important site that it is important to know the alternative transliterations Tha Beik Kyin and Tha Peik Kyin.

(9) “Daw” is an honorific, not a name
List of Participants, RCARO/KAERI Regional Training Workshop on Research Reactor Utilization and Radiation Application Technology, Korea Atomic Energy Research Institute (KAERI), Daejeon, the Republic of Korea, 12 ~ 23 October 2009

For example, http://www.armscontrolwonk.com/2407/big-odd-myanmar-box, 3 August 2009


DVB has carefully examined photographs and noted that personnel who wore civilian clothes during the German expert visit wear military uniforms when the Europeans are not there.


IAEA INFCIRC/540

Chad became the 100th State to complete an Additional Protocol on 13 May 2010


THE STRUCTURE AND CONTENT OF AGREEMENTS BETWEEN THE AGENCY AND STATES REQUIRED IN CONNECTION WITH THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS, INFCIRC/153 (Corrected), IAEA, June 1972

"Nuclear material" means any source or any special fissionable material as defined in Article XX of the Statute. The term source material shall not be interpreted as applying to ore or ore residue.

IAEA public information spokesman, 18 September 2009


Arms Control Association, Nuclear Weapon Free Zones at a Glance
One of the great things about writing for the Wonk is that people tell you things, including what’s inside what has been called here the “Big Odd Box” in Burma. Last January, I was invited to join a group of experts in Oslo, Norway, to review a ton of electronic documents smuggled out of Burma to the Democratic Voice of Burma (DVB). (There is a great documentary about the DVB that was nominated for an Oscar in 2010. You can watch it on YouTube here.)

Now that DVB has released its latest documentary, I can tell about my part and the information I learned about Burma’s nascent missile development program. Other experts can address any nuclear connections.

These documents contain a large number of images taken by elements of the Burmese military as they constructed the two BOBs and then installed an amazingly sophisticated numerically controlled machine shop. Such documentation is a normal part of any construction project today much like the photos taken of Syria’s reactor when it was being built. And like the Syrian photos, DVB’s sources probably didn’t take them but, instead, only later had access to them and made copies. They cover so much material—DVB’s source(s) simply grabbed whatever was available—that I expect I will have a number of future posts exploiting this information.

**Internal Consistency**

We spent a significant fraction of our time in Oslo trying to authenticate the information and judging its significance. Since very little is known about what’s going on inside Burma, most of this consisted of looking for internal consistency. This was fairly easy for the Big Odd Box(es), which aren’t really odd at all.

The image documentation show the Boxes at nearly all levels of construction; from clearing the forest and leveling the ground, to preparing the concrete pad and support beam holes, to stabilizing the surrounding banks with shotcrete, to finishing the interior, to installing the CNC machines. According to DVB’s source(s), both “Boxes” are essentially the same: loaded with sophisticated milling machine and other equipment for precision engineering. Some of these images show non-Asians (they actually look like Europeans to me, but I cannot say for sure) installing some of the sophisticated equipment.

[Pictures linked to in the above paragraph follow]
clearing the forest and leveling the ground
preparing the concrete pad and support beam holes
stabilizing the surrounding banks with shotcrete
finishing the interior
The Burmese have filled this building with a wide range of numerically controlled milling machines, lathes, etc. Interestingly, they have laid out the machine shop by placing together those machines that are related. For instance, there is a hall with progressively larger milling machines, another for machines for cutting or welding, and another for precision 3-D measurements. The later, of course, could be used either for quality control or reverse engineering. I have not seen any evidence that the Burmese intend to reverse engineer missiles, which is probably a wise choice. However, what they are doing right now is not that much better.

The arrangement of equipment that I alluded to above makes sense for a general purpose machine shop, one that might get a wide variety of orders but always for one or two items. It might even be intended solely from prototyping, albeit some pretty massive prototypes, some weighing up to 20 tons! (When contacted by the producers of the DVB documentary, the companies exporting these sophisticated CNC machines claimed that both Boxes were set up as training centers for future machine operators and had nothing to do with missile or nuclear related production. Taking the big picture point of view, that, at best, just kicks the can down the road.) If, on the other hand, the shop was intended to produce thousands, or even hundreds, of copies of the same item—a centrifuge for instance—the layout would be, or should be, optimized for material flow with very different types of equipment positioned near each other. For instance, an electron beam welder might be positioned near a milling machine etc. So it seems unlikely that the shop is intended for producing centrifuges, which require thousands for any meaningful project. (And would not need the very large machines in any case.) It is, of course, conceivable that they might make missile parts since those are often done in onesies and twosies.
Evidence of a Desire to Make Missiles

According to the information gained by DVB, Burma is pursuing a least two different paths towards acquiring a missile production capability. One is a more or less indigenous path. The “less indigenous” comes from the fact that they have sent a number of Burmese military officers to Moscow for training in engineering related to missile design and production. The second in command of one of these “Boxes” received a degree in rocket engines. (He received a Master’s of Science in Engineering from the Bauman Moscow State Technical University in 2004. During his studies in Moscow, he specialized in Power Engineering for Rocket Engines, one of the specialties Bauman MSTU is known for. Here is a copy of his Diploma.) Here he is holding a test item manufactured at his “Box.” He identifies it as the impeller for a large kerosene/liquid oxygen engine intended for static testing.

From a purely evidentiary point of view, it is very significant that a different group than the Box designed the impeller. What took place at the Box was a conversion from the CAD files to machine instructions to make the impeller using the machine the gentleman is standing in front of. This two-group activity implies a significantly greater level of interest by the Burmese authorities than if the impeller had been designed in the same group as it was manufactured. In fact, it implies at least three organizational entities were involved: the design group, the manufacturing group at the Box, and a coordinating authority that approved the impeller being sent over to the Box for fabrication.

The engine that this impeller design—the item actually fabricated is simply a “proof of concept” item that lacks some significant features for an actual working impeller—is destined for is reported, in addition to burning liquid oxygen/kerosene, to have a combustion pressure of 25 mega-Pascals. That is about four times the combustion pressure of a SCUD engine. (My own calculations, based on assuming scaling from a SCUD-type engine, show that the impeller’s diameter is consistent with a large rocket engine, perhaps a Nodong. I did not try to estimate anything assuming it was for a liquid oxygen engine.) Such a large pressure—not to mention using a cryogenic propellant!—seems highly undesirable for the first engine produced by a country that has a serious plan for developing missiles or rockets on its own. A more realistic first attempt at designing an indigenous engine might have used a more conventional propellant combination and preferable a smaller engine with a lower combustion chamber pressure. There are simply too many hurdles for the novice to overcome on their first engine design without throwing in handling liquid oxygen. In fact, this example perfectly illustrates the risks involved in independent innovation: the personnel involved are simply too inexperienced to know when they are getting in trouble.
One is left with the impression that the higher-ups are interested in utilizing their foreign trained scientists and engineers for missile production but do not have a master plan for development. In stead, they are giving a green light to their workers to exercise their new-found skills. Perhaps they will get serious later but as of now we can definitely say that this indigenous path has a much, much greater risk of failure than the other path they seem to be pursuing.

Burma also appears to be following another acquisition path: purchasing missile production lines and know-how from the North Koreans. Here most of the evidence comes from a single source; a summary of a trip report describing the activities and accomplishments of a number of high-ranking Burmese officials made to North Korea. There is, however, considerable supporting evidence that the officials did actually make the trip. There are images of meetings of North Korean and Burmese officials and some photos that could be of sites mentioned in the trip report. The summary of the trip report is, however, the only evidence of the one of the results of the meeting: a Memorandum of Understanding where Burma gets assurances from North Korea that it will be able to purchase complete production lines for missiles with ranges up to 3500 km. A two stage U’nha-2 or a Simorgh come to mind. There is, unfortunately, no strategic reason given for why Burma would want such missiles.

There is, on the other hand, plenty of evidence in the DVB cache of information that Burma fears an attack by the United States and Diego Garcia—a major US air base—is almost exactly 3500 km away. So we can at least imagine a deterrent reason though that threat would be minimal without a nuclear warhead. That lack of a stated reason, and the lack of clear and independent confirmation of the trip report, makes me want to hold off on accepting that Burma is committed to purchasing a production line for a large missile from North Korea. However, I think we can be fairly confident that such an acquisition path would have a much, much higher chance of success than the indigenous path.

**Signs of a Sea Change in the Proliferation Environment?**

According to DVB’s sources, North Korea had nothing to do with setting up the two machine shops inside the Boxes. In fact, the Boxes seem to have been set up as general purpose machine shops and probably do not violate either the MTCR or even political sanctions imposed by Europe against the Junta (Europe’s sanctions against the Burmese Junta are considerably looser than those of the US and these exports were probably legal. Now that there is evidence of the production of missile related components those companies will probably want to rethink their future exports.) However, this whole episode is an indication of how proliferation might be changing.

Consider how India got started on its road to preeminence in solid propellant missile technology: it licensed the technology from France, received detailed written know-how on production (and training of technicians in France), and received a list of production equipment, which India purchased elsewhere. France was obviously capable of producing the needed equipment and chose—presumably for political reasons since the US was at the time trying to pressure other countries not to assist India’s rocket/missile program—not to sell them directly. North Korea is also at least claiming the ability to produce advanced production machines and probably did sell a certain level of technology to Iran for missile production. However, North Korea must wonder if it will always be able to ship large pieces of equipment out of its country or even if its clients would settle for DPRK’s finest. Instead, the spread of precision engineering worldwide—A. Q. Khan’s use of Malaysia’s SCOPE engineering is the clearest example of this—has opened up the possibility of proliferation networks more as consulting engineering firms rather than one-stop-shopping centers. After all, without the testimony of DVB’s sources, it would be impossible to tell the difference between the Boxes set up by Westerners with the equipment list coming from a North Korean consultant for WMD/delivery production and the Boxes set up by Westerners as general purpose machining.

**A Special Thanks**

DVB’s sources are brave people who have decided to smuggle out a variety of information about the Junta’s activities so that the world might know. Missile development is not causing as much harm to the Burmese people as many of the other activities of the Junta. Nevertheless, it is part of a military program that shows a remarkable disregard for the Burmese people. I have waited to publish this posting until being assured that any source who might be implicated by the information has been safely evacuated from Burma.
Myanmar rebuts nuclear talk

BY KENNY CHEE
Mon, Jun 07, 2010

THE Myanmar ambassador to Singapore has told my paper that renewed allegations that the country has a secret nuclear programme were false, but experts said new evidence raises more suspicions regarding alleged nuclear equipment purchases by the reclusive nation.

When asked at the end of the three-day Shangri-La Dialogue security conference yesterday on fresh media reports on the issue, Ambassador Win Myint said they were "not true". "It stereotypes our country," he said. "If (we wanted to) know how to produce nuclear bombs, we need infrastructure and technology."

On reports that North Korea had been helping Myanmar build up nuclear capabilities, Mr Win Myint said: "Some communities and societies... stereotype our country."

Last week, Norway-based media group Democratic Voice of Burma released a report that said military-ruled Myanmar was secretly building a nuclear programme and has intentions of creating a nuclear bomb.

The report said a defector involved in the nuclear programme smuggled out extensive files and photos describing experiments with uranium and specialised gear needed to build a nuclear reactor and develop enrichment capabilities. It said Myanmar was still not close to a weapon.

United States Senator Jim Webb nixed a Myanmar trip last Thursday due to the report, according to Reuters.

Last July, US Secretary of State Hillary Clinton expressed worries that Myanmar was receiving nuclear technology from North Korea and called it a threat to US allies.

Security experts say the latest nuclear allegations have raised more questions and concerns.

Mr Mark Fitzpatrick, Senior Fellow for Non-proliferation at The International Institute for Strategic Studies (IISS), told reporters at the Shangri-La Dialogue that the latest developments on Myanmar were discussed on the sidelines and at at least one closed-door session.

The London-based Mr Fitzpatrick later told my paper Myanmar has consistently denied claims it is pursuing a nuclear programme. But he said Myanmar had imported very sophisticated machine tools which could be used for making missile parts or possibly nuclear energy or nuclear weaponry. "One of the gravest questions is what is the purpose of these...tools," he said.

Dr Tim Huxley, executive director of IISS Asia, said Myanmar has moved another notch closer to being seen as a rogue state with the new reports, and it was "courting serious consequences" for not being open.

Myanmar Deputy Minister of Defence Aye Myint was to attend the forum but pulled out last week. Asked why, Mr Win Myint said it is because Premier Wen Jiabao of China was visiting Myanmar at the same time as the conference.
BANGKOK—The Burmese junta is taking cues from North Korea on how to use weaponry to maintain its grip on power at the people's expense, experts say.

On June 3, the Norway-based news agency Democratic Voice of Burma (DVB) released hundreds of photos purportedly showing facilities the junta is using to develop nuclear expertise, which it said is likely being refined with North Korea's help.

Bruce Klingner, senior research fellow at the conservative Washington-based Heritage Foundation, said Burma is also spending what little money it earns preparing to repel a feared invasion with North Korean tunneling techniques.

“Burma, like North Korea, has no problems with subjugating the population and with starving the population as it focuses its priorities on developing military programs—in Burma’s case a lot of underground facilities, which again mirrors North Korea,” he said.

“[It’s] developing missile and/or nuclear programs, even as the people suffer international isolation and poor economic conditions.”

Photos ‘appear genuine’

DVB also released analysis contending that while the photos come from one source—a former Burmese Army major, Sai Thein Win, who recently defected to Thailand—they are “so consistent with other information ... that they lead to a high degree of confidence that Burma is pursuing nuclear technology.”

The analysis, compiled by former director of the UN International Atomic Energy Agency (IAEA) Robert Kelley and co-researcher Ali Fowle, concluded that the technology, likely originating in North Korea, “is only for nuclear weapons and not civilian use or nuclear power.”

Kelley and Fowle said Burma’s generals, over time, “seek more ways to hang onto power as their wealth grows ever larger and the dissatisfaction of the population threatens to oust them.”

The researchers said Burma hopes to develop a defensive military power that would “make foreign intervention very painful for an aggressor,” and which “signals its neighbors to leave them alone.”

“The model for this is the Democratic People’s Republic of Korea, DPRK, commonly known as North Korea. North Korea is too poor to threaten anyone except its immediate neighbors, but its possession of nuclear weapons inhibits any outside intervention in its repressive regime.”

The Burmese regime has denied developing a nuclear weapons program.

Geoff Forden, a researcher at the Massachusetts Institute of Technology (MIT), said building such facilities would likely have cost Burma “on the order of U.S. $10 million or several tens of millions of dollars.”

“I was struck by aspects [of the photos] ... related to what the government of Burma is willing to do to prevent what they think of as an invasion possibility,” Forden said.

“To me it seems like they are not very concerned about the people of Burma and are willing to let them suffer so that the regime could survive,” he said.
“The other documents showed a real lack of concern for the Burmese people that was very disturbing.”

Forden said the photos appear genuine and consistent with what is known about Burma’s military plans.

They appear to show the inside of two factories the junta has built to house advanced “Western technology,” he said, but added that it is unlikely the equipment is used to manufacture any viable weaponry.

“They’re general-purpose machine shops with sophisticated equipment, and they could do quite a few things. And Burma has shown an interest in making missiles, though they are definitely not very far along in their program,” he said.

**Imports are key**

Forden said Burma’s ability to develop an effective weapons program relies on its regime’s ability to import technology.

“It’s going to depend on how much foreign assistance they can get. And presumably they would get it from North Korea,” he said.

“If that goes through, as there were indications, then they could get ... a Nodong missile fairly rapidly—maybe one or two years,” Forden said, referring to the North Korean mid-range ballistic missile.

“They’re just starting off in the missile program, and it definitely needs foreign assistance that they haven’t gotten yet.”

Klingner cited “little to no evidence of how much progress, if any, has been made” by any Burmese nuclear or missile program.

“I haven’t seen anything tangible ... it seems a general consensus is that there is nothing imminent, even if there is an effort there,” he said.

**Preservation of power**

“Given North Korea’s propensity for nuclear development as well as proliferation ... I think there is great suspicion or certainty that North Korea also has a relationship with Burma,” he said, adding that both North Korea and Burma, which the ruling junta calls Myanmar, are pariah states.

Burma could attempt to use a missile and nuclear weapons program as a deterrent to a U.S. attack, Klingner said, which the regime fears enough to have relocated the country’s capital from Rangoon to the remote city of Naypyidaw in 2005.

“Or perhaps they would go down the path of North Korea—of using the threat of a nuclear deterrent or a nuclear weapons program as a way of forcing concessions from their opponents, including an amelioration of international sanctions,” he said.

Hours before the report was released, U.S. senator Jim Webb canceled a planned trip to Burma, citing U.S. concerns over an alleged shipment of North Korean arms to Burma.

Webb chairs a U.S. Senate Foreign Relations panel on East Asia, and has called for increased dialogue between the Obama administration and Burma's junta.

IAEA chief says looking into Myanmar nuclear report
Mon Jun 7, 2010 8:10pm IST

VIENNA (Reuters) - The U.N. nuclear watchdog said on Monday it was looking into a report that military-ruled Myanmar was aiming to develop nuclear weapons.

Yukiya Amano, head of the International Atomic Energy Agency (IAEA), also said that if necessary the Vienna-based body may ask for clarification from Myanmar.

Accounts of suspected nuclear plans surfaced last year, but Myanmar has never confirmed or denied any nuclear ambitions.

Last week, an investigation by an exiled anti-government group said Myanmar was seeking to develop a clandestine nuclear programme with the intent to produce an atomic bomb.

The five-year investigation by the Norway-based Democratic Voice of Burma (DVB) concluded that Myanmar, formerly Burma, was a long way from producing a nuclear weapon but had gone to great lengths to acquire the technology and expertise to do so.

If true, it would be the first southeast Asian country with nuclear ambitions and alter the strategic landscape of a fast-growing region whose big countries -- from Indonesia to the Philippines and Thailand -- are closely allied with Washington.

"We have seen the related articles in the media and we are now assessing the information," Amano told a news conference.

"And, if necessary, we will seek clarification from Myanmar," the Japanese diplomat said, speaking on the first day of a meeting of the 35-nation board of the IAEA.

Myanmar is a member of the nuclear Non-Proliferation Treaty (NPT), a global anti-nuclear arms pact, and of the IAEA.

The DVB report cited a U.S. nuclear scientist assessing evidence provided by Sai Thein Win, a Burmese defence engineer trained in Russia in missile technology.

He said he had defected after working in factories built to develop weapons of mass destruction.

The report prompted a U.S. Senator, Jim Webb, to cancel a trip to Myanmar last Thursday, which he said would be "unwise and inappropriate" in light of the report.

Previous claims by defectors suggest Myanmar had enlisted the help of North Korea, with which it reportedly agreed a memorandum of understanding on military cooperation during a visit by a top general to Pyongyang last year.
Press Releases

Webb Recommends State Department Strengthen Engagement in Asia

Calls for passage of US-Korea Free Trade Agreement, increased East Asia Bureau funding, immediate appointment of Special Envoy to Burma

June 8, 2010

Senator Jim Webb, chairman of the Senate Foreign Relations East Asian and Pacific Affairs Subcommittee, today sent the following letter to Secretary of State Hillary Rodham Clinton regarding his recent trip to Asia and his recommendations for strengthening U.S. policies in the region:

[EXCERPTS]

June 8, 2010

The Honorable Hillary Rodham Clinton
Secretary of State
U.S. Department of State
2201 C Street, NW
Washington, DC  20520

Dear Secretary Clinton:

In my capacity as chairman of the Senate Foreign Relations East Asian and Pacific Affairs Subcommittee, I visited Korea and Thailand last week to assess the current situation in both of those countries, as well as in the region. I had also intended to visit Burma on this trip, but postponed my visit for reasons described below.

Following meetings with government representatives, business and community leaders, U.S. diplomats, and others, I would like to share with you the following observations and recommendations. As you will note, some of these recommendations are quite time-sensitive.

1. **United States-Korea Free Trade Agreement:**

   [deletia]

2. **Democracy assistance to Thailand:**

   [deletia]

3. **United Nations Security Council Resolution 1874:**

   In May 2010, Assistant Secretary of State Kurt Campbell raised allegations that Burma has violated its commitment to UN Resolution 1874 regarding acceptance of shipments of military items from North Korea. Although not explained in his statement, and not validated by subsequent information, news reports alleged that Burma received a shipment of arms from North Korea. This allegation, which from my understanding has yet to be publicly clarified and substantiated by the State Department, has frozen any prospect of further engagement with the Burmese government.
Prior to my recent Asia trip, I and my staff worked for weeks to seek public clarification of this allegation, but the State Department provided none. At the time I left for my trip to Asia, no other countries had joined the United States in this allegation, although it had been discussed with several other countries. The State Department still has not publicly clarified this matter. My staff was told by Deputy Assistant Secretary of State Scot Marciel that no other nation has joined the United States in publicly denouncing Burma on this matter.

As you know, only hours before I was scheduled to enter Burma, reports surfaced in the international media regarding new allegations that the military regime was cooperating with North Korea to develop a nuclear program. These allegations were raised by the Democratic Voice of Burma, which is a U.S.-funded media organization.

As a consequence of these two allegations, I postponed my visit to Burma until such time as both of them can be examined objectively and factually. I am now calling on you to do so, in a timely manner, so that our future relations with this country can proceed forward in a responsible way.

4. Special Envoy to Burma:

You will recall that the 2008 Tom Lantos Block Burmese JADE Act requires the President to appoint a Special Representative and Policy Coordinator for Burma, by and with the advice and consent of the Senate. Among other responsibilities, this position should “promote a comprehensive international effort, including multilateral sanctions, direct dialogue with the SPDC and democracy advocates, and support for nongovernmental organizations operating in Burma and neighboring countries, designed to restore civilian democratic rule to Burma and address the urgent humanitarian needs of the Burmese people.” Since this act has been in effect, the position has not been filled.

I hope you will ask the President to appoint a Special Envoy to Burma without delay. In that regard, I would like to strongly recommend Ambassador Eric John, who currently serves in Thailand, for this position. Ambassador John has spent many years in East Asia, and has long experience in dealing with the North Korean regime on issues that might be similar to those we will be facing in Burma.

5. Increase East Asia Bureau Funding:

[deletia]

Sincerely,

Jim Webb
United States Senator
QUESTION: Senator Jim Webb today wrote a letter to Secretary Clinton calling for the passage of the U.S.-Korea Free Trade Agreement.

MR. CROWLEY: Calling for the passage of the --

QUESTION: Of the U.S.-Korea Free Trade Agreement and the appointment of a special envoy to Burma immediately, as well as -- and increased East Asia Bureau funding here. So do you -- have you seen the letter or do you intend to respond to it soon?

MR. CROWLEY: Well, of course we will respond to it. I’m not aware that we’ve seen the letter yet.

[deletia]

QUESTION: I’d like to follow up on Burma.

MR. CROWLEY: Mm-hmm.

QUESTION: The same letter – Senator Webb also says that the State Department is not willing to share more information on Burma’s violation of 1874, which Assistant Secretary Kurt Campbell has said during his – one of his meeting that --

MR. CROWLEY: That is something that we watch very carefully. We are talking to Burma, reminding Burma about its international obligations under 1874 and other resolutions. As to what – the nature of our conversations, we – obviously, Senator Webb, we’ve had many conversations with him about Burma. It’s a country of – that he recognizes is of significance. And I’m sure that we will continue our conversations with Senator Webb and others on the Congress about the best way forward.

QUESTION: And is the appointment of a special envoy for Burma – is under consideration? Do you consider this as a viable option for --

MR. CROWLEY: I’ll take that question.
Special Envoy for Burma

Philip J. Crowley
Assistant Secretary, Bureau of Public Affairs
Washington, DC

**Question Taken at the Daily Press Briefing on June 8, 2010**

*June 9, 2010*

Q: Will the State Department appoint a Special Envoy for Burma? If so, when will the appointment be made?

A: The Administration plans to fill this position soon.
Myanmar risks destabilising Southeast Asia through its pursuit of weapons, although it is not yet clear whether the military regime is developing a nuclear program, a US official has said.

A senior army defector, in a recent documentary broadcast on Al Jazeera television, said the junta has been seeking nuclear weapons and developing a secret network of underground tunnels with help from North Korea.

Scot Marciel, the State Department official in charge of Southeast Asia, said that the United States was still assessing the allegations about Myanmar - also known as Burma.

"I think there's two issues. One is whether there is some kind of serious nuclear program in Burma, which certainly would be tremendously destabilising to the entire region," Marciel testified at a congressional hearing.

"There's also the Burmese acquisition of other military equipment -- conventional -- which also can affect regional stability," he said.

"We're looking at both of those questions very closely," said Marciel, the deputy assistant secretary of state for East Asian affairs.

A senior Myanmar official last week said that the accusations of a nuclear program were "groundless," without elaborating.

On a visit to Myanmar in May, Marciel's superior, Assistant Secretary of State Kurt Campbell, expressed concern about a suspected arms shipment from North Korea and sought assurances from the regime.

Senator Jim Webb, one of the most vocal US advocates of engagement with Myanmar, abruptly cancelled a visit to the country earlier this month due to the allegations of cooperation with North Korea.

Addressing the Asia Society on Wednesday, Webb said he was still waiting to learn more about the allegations but decided it would be counterproductive to visit Myanmar at the time the documentary was broadcast.

President Barack Obama's administration last year opened dialogue with Myanmar, concluding that the previous approach of isolating the regime had not borne fruit.

But the administration has voiced deep concern about elections later this year, which the opposition considers a sham to legitimise military rule.
Myanmar denies nuclear plans, North Korean help
Fri Jun 11, 2010 3:39pm GMT

YANGON June 11 (Reuters) - Myanmar has no ambition to become a nuclear power and reports that it is developing a nuclear programme with North Korean help are groundless, the Foreign Ministry said in a statement read on state television on Friday.

Democratic Voice of Burma (DVB), a Norwegian-based exile group opposed to Myanmar's military regime, said in a report last week Myanmar was trying to develop a secret nuclear programme with the intention of making an atomic bomb.

Accounts of suspected nuclear plans surfaced last year, but Myanmar has never confirmed or denied any nuclear ambitions. Some reports have suggested it had enlisted the help of nuclear-armed North Korea.

In a first reaction to the latest such reports, the Foreign Ministry accused dissidents of spreading false information, suggesting this might be an effort to scupper efforts by the United States in recent months to engage with the military regime.

"In the past few days, some international media reported the accusations that Myanmar is making attempts to develop a nuclear project with the intention of having nuclear weapons in cooperation with North Korea," the Foreign Ministry said.

"These are merely groundless and politically motivated accusations," it said, adding the claims were also aimed at disrupting the government's plans to hold elections later this year.

It said Myanmar once had a plan to build a 10-megawatt reactor for peaceful purposes with the assistance of Russia, but that was abandoned.

The ministry denied Myanmar had purchased weapons from North Korea. It had only imported cement from North Korea while North Korea had imported rice from Myanmar, it said.

DVB said that its five-year investigation showed that Myanmar, formerly Burma, was a long way from producing a nuclear weapon but had gone to great lengths to acquire the technology and expertise to do so. (Reporting by Aung Hla Tun; Editing by Alan Raybould and Sanjeev Miglani)
As regards allegations against Myanmar on nuclear programmes, Resident Representative of Myanmar to IAEA Ambassador U Tin Win sends reply to Director Mr. Marco Marzo of Division of Operations A, Department of Safeguards, IAEA. No activity related to nuclear programme has been carried out in the past, is ongoing or is planned for the future in Myanmar.

NAY PYI TAW, 18 June [2010]

As regards the allegations against Myanmar in connection with nuclear programmes, Director Mr. Marco Marzo of Division of Operations A, Department of Safeguards, International Atomic Energy Agency (IAEA) sent a letter dated 14 June to U Tin Win, Resident Representative of Myanmar to IAEA and Ambassador of Myanmar to the Federal Republic of Germany.

The letter requested Myanmar to inform the Agency as to whether any activities related to uranium conversion, enrichment, or reactor construction or operation has been carried out in the past, is ongoing or is planned for the future in the country as claimed by the Al Jazeera documentary.

Ambassador U Tin Win sent a reply letter today to Mr. Marco Marzo. The letter stated that the allegations made by the international media against Myanmar regarding the nuclear programme are groundless and unfounded; that no activity related to uranium conversion, enrichment, reactor construction or operation has been carried out in the past, is ongoing or is planned for the future in Myanmar; that Myanmar is a party to the Nuclear Non-proliferation Treaty (NPT) and has signed the Safeguards Agreement in connection with the NPT and the Protocol thereto in 1995; that as stated in its Safeguards Agreement with the IAEA, Myanmar will notify the Agency if it plans to carry out any of the aforementioned nuclear activities.
Burma Denies Allegations It Is Seeking Nukes
By THE ASSOCIATED PRESS
Saturday, June 19, 2010

RANGOON — Burma has sent a letter to the U.N. nuclear agency insisting it has no current or future plan to develop a nuclear program in the isolated country's second denial this month after reports emerged it may be seeking an atomic weapon.

Burma's military government has denied similar allegations in the past, but suspicions have mounted recently that the impoverished Southeast Asian nation has embarked on a nuclear program.

Burma's envoy to the International Atomic Energy Agency, Tin Win, dismissed the allegations as "groundless and unfounded" in a letter sent Friday, according to a Saturday report in The New Light of Myanmar newspaper. The Foreign Ministry issued a denial on June 11.

"No activity related to uranium conversion, enrichment, reactor construction or operation has been carried out in the past, is ongoing or is planned for the future in Myanmar [Burma]," the letter said, according to the newspaper which is a mouthpiece for the junta.

The letter was sent in response to one from the IAEA dated June 14 that asked Burma to outline any nuclear-related activities or ambitions, the newspaper said.

Earlier this month, the Norway-based Democratic Voice of Burma, a Burma exile news service, charged that the junta, aided by North Korea, is actively pursuing a nuclear weapons program with the aim of developing a bomb and long-range missiles.

It said its conclusions were based on a five-year study and revelations by a recent Burma army defector who smuggled out extensive files and photographs. The report also said that Burma is still far from producing a nuclear weapon.

Tin Win's letter noted that Burma is a signatory of the Nuclear Non-Proliferation Treaty and the agency's so-called safeguards agreement.

"As stated in the safeguards agreement, Myanmar will notify the agency if it plans to carry out any nuclear activities," the letter said.

Last month, U.N. experts monitoring sanctions imposed against North Korea over its nuclear and missile tests said their research indicated it was involved in banned nuclear and ballistic missile activities in Iran, Syria and Burma, which is also called Myanmar.

Documents that surfaced earlier showed that North Korea was helping Burma dig a series of underground facilities and develop missiles with a range of up to 1,860 miles (3,000 kilometers).
I. Executive Summary

1. On 12 June 2009, the Security Council unanimously adopted resolution 1874 (2009) in which it requested the Secretary-General to establish a Panel of Experts mandated to: gather, examine and analyze information regarding the implementation of the measures imposed by the Council in resolutions 1718 (2006) and 1874 (2009), in particular incidents of non-compliance; make recommendations on actions the Council, the Committee or Member States may consider to improve implementation of those measures; and, assist the 1718 Committee in carrying out its functions.

Nevertheless, the Panel of Experts has reviewed several government assessments, IAEA reports, research papers and media reports indicating continuing DPRK involvement in nuclear and ballistic missile related activities in certain other countries including Iran, Syria and Myanmar. A number of government and private experts with whom members of the Panel of Experts have spoken also expressed concern that the DPRK has the capability as well as the propensity to provide nuclear and ballistic missiles-related equipment, facilities, technical advice to and through clients overseas.

Evidence provided in these reports indicates that the DPRK has continued to provide missiles, components, and technology to certain countries including Iran and Syria since the imposition of these measures. The Panel of Experts has also reviewed government issued reports indicating that the DPRK has provided assistance for a nuclear programme in Syria, including the design and construction of a thermal reactor at Dair Alzour. The IAEA is still attempting to obtain updated reports concerning the current status of this site and the activities involved.

The Panel of Experts is also looking into suspicious activity in Myanmar including activities there of Namchongang Trading (NCG), a 1718 Committee designated entity, and reports that Japan, in June 2009, arrested three individuals for attempting to illegally export a magnetometer to Myanmar via Malaysia, allegedly under the direction of a company known to be associated with illicit procurement for DPRK nuclear and military programmes.

The Panel of Experts believes that the information referred to paragraphs 59 to 61 merits the close attention of Member States with regard to the implementation and enforcement of the Security Council measures. Further study with regard to these suspected activities will be conducted by the Panel in order to develop a more thorough understanding of the facts. The Panel will seek the cooperation of relevant organizations, including the IAEA, in this regard.

The views expressed in this report are exclusively those of Panel of Experts and do not represent those of any others unless otherwise indicated.

Reference is made to the Press Briefing by Dr. Mathew J. Burrows, US National Intelligence Council (NIC) Counselor and Director of the Analysis and Production Staff, 24 March 2010,

26 In a letter to the IAEA dated 24 May 2009, Syria denied these allegations but provided no supporting documentation concerning the facilities in question. In its last report on Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic, the IAEA underlines that Syria has not cooperated with the Agency since June 2008 regarding the unresolved issues related to the Dair Alzour site. (See paragraph 15 of Gov/2010/11 of 18 February 2010). See also Statement to 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) made by IAEA Director General, Yukiya Amano, 3 May 2010.

[deletia]

72. The Government of the Republic of Korea informed the 1718 Committee on 13 October 2009 that the relevant authorities of the Republic of Korea inspected at the port of Busan a container ship flying the Panama flag with the name of MSC Rachele, owned by Mediterranean Shipping Company, a Swiss firm, and found that four containers were filled with working protective garments which were deemed to have military utility for chemical protection. The Republic of Korea authorities further indicated that their investigation had revealed that the shipment of the four containers in question had originated in the port of Nampo, DPRK, and were shipped on or about 11 September 2009 to Dalian, China. In Dalian the containers were placed on board the MSC Rachele. The intended recipient of the goods was declared as the Environmental Study Center in Syria. The Government of Syria disavowed the shipment. In December 2009, the Panel was given an information briefing from ROK officials and experts on the case and the nature of the goods. The Panel was also able to physically examine the goods in the port of Busan. Based on the information provided and expertise of the Panel, it concluded that these goods would primarily have military application in the protection against certain chemical agents.³¹

³¹ It was noted by some experts that these goods could also be used for civil purposes.

[deletia]

109. The DPRK relies heavily on overseas branches of its banks and on their correspondent accounts to handle surreptitious transactions. This scenario is exemplified by the activities of Korea Kwangson Banking Corporation (KKBC), which continues to maintain overseas branches. KKBC has repeatedly been involved in transactions for and on behalf of the entities designated by 1718 Committee including Tanchon Commercial Bank55, the Korea Mining Development Trading Corporation (KOMID), Korea Hyoksin Trading Corporation and Korea Ryonbong General Corporation. According to information provided to the Panel of Experts, KKBC has handled several transactions involving millions of dollars directly related to transactions conducted between the Korea Mining Development Trading Corporation (KOMID) and Myanmar.⁵⁶


[deletia]
XII. Recommendations

Interdiction

9) The Panel of Experts has expressed concern that certain countries such as Syria, Iran, Myanmar, continue to be associated with the DPRK in regard to proscribed activities and believes that special attention should be taken by all Member States to inhibit such activities. Further study should be conducted by the Panel of Experts, and by the Committee, for a more thorough understanding of such activities. Cooperation with other relevant international organization including the IAEA should be sought in this regard.
QUESTION: On Burma, some members of NLD have now registered a different party and are not planning to contest the elections. Do you see this as the military junta has been successful in further isolating Aung San Suu Kyi in the country or dividing the NLD itself?

MR. CROWLEY: Well, it doesn't change our concern about the electoral process. We think that this is a flawed electoral process. We respect decisions that former NLD members have made. But we certainly do not have any expectation that what proceeds in Burma here will be anything that remotely resembles a free, fair, or legitimate result.

QUESTION: Does that make you rethink your outreach to the government?

MR. CROWLEY: Not at all. We will continue to engage the Burmese Government because it’s in our interest to do so and we will continue during those discussions, if and when they occur in the future, to make clear that Burma has more that – much more that it needs to do to engage in dialogue with its key groups within its population and to open up its political process to meaningful participation.

QUESTION: Can you --

MR. CROWLEY: And to release Aung San Suu Kyi. That will continue to be our message whenever we meet with Burmese officials.

QUESTION: Can you point to any --

QUESTION: Well, then ultimately --

QUESTION: Sorry, can I keep going? Can you point to any instance in which, since you began this dialogue under the current Administration, and at a higher level than had hitherto been the case, where the government has moved in your direction in any manner whatsoever? The two that come to mind particularly are democracy and Aung San Suu Kyi, on the one hand, and assuaging your concerns about possible nuclear cooperation with North Korea.

Have they done anything to address your concerns on those two fronts?
MR. CROWLEY: On the democracy front, no. Their steps have been inadequate. We continue to have concerns about Burma’s relationship with North Korea. It’s something that we watch very, very carefully and consistently.

QUESTION: Can I follow up on that?

MR. CROWLEY: Sure.

QUESTION: Can I follow up on that? I mean, do you have any benchmarks for this type of engagement, I mean, at which point you say that engagement isn’t working and maybe you need to try something else? I mean, just following on Arshad’s question, you — obviously, you want to give it a chance. But at what point do you say, well, this is not working and we’re rewarding the military junta there --

MR. CROWLEY: Well --

MR. CROWLEY: There’s a presumption behind your question that engagement is somehow a reward. Engagement is what we think is the most effective means to an end. Now --

QUESTION: Well, what’s so effective about it?

MR. CROWLEY: Hang on a second. We have years, if not decades, of experience that tells us that isolation has not worked either. We are involved in direct discussions with Burmese officials. I can’t predict when the next round will occur. But so far, their response on – particularly on the democracy front has been disappointing. It’s been a missed opportunity. But we will continue to engage them – not to reward them, but just simply to make sure that they have clarity that if they envision any different kind of relationship with the United States, that fundamental processes within their own country have to change.

QUESTION: Well, what if they don’t envision a fundamental different --

MR. CROWLEY: Then at a point, we will reach that conclusion. We’re not there yet.

QUESTION: Just to follow up on that?

MR. CROWLEY: Sure.

QUESTION: Are you any closer to appointing a special envoy to Burma?

MR. CROWLEY: I’ve got nothing to announce. Well, I know where we are in the process.
QUESTION: Hi, I'm Mark Hosenball from Newsweek. I had some questions for you. Do you have any comment or view on allegations recently made by the Democratic Voice of Burma and other human rights activists based on information from defectors that Burma is pursuing a secret nuclear program?

MR. CROWLEY: All I will say on this topic is that we have longstanding concerns about the nature of the relationship between Burma and the United States and we have consistently reinforced in our conversations with Burmese authorities the importance of meeting all of their international obligations, including those in the area of nonproliferation. I’m not going to get into intelligence matters about what we know or what we think. This is an area that we are watching very carefully. We have concerns about the nature of that relationship. It is something that we watch very carefully. It’s something that we continue to talk to the Burmese Government about.

QUESTION: I have a couple follow-ups here. Senator Jim Webb says that he can’t get a full briefing from the Administration on the Burma nuclear allegations. Why is that? It was well-publicized that the senator recently cancelled a trip to Burma on the basis of the Democratic Voice of Burma’s information which was sponsored, backed up, promoted by the National Endowment for Democracy and was based on unclassified sources. Why isn’t the senator getting the most up-to-date analysis from the United States Government on this? Webb says that he asked the State Department about this in writing, but got no reply.

MR. CROWLEY: I will check to see if we have a formal request from Senator Webb. We have talked to Senator Webb on an ongoing and frequent basis, given his interest in Burma, given his recent travel to the region, and in fact, I can recall a previous trip, I think, last year where he visited Burma himself. We talk to Senator Webb all the time. We appreciate his interest in Burma. If he has a particular request that he wants to make of us beyond – and I will check to see if he’s already made that request, we will certainly be responsive.

QUESTION: Now, the National Endowment for Democracy has been very actively involved in supporting the Democratic Voice of Burma and promoting its allegations about a secret Burmese nuclear program. Has the Administration, in any way, directed or approved the Endowment’s promotion of these allegations? And what control or influence, if any, does the State Department or other elements of the Executive Branch have over the activities of the National Endowment for Democracy and its related organizations?

MR. CROWLEY: Well, I’ll take a question. I’m not equipped to say what kind of democratic programs we support with respect to Burma. I will take that question.
QUESTION: Okay, and one final thing, earlier this year, Mrs. Clinton criticized the growing relationship between the governments of Burma and North Korea. What’s the U.S. Government’s view of the nature of that relationship? Does the U.S. Government have any validated evidence that there’s a nuclear element to that relationship?

MR. CROWLEY: I’ve already answered that question.

QUESTION: On Burma itself, Secretary – sorry, Bill Burns travel to Thailand – does he have any plans to meet the Burmese leader in exile living in the country in Thailand? They have a huge Burmese refugees living there?

MR. CROWLEY: Burma is a member of ASEAN. I can’t say whether there will be a meeting. Let’s wait for the trip and we’ll see what happens.
North Korea and Myanmar top agenda for Asia security meet
By Jason Szep and Ambika Ahuja
Mon Jul 19, 2010 6:45am EDT

[EXCERPTS]

HANOI (Reuters) - Tension on the Korean peninsula, elections in military-ruled Myanmar and the question of whether the former Burma is developing nuclear arms will top the agenda of meetings of Asian foreign ministers this week in Vietnam.

Southeast Asian foreign ministers met in Hanoi on Monday to discuss regional security ahead of talks this week with counterparts from China, Japan, North and South Korea, the United States, the European Union and Russia.

Myanmar's foreign minister repeated that the country had no ambition to become a nuclear power, denying a report published in June by an exile group that it was trying to develop a secret nuclear program with the intention of making an atomic bomb.

"Myanmar told the meeting that it's not attempting to procure or develop nuclear weapons and we thanked them for their clarification on the matter," said Thani Thongpakdi, a deputy spokesman for the Thai foreign ministry.

U.S. Secretary of State Hillary Clinton arrives on Thursday and will reinforce Washington's commitment to Asia in the face of rising Chinese influence and growing tensions with North Korea during two days of meetings, U.S. officials say.

[deletia]

PRESSURE ON MYANMAR

U.S. officials say Clinton will raise concerns about election preparations in Myanmar, hoping to underscore that the country's military leaders must be held accountable for the lack of real democratic reform.

[deletia]

The United States is also increasingly concerned about potential links between Myanmar and North Korea, including reports by an exiled anti-government group that Myanmar may be harboring nuclear ambitions of its own, U.S. officials said.

Assistant U.S. Secretary of State Kurt Campbell said the United States would press Myanmar to implement U.S. Security Council resolutions tightening sanctions on North Korea but that there were "no plans in the current climate" for Clinton to meet representatives of either North Korea or Myanmar in Hanoi.

(Additional reporting by John Ruwitch, Andrew Quinn and Jack Kim; Editing by Alex Richardson)
Burma’s Nuke Ambitions to Come under Scrutiny
By Marwaan Macan-Markar
BANGKOK
Jul 19, 2010 (IPS)

When South-east Asian foreign ministers gather in Hanoi this week for a series of annual security meetings, the region’s most troublesome member, military-ruled Burma, is due to come under scrutiny over reports of its nuclear ambitions.

Alarm bells have been going off in South-east Asian capitals since the early June expose by the Democratic Voice of Burma (DVB), an Oslo-based broadcasting station run by Burmese journalists in exile that reported that the Burmese junta intends to build nuclear weapons facilities.

Indonesia, the largest country in the 10-member Association of South-east Asian Nations (ASEAN), is among those expected to seek an explanation from Burma during the meetings in the Vietnamese capital, which run from Jul. 20-23.

"Jakarta is concerned about this issue," a South-east Asian diplomatic source told IPS.

Burma, also known as Myanmar, is expected to face similar queries from the Philippines, which in May had an envoy, Libran Cabactulan, chair the 2010 Review Conference of the Nuclear Non-Proliferation Treaty at the U.N. headquarters in New York.

At that review meeting, Cabactulan urged delegates to work towards the treaty’s common goals: disarmament, non-proliferation of nuclear weapons and the right to peaceful use of nuclear technology.

The treaty, which entered into force in 1970, remains the cornerstone for building a global nuclear non-proliferation regime.

ASEAN, whose members include Brunei, Cambodia, Laos, Malaysia, Singapore and Thailand in addition to Burma, Indonesia, Philippines and Vietnam, itself has a nuclear weapons-free zone agreement.

The South-east Asian Nuclear-Weapon-Free Zone Treaty came into force in 1997, the same year Burma became an ASEAN member and started to benefit from regional protection against international criticism for the junta’s oppressive rule. Burma signed the regional nuclear weapons moratorium treaty at a 1995 meeting in Bangkok.

Against the backdrop of reports of Burma’s nuclear plans, the ASEAN prohibition on building and storing nuclear weapons now faces a serious challenge. "The issue will be raised at this meeting even though the concrete evidence may be hard to find," said Kavi Chongkittavorn, a columnist on regional affairs for Thailand’s English-language daily ‘The Nation’. This is about intention and motive."

According to media reports, U.S. Secretary of State Hilary Clinton, who will be in Hanoi to join her ASEAN counterparts in a broader security forum, is likewise expected to seek clarification about Burma’s nuclear intentions. Washington has also expressed concern about Burma’s close links to North Korea, which has faced sanctions imposed by the U.N. Security Council since June last year.

U.N. Security Council Resolution 1874, adopted in the aftermath of an underground nuclear test by North Korea, also calls on U.N. members to search North Korean cargo ships, but Burma has not adhered to this.
In fact, the DVB’s investigative report ‘Burma’s Nuclear Ambitions’ pointed to Burmese-North Korean collaboration in building a network of tunnels for military purposes in the secretive South-east Asian nation.

The report has already prompted the Vienna-based International Atomic Energy Authority (IAEA) to send a formal letter of inquiry from the junta, which denied the DVB’s findings. The Burmese regime has also issued two more formal statements denying it has any nuclear ambitions.

But little of that has turned the heat off the regime’s back. Experts in the field have entered the fray, arguing that ‘Burma’s nuclear ambition is apparently real and alarming’, as the headline of one commentary recently published in ‘The Nation’ argued.

"Although Burma’s pursuit of nuclear weapons has long been rumoured, the (DVB) documentary contains new information from a recent defector who provided DVB with photographs, documents and a view from inside the secretive military that should finally put to rest any doubt about Burma’s nuclear ambition," wrote Robert Kelly, a recently retired director of the IAEA, in that commentary.

"The evidence includes chemical processing equipment for converting uranium compounds into forms for enrichment, reactors and bombs," Kelly added. "Taken altogether in Burma’s covert programme, they have but one use – nuclear weapons."

ASEAN’s latest troubles with Burma come on top of mounting pressure from Western nations and human rights groups for it to urge the junta to enable a free and fair general election it has promised to hold this year.

ASEAN is already grappling with the plight of tens of thousands of refugees from Burma who have fled the country due to the army’s campaign against separatist rebel groups, as well as the nearly two million undocumented migrant workers who have left their country’s crumbling economy.

Thus far, ASEAN has not viewed this exodus as an urgent threat to regional security. But the nuclear threat could end its silence and cooperation with Burma, say analysts.

"For decades, Burma’s ruling regime has been regarded primarily as a menace to its own people," Aung Zaw, editor of the ‘The Irrawaddy’, a Burmese affairs magazine, wrote in Monday’s edition of the ‘Bangkok Post’ newspaper. "But with recent reports confirming long-held suspicions that the junta aspires to establish Burma as South-east Asia’s first nuclear state, there is now a very real danger that it is emerging as a threat to the rest of the region."

"Burma is not North Korea, but the country’s military rulers are no less capable than their fellow despots in Pyongyang of holding their neighbours to ransom if they believe their own survival is at stake," he added. "They have taken the first steps toward realising their nuclear dream; now the international community must act to prevent it from becoming a nuclear nightmare for the rest of us."

Envoy: Asean wants capability to monitor nuclear weapons
Mon, 19 Jul 2010 22:25

HANOI: Asean wants to develop the capability to detect atomic weapons so it can effectively implement a treaty aiming to keep the region free of nuclear arms, a diplomat said today.

The diplomat said the Association of Southeast Asian Nations (Asean) is also striving to deal with potential nuclear disasters, as some members consider the use of nuclear energy for civilian purposes.

"We would like to have the capacity to monitor the presence of nuclear weapons in our territories," including on warships transiting the region's waters, the diplomat said on condition of anonymity.

The region does not currently have the right training or equipment to verify whether nuclear weapons are in its ports or passing through its waters, he added.

The Southeast Asia Nuclear Weapon-Free Zone treaty commits Asean states "not to develop, manufacture or otherwise acquire, possess or have control over atomic weapons".

It also prohibits the storage or transit of nuclear weapons in Asean, which groups Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.

The treaty prevents the testing of any nuclear device and dumping of radioactive waste in the region, including in members' territorial waters.

"Even if you are a declared nuclear weapons free zone, if you don't have the capability to implement it, then there's no use," said the diplomat, a member of the commission that ensures compliance with the treaty.

The commission met in Hanoi today as part of the annual meetings of Asean foreign ministers.

The diplomat said allegations aired by a Norwegian-based news group, the Democratic Voice of Burma, that Myanmar was trying to begin a nuclear weapons programme with the help of North Korea were not discussed at the Hanoi meeting.

- AFP
British Foreign Office Minister Skeptical of Burmese Elections
2010-07-19 11:303

On Sunday during a visit to Thailand, UK Minster of State for Foreign Affairs, Jeremy Browne, says the new British government will continue to pressure Burma to improve its political and human rights record.

He says Britain will not view Burma's upcoming elections as free and fair while Nobel peace laureate, Aung San Suu Kyi, and other political prisoners remain in detention.

"We do not regard the forthcoming election as a legitimate expression of public opinions. We continue to have a very strong view that the situation in Burma is unacceptable."

Browne says more than 2,000 political prisoners are in Burmese jails.

On reports that North Korea and Burma may have been cooperating on a project to develop nuclear arms, Brown says it contravenes international law and that nuclear proliferation of this type is wrong.

"We will express that in the strongest terms at international institutions."
Jane’s Intelligence Review Examines Satellite Imagery to Collaborate
Defector’s Testimony of Myanmar’s Nuclear Programme
LONDON (21st July 2010)

Jane’s Intelligence Review has acquired commercially available satellite imagery from DigitalGlobe taken over sites in Myanmar reported to be nuclear sites, including two machine tool factories. These images corroborate evidence gathered by the Democratic Voice of Burma from Major Sai Thein Win, a defector from Myanmar, who worked as a deputy director at the two machine tool factories. Jane’s Intelligence Review Contributor Robert Kelley, former senior International Atomic Energy Agency (IAEA) inspector, has provided an assessment of this information.

Win’s information is so consistent with Western information that it increases confidence in its content and, in combination with the DigitalGlobe satellite imagery analysed by Jane’s Intelligence Review, it has helped clarify to some extent the intent and capability of Naypyidaw to pursue a military nuclear programme.

After careful analysis of the diagrams, manifest orders, photographs and satellite imagery, Jane’s Intelligence Review can conclude that Myanmar is taking measures to propagate an indigenous nuclear programme, but its ability to advance along the route towards nuclearisation is severely hampered because the programme is overly ambitious with limited expertise.

Myanmar retains obsolete agreements with the IAEA and has not signed the additional protocols that would provide the agency greater powers for more intrusive inspections of the factories in question. Myanmar has ignored the IAEA’s request to upgrade this agreement, which means the country is virtually exempt from inspections.

Christian Le Mière, editor of Jane’s Intelligence Review, explained, “There is no question Myanmar is attempting to build the components for a nuclear fuel cycle. However, Win’s testimony and other evidence also reveal intrinsic flaws within the programme. Careful analysis of the recovered data reveals that Myanmar is vastly out of its depth in terms of nuclear pursuit. Almost all of its diagrams and computer-assisted designs for tool production are categorically flawed. The apparent attempts at enrichment using the highly technical process of laser isotope separation, a technique that challenges even the most sophisticated of nuclear actors, will never materialise without an unprecedented augmentation of methodology.”

Jane’s Intelligence Review reported that Myanmar certainly has the intent to develop its nuclear programme. This in itself is a significant breach of IAEA agreements and its membership of the 1995 Southeast Asia Nuclear-Weapons-Free Zone (Treaty of Bangkok). Paradoxically, Myanmar is currently aided in its programme by a lack of IAEA oversight and had Win not come forward with his evidence Myanmar could have continued to fumble along its course towards uranium enrichment with little impediment.

Le Mière concluded, “Win’s disclosure of the sensitive information and the scrutiny thereof may lead the way to hinder Myanmar’s efforts through diplomatic impediments, but it also has served to inform its nuclear leadership of its grave technical shortcomings. Nevertheless, with Myanmar’s current freedom from sanctions and relative economic prosperity, the junta may be able to outsource the technical know-how and tools to reach its goals far sooner than expected.”

Jane’s Intelligence Review is an IHS (NYSE: IHS) publication.
Remarks With Vietnam Deputy Prime Minister And Foreign Minister Pham Gia Khiem
Hillary Rodham Clinton
Secretary of State
Government Guest House
Hanoi, Vietnam
July 22, 2010

[EXCERPT]

MODERATOR: (Via interpreter) I invite the question from other journalist. Kim Ghattas from BBC, please.

QUESTION: Question to the Secretary first. I would like to ask you about Burma. You’ve expressed in the past concerns about the possibility that Burma is pursuing a nuclear program, that it has connections with North Korea on that front. I was wondering whether you were planning to present any evidence to members of ASEAN about your suspicions. And if you could tell us a little bit more about how you feel one year on or ten months on about how your efforts to engage Burma are actually going.

And to the minister, the Secretary said that she’d raised the issue of human rights and I was wondering what your response was.

SECRETARY CLINTON: Well, first with respect to problems in Burma and the impact not only on the people of that country, but on the neighbors as the outflow of refugees continues and the consequent instability because of that. I believe that the ASEAN nations correctly raised yesterday in their meeting their concerns about Burma and particularly the planned elections that Burma has said will be held, but without providing any details, even the date, raising questions about their commitment to such elections. I’ve also shared with the minister our concerns about the exporting by North Korea of military materiel and equipment to Burma. We know that a ship from North Korea recently delivered military equipment to Burma and we continue to be concerned by the reports that Burma may be seeking assistance from North Korea with regard to a nuclear program. So this is a matter that is of concern to ASEAN and it is of concern to the United States. And we will be discussing further ways in which we can cooperate to alter the actions of the government in Burma and encourage the leaders there to commit to reform and change and the betterment of their own people.
And today I’ve joined the annual meeting of the larger ASEAN regional forum to continue and expand our discussions. As I stated when I attended this forum last summer in Thailand, the Obama Administration is committed to broad, deep, and sustained engagement in Asia. And as I discussed in a speech in Hawaii last fall, we are focused on helping strengthen the institutional architecture of the Asia Pacific.

Over the last 18 months we have signed the Treaty of Amity and Cooperation, announced our intention to open a mission and name an ambassador to ASEAN in Jakarta, and held the first U.S.-ASEAN summit. And we have pursued new sub-regional efforts like our new Mekong Delta partnership.

To build on that progress I conveyed to my colleagues our interest in engaging with the East Asia Summit as it plays an increasing role in the challenges of our time. And I announced that President Obama had asked me to represent the United States in an appropriate capacity at this year’s EAS in Hanoi to continue a process of consultations with a view toward full American participation at the presidential level in 2011. Through these consultations we will be working with EAS members to encourage its development into a foundational security and political institution for Asia in this century. The President also looks forward to hosting the second U.S.-ASEAN leaders meeting in the United States this coming autumn.

Today we discussed a number of urgent challenges including North Korea and Burma. I encouraged our partners and allies to continue to implement fully and transparently UN Security Council Resolution 1874, and to press North Korea to live up to its international obligations. I also urged Burma to put in place the necessary conditions for credible elections including releasing all political prisoners, especially Aung San Suu Kyi, respecting basic human rights, and ceasing attacks against their ethnic minorities. And as I said in our meetings today, it is critical that Burma hear from its neighbors about the need to abide by its commitments, under the nuclear non-proliferation treaty, to fulfill its IAEA safeguards obligations and complies with Resolutions 1874 and 1718.
MFA Press Release: Transcript of media interview by Minister for Foreign Affairs George Yeo following the Closing Ceremony of the 43rd ASEAN Ministerial Meeting and Related Meetings, 23 July 2010, Hanoi

24/07/2010

[EXCERPT]

Question: With regard to Myanmar, is there any concern about these reports about its alleged intent to develop nuclear weapons?

Minister: I've read those reports, but Myanmar is part of the Southeast Asian Nuclear Weapons-Free Zone (SEANWFZ), and they are committed to that. They have told us openly that, yes, they are looking at peaceful use of nuclear energy. I think the Russians are helping them, but they have no intention of moving in the direction of nuclear weapons. And not only will it be frowned upon, it will be a serious breach of what makes ASEAN in the first place.

I think what is important in Myanmar is [that] their elections are here, and how successfully those will be held. Unless something terrible happens, we will still have to continue engaging them. I don't see a very sharp break from the present to the future. Continuity is not necessarily a bad thing. The important thing is that their economy should be opened up. Because [of] so many rigidities now which have caused corruption, the economy has been reduced to concessions and licenses and that's bad. You know, that means that they are not growing as fast as they could. It means that the people are suffering unnecessarily, and that the opportunities which now abound in the region are not available to them. So I believe with elections and a move towards constitutional government, behaviour would change and we will see steady progress.
Southeast Asian foreign ministers gave Myanmar's military-run government an "earful" while demanding that it hold free and fair elections _ a rare stand by the cautious group often accused of overlooking rights abuses in member nations.

Foreign ministers from the 10-member Association of Southeast Asian Nations ended their annual meeting Tuesday in the Vietnamese capital of Hanoi, where they tackled a diverse agenda _ from setting up a European-style economic community by 2015 to bolstering ties with the West and regional powers China, Japan and India.

But at a dinner on the eve of the conference, Myanmar took center stage as diplomats vented their concerns about planned elections, which the junta has said will be held this year, without giving a date.

Many ministers told Myanmar's that the junta should hold "free, fair and inclusive" elections. Such straight talk is unusual given ASEAN members' bedrock policy of not interfering in one another's domestic affairs.

On Monday [presumably 2010-07-19], Thai Foreign Minister Kasit Piromya also raised concerns about allegations that Myanmar may be interested in developing a nuclear weapons program with help from North Korea. Myanmar has denied those claims.
FINDING

The United States is concerned about Burma’s interest in pursuing a nuclear program, including the possibility of cooperation with North Korea. The U.S. Government will continue to be alert to any indications of Burmese nuclear weapons-related activities or intentions to develop a nuclear weapons capability. At this time, the United States lacks evidence to support a conclusion that Burma has violated its NPT obligations or IAEA safeguards, but U.S. confidence in Burma’s compliance would be enhanced by the adoption of an Additional Protocol.

BACKGROUND

In May 2007, Burma and Russia signed an agreement for Russia to assist in building a nuclear research center in Burma that would include a 10 Megawatt lightwater research reactor. Russia has provided public assurances that the research reactor would be placed under IAEA guarantees. Available information suggests that Burma may have also received North Korean assistance in its efforts to establish a nuclear research center. Available information does not indicate that the nuclear research center called for in the Burma-Russia agreement has become operational, or that Burma’s efforts to establish the center have involved activities prohibited by the NPT or IAEA safeguards.
Compliance Discussions

Since May 2007, numerous countries including the United States have exchanged views regarding Burma’s nuclear intentions, and the potential nonproliferation, nuclear safety and security, and environmental issues that could result from nuclear development in Burma. Burma affirmed during diplomatic discussions in 2008 that it attaches paramount importance to the NPT and to nuclear disarmament and that it was preparing to take measures to align itself with IAEA safeguards.

COMPLIANCE ANALYSIS

The United States is concerned about Burma’s interest in pursuing a nuclear program, including the possibility of cooperation with North Korea. The U.S. Government will continue to be alert to any indications of Burmese nuclear weapons-related activities or intentions to develop a nuclear weapons capability. At this point in time, the United States lacks evidence to support a conclusion that Burma has violated its NPT obligations or IAEA safeguards, but U.S. confidence in Burma’s compliance would be enhanced by the adoption of an Additional Protocol.
South Korea will talk about possible nuclear cooperation between Myanmar and North Korea when a senior diplomat visits the Southeast Asian country next week, the foreign ministry here announced Monday.

Vice Foreign Minister Shin Kak-soo is scheduled to visit Myanmar from Aug. 19-21, where he will deliver Seoul's message encouraging fair elections on Nov. 7, according to ministry spokesman Kim Young-son. The elections will be the country's first in two decades.

Shin is also expected to address the suspected nuclear ties between Myanmar and North Korea.

"Our government is keeping a close eye on possible military cooperation between Myanmar and North Korea, including nuclear cooperation," Kim said. "We're working with the United States and other relevant states but we have not yet confirmed anything regarding nuclear ties. But Shin will have discussions on North Korea-Myanmar relations of late during his visit."

North Korean Foreign Minister Pak Ui-chun visited his Myanamarian counterpart U Nyan Win in late July, the first trip to the Southeast Asian country by a North Korean foreign minister in 27 years, amid U.S. warnings to Myanmar against nuclear cooperation with the North.
India says Myanmar has no nukes
IANS, Aug 26, 2010, 02.23pm IST

NEW DELHI: India believes that neighbouring Myanmar has no nuclear programme but is monitoring developments closely as nuclear weapons in the neighbourhood were a matter of concern, External Affairs Minister S.M. Krishna said on Thursday.

"Myanmar asserts that it has no nuclear programme on its anvil. The government of India will have to believe," Krishna said while replying to a supplementary in the Rajya Sabha, parliament's upper house.

The minister, however, added that information was being gathered through intelligence networks as well.

"We will also gather through our own intelligence what is happening. The government always monitors development closely because it concerns our security," Krishna said.

He stated that nuclear weapons in neighbouring countries were a matter of concern and that the Indian intelligence was keeping tight watch on the situation.

"We know Pakistan has nuclear weapons, China also has. We also know there has been a clandestine proliferation effort that Libya and other similar countries are making. We know A.Q. Khan network is very active. (The) government is monitoring the situation and will take steps to see India's security is not jeopardised," he said.

Myanmar has been under military rule since 1962. Its leader, Senior General Than Shwe, visited India in July to discuss energy and cross-border security issues.
India gathering facts on reports of Myanmar's N-programme
Updated on Thursday, August 26, 2010, 17:05

New Delhi: Amid reports of Myanmar denying having any nuclear programme, India on Thursday said that though it has taken note of their stand, it keeps a close watch on such activities.

"If a country like Myanmar with which India has bilateral relations, asserts a denial (about its nuclear programmes), then India will have to believe," External Affairs Minister S M Krishna said in Rajya Sabha during Question Hour.

At the same time, he added, "The government is trying to gather information about such peripheral activities. We monitor such activities closely as we are concerned about security of the country."

"Government has seen media reports indicating that Myanmar has a nuclear programme. Government of Myanmar has rejected media reports that it was engaged in making nuclear weapons as unfounded and fallacious," he said.

While quoting Myanmar's denial of any such development, Krishna said, "Myanmar described media reports about its nuclear programme as a groundless motive to assert pressure on it."

"We take cognisance of its views but we do keep note of such (nuclear) activities," the minister said.
GOVERNMENT OF INDIA
MINISTRY OF EXTERNAL AFFAIRS
RAJYA SABHA
QUESTION NO 424
ANSWERED ON 26.08.2010

ATOMIC WEAPONS WITH NEIGHBOURING COUNTRIES.

424 SHRI RAVI SHANKAR PRASAD

Will the Minister of EXTERNAL AFFAIRS be pleased to state :-

(a) whether it is a fact that Myanmar is also now engaged in making atomic weapons along with North Korea, Iran, Syria, Pakistan, etc.;

(b) if so, the facts in this regard; and

(c) the names of those neighbouring countries of India wherein atomic weapons are being manufactured legally or illegally?

ANSWER

THE MINISTER OF EXTERNAL AFFAIRS

(SHRI S.M. KRISHNA)

(a) & (b) Government has seen media reports indicating that Myanmar has a nuclear programme. Government of Myanmar has rejected media reports that it was engaged in making nuclear weapons as unfounded and fallacious.

(c) In India’s neighbourhood, China and Pakistan are known to possess nuclear weapons.
Over 100 households near uranium project in Mogok to be relocated
Hseng Khio Fah
Friday, 03 September 2010 17:05

An estimated 150 households from three villages located near a uranium mining site in Rubyland Mongok (Mogok in Burmese), 200 km north of Mandalay are to be relocated from the areas next year citing the project’s security, local sources said.

The targeted households were mostly of Lisu ethnic nationality, a Lisu businessman from Mogok said. “Each village has around 50 households.”

Military junta has reportedly been long drilling for uranium in the area. But the discovery has never been publicized and the place remains off-limits to non-military members. In addition, there has been no information of which company is in charge for the mining, he said.

In addition, the existing Mandalay-Thabeikkyin-Mogok road is also to be closed when the new road Mandalay-Pyun Oo Lwin (Maymyo)-Nawngkho-Mogok, which is still under construction, is finished, the businessman said. “It is expected to be completed next year.”

The military regime has been building the new road since last year in order to stop people using it except itself to carry the uranium. The road is 60 miles long.
“I heard the military regime will close the road next year because they will come to build nuclear reactor there,” said another local resident from Mogok.

A Burma Army missile expert Maj Sai Thein Win, the source of the latest exposé of the Burma ruling military junta’s nuclear weapons program in February claimed that the military has a nuclear battalion near Theabeikkyin on the Irrawaddy River, where the regime is trying to build a nuclear weapon.

In 2007, most of the companies working on gold mines in Thabeikkyin, 96 km (60 miles) north of Mandalay were ordered to close following discovery of uranium deposits near the area.

In the early 2000s, the Burmese regime confirmed publicly that uranium deposits had been found in five areas: Magwe, Taungdwingyi, Kyauksin, Kyaukphygon and Paongpyin in Mogok Township. The ore is supposedly transported to a Thabeikkyin refinery.

The Yale Global reported that the said five uranium deposits have been found by the help of Russians. In May 2007 Russia’s Atomic Energy Agency and SPDC signed an agreement to build a 10 megawatt nuclear reactor in Burma.

In Kachin State, there is a Russian - Burma joint venture company the Victorious Glory International Ltd, that has been drilling for uranium at Hawng Pa village in Hpa Kant Township, about 80 miles west of Myitkyina since February 2007.

According to Dictator Watch, SPDC is mining and refining uranium and then bartering the final product the "yellowcake", to North Korea and reportedly to Iran, in return for missiles and technical assistance for its own nuclear weapons program.
WASHINGTON — The US official leading dialogue with Myanmar said Thursday he was thoroughly disappointed with the results but that engagement was the best option as the country prepares for controversial elections.

"I think it would be fair to say in almost every arena, we have been disappointed," said Kurt Campbell, the assistant secretary of state for East Asian affairs.

"Everything we've seen to date suggests that the November elections will be without international legitimacy," Campbell told a forum at the US Institute of Peace [on 2010-09-16].

President Barack Obama's administration last year entered dialogue with Myanmar, also known as Burma, after concluding that the longstanding policy of isolating the military regime had not borne fruit.

Campbell said that US priorities included persuading the junta to free political prisoners including opposition leader Aung San Suu Kyi and to seek clarity on reports of nuclear cooperation with North Korea.

But the military regime is going ahead with a November 7 election, ahead of which it officially abolished Aung San Suu Kyi's National League for Democracy.

The election is the first since 1990 polls, which the National League for Democracy swept. The opposition party was never allowed to take power and Aung San Suu Kyi, a Nobel peace laureate, is under house arrest.

But Campbell supported dialogue with the junta, calling it "among all the difficult options, the best way forward."

"The period after the election might create new players, new power relationships, new structures inside the country, so we think we need to stand by and see how that plays out," Campbell said.

Campbell said that the United States was ready with "a combination of some pressure, and also some rewards," in return for progress by Myanmar.

"We are prepared to act in both cases given developments on the ground," Campbell said.

The United States has maintained sweeping sanctions on Myanmar but says it is willing to ease them eventually in return for progress.
Myanmar tells U.N. body it will never seek atom bombs
By Fredrik Dahl
VIENNA
Thu Sep 23, 2010 7:36pm IST

[EXCERPT]

VIENNA (Reuters) - Myanmar told the U.N. nuclear watchdog on Thursday that allegations it was trying to develop atomic bombs were unfounded and that its nuclear activities had solely peaceful ends.

A Norwegian-based exile group said in June that Myanmar had a secret programme dedicated to acquiring nuclear weapons capability, following up on similar allegations by defectors from the reclusive, military-ruled country.

The International Atomic Energy Agency (IAEA) said at the time it was looking into the report. Myanmar is a member of both the nuclear Non-Proliferation Treaty (NPT) and the Vienna-based U.N. agency, now holding its annual 151-nation assembly.

"There have been unfounded allegations reported by international media...that Myanmar is attempting to develop a nuclear weapon programme," the head of the country's delegation, U Tin Win, said in a speech to the IAEA General Conference.

"We would like to reiterate that the applications of nuclear science and technology in Myanmar are only for peaceful developmental purposes and Myanmar will never engage in activities related to the production and proliferation of nuclear weapons," the Myanmar chief delegate said.

(Reporting by Fredrik Dahl; Editing by Mark Heinrich)
Now, immediately following this speech, I will leave for Hanoi, where I will represent our country at the East Asia Summit. This will be the first time that the United States is participating and we are grateful for the opportunity. I will introduce the two core principles that the Obama Administration will take in its approach to the EAS—first, ASEAN’s central role, and second, our desire to see EAS emerge as a forum for substantive engagement on pressing strategic and political issues, including nuclear nonproliferation, maritime security, and climate change.
Burmese defector reveals truth about junta's nuclear ambitions

In his extraordinary first interview, on the eve of elections, a former major in the secretive regime tells of chaos at the core of the state's weapons programme

By Simen Saetre
Friday, 5 November 2010

A senior missile scientist who defected from Burma after leaking secrets about the junta's suspected nuclear programme has revealed how senior generals were personally involved in plans to develop a weapons system.

In his first in-depth newspaper interview since defecting seven months ago, Sai Thein Win, a major in the Burmese army, said he attended four presentations where the nation's nuclear ambitions were revealed. He gives a rare insight into the shambolic, demoralising conditions imposed on scientists, and reflects on the consequences of his flight on the family he has left behind. The interview was conducted just days before Burma holds its first elections [on 2010-11-07] for 20 years, which have been condemned as rigged by rights groups and the international community.

Sai Thein Win now lives in a small flat on the outskirts of a large European city. There is no name on the door and the curtains are closed. The location of his home can not be revealed because he fears that Burma's generals will send someone to try to kill him. "I'm not really here," he said. His room is sparsely decorated, with a table, a computer and a large, sharp dagger.

Sai Thein Win's revelations since he left the country have been described by a former International Atomic Energy Agency head as "truly extraordinary information". Burma's army is closed to the outside world and Sai Thein Win is the main source, and in some cases the only source, for a case with major political implications. Can he be trusted?

International observers fear that the junta has tried to obtain nuclear weaponry as part of its strategy to retain power. But evidence from Sai Thein Win suggests that the programme is so mired in incompetence, corruption and delays that it would take years to develop a nuclear programme.

Sai Thein Win – who has been compared to Mordechai Vanunu, who in 1986 exposed Israel's nuclear weapons programme – said he spent three years working in a factory in the hot desert of western Burma. He said the regime installed machinery for their programme but virtually nothing was made, and employees were bored waiting for designs. At night, they sat drinking whisky and watching TV.

"When we were alone, we sometimes talked about how stupid this was," said Sai Thein Win. "We called ourselves Nato – No Action, Talking Only. We wasted our lives. I'm not a politician, I'm proud to be an engineer and an officer. I would be proud to be the first rocket scientist of Burma but I had no chance to apply what I had learned. It made me upset." The Burmese authorities have denied that they are developing nuclear weaponry and called Sai Thein Win a deserter and criminal. The country's Foreign Ministry said that it lacked the "infrastructure, technology and finance to develop nuclear weapons".

But in Sai Thein Win's evidence he claims senior leaders of the junta were keen to try. As one of 72 young engineers sent to Moscow for further study in 2001, he said they were waved off by a senior general, Maung Aye. Sai Thein Win said a senior general told them Burma needed nuclear weapons for its protection.
He specialised in missile technology but interrupted his doctorate studies in Moscow. He was appointed production manager to make components for the Burma's missile and nuclear weapons programme. He said he was in a trusted position and had access to confidential material.

On two occasions, he says, he attended presentations of the so-called nuclear battalion at another installation at Thabeikkyin, in central Burma. At one of them, Than Shwe – the leader of the junta – arrived in a car and was led to a room filled with other generals. He sat on a sofa and watched a female scientist give a presentation related to their work. Apparently, Than Shwe was impressed, gave a short comment and encouraged them to continue with their work, said Sai Thein Win.

The scientist said he did not doubt that the intention of the so-called nuclear battalion was to construct a reactor, enrich uranium and build a nuclear bomb. He said he saw documents that proved this but did not steal any to prove his claim.

"Everyone asks me, 'Did I get an order from the generals to create a nuclear bomb?' But I never got my hands on those documents. I had the chance to steal them, but I didn't."

He emphasised that his frustration with problems at the factory was a major reason why he started leaking the information. He said when machines broke, they could not fix them themselves but had to call the German manufacturer, who thought they were for civil use and had to be deceived. "If things went well, I would have still been there," he said. "If they did very professional work, I would be proud to be there. I would be proud to be part of that."

Another factor behind his defection was the suicide of his sister while he was in Moscow. She had worked at a school and earned one-seventieth of what he as a privileged army officer could earn. "The regime gives privileges to the officers, but condemns other public workers," he said. "For me, the pay was good enough, but not for my sister. In that way, the regime was partly responsible for her suicide."

In 2009, he saw a television show from the Oslo-based television channel, the Democratic Voice of Burma (DVB), which spoke of rumours of a nuclear weapons programme, and showed a picture of the factory where he worked. He said he went and bought a camera and took pictures at the factory. A security guard saw him but did not say anything.

So he went to the office, uploaded a picture and sent it to a contact. "After sending the pictures, it was like my thoughts kept circling around this, 'I'm in danger, I'm in danger, I'm in danger!'" He continued to collect pictures, get documents and upload them. "I had to rely on strangers. I felt stupid. If the pictures were publicised before I was out of the country, I would be killed."

He sat in his office during work hours and uploaded pictures to Facebook. DVB, which he was now in contact with, asked for more. He replied that he could give them everything, but that he would have to get out quickly afterwards. He had a fake passport and paid a $400 (£246) bribe for a visa. "If they got me on just one thing, they would find everything," he said. "I wrote nothing down, it was too dangerous. Everything was spinning around in my head."

He managed to get a flight to Thailand where he was met by a representative from DVB. His documents were sent to the former head of the International Atomic Energy Agency, Robert Kelly, for analysis. He has described Sai Thein Win as a "source with truly extraordinary information". The defector revealed hundreds of photographs from inside a factory that show machines and constructions, as well as technical documents that suggest attempts to develop nuclear technology, according to experts. The defector's evidence "correlates well with information from other published and unpublished sources", said Mr Kelly's report.
In his analysis, Nuclear Related Activities in Burma, he wrote: "Our assessment of multiple sources is that Burma is really developing nuclear technology, that it has built specialised equipment and facilities, and it has issued orders to a cadre to build a programme." Mr Kelly has also said: "This is not a good programme, it is not successful and it is not professionally managed."

Sai Thein Win said his email and Facebook page were hacked and he was tipped-off that he had been traced in Thailand. After he left the country, his mother and family were visited by the secret police, put under surveillance and had to inform the authorities if they were planning to leave Rangoon, he said. The Burmese authorities have called the accusations about the nuclear programme "unfounded" and said that Burma "only wants peace and has no ambition to become a nuclear-power state".

If Burma's nuclear ambitions are substantiated, it will raise questions about whether the junta – which has run the country since 1962 – is receiving help from rogue nations such as North Korea. Finally, when asked what he wanted to tell those who suspected he had made up his story, Sai Thein Win said: "Go and see for yourself. And wait for more to escape with evidence. I've done my best. I've done everything I could."

**Sai Thein Win: Life in brief**

Sai Thein Win grew up in the village of Kyaukme in Shan state in north-eastern Burma with mountains on all sides. His father was a clerk; his mother stayed at home. He went swimming, boxing and played the guitar – but one interest had his special attention: weapons.

He created traps, caught birds and studied guns and missiles. At 18, he applied for the military. Because of his good grades, he was one of 100 accepted on a defence engineering course. He studied subjects including electronics, mechanics and weaponry. He got up to work at 5am every day, and he says that he was proud to wear the uniform.

Still, the life he dreamed of was as a student, a life he was finally able to enjoy when sent to Moscow by the Burmese government in 2001. Later he returned to Burma as a production manager for the national nuclear weapons programme – his last job before he fled from the country for good.

A version of this article appears in the Norwegian newspaper 'Morgenbladet' today,
Experts, Intelligence Agencies Question a Defector's Claims About Burma's Nuclear Ambitions
by Stephen Engelberg, ProPublica, and Natan Dotan
Nov. 12, 2010, 2:41 p.m.

A ProPublica/PBS Need to Know investigation on this report will air tonight. Check local listings. [1] Or watch it now [2].

On June 4, a startling allegation about Burma's repressive military regime rocketed around the globe: A defector from the Burmese Army said his technologically backward nation had launched a program to build a nuclear bomb. The defector, a former major in the Burmese Army, provided pictures and documents to bolster his claims.

Previous allegations about Burma's purported nuclear efforts had stirred little interest. But this story, which was written and prepared by a leading Burmese opposition group, was accompanied by a detailed report drafted by Robert Kelley [3], a former weapons scientist for the U.S. government who had worked for many years for the International Atomic Energy Agency. Kelley, whose research on Burma was paid for in part by U.S. tax dollars, wrote that the "only" plausible interpretation of the evidence was that Burma had launched a program to build an atomic bomb.

The story had immediate impact. Senator Jim Webb, D-Va., who was in Thailand on his way to a meeting with Burma's generals, called a press conference to announce he was canceling his visit [4] just hours before he was scheduled to cross the Thai-Burma border. Webb, an advocate of closer Western "engagement" with the regime, said the report made such an approach impossible. The Burma story was mentioned on ABC's "Good Morning America" [5] and in stories in The Washington Post [6], Time [7], National Public Radio [8] and the BBC [9].

Kelley played a direct role in publicizing the story, appearing at a press conference in Washington and presenting his findings to congressional staffers and other influential people in the non-proliferation world in Washington. At the press conference, Kelley summed up his findings without equivocation, saying: "I state this very clearly and strongly, this is a clandestine nuclear program."

An examination by ProPublica and the PBS program Need to Know [10] has found that the question of Burma's nuclear ambitions is much less settled than Kelley contends. Other experts, including Olli Heinonen, the former deputy director of the IAEA, viewed the evidence as inconclusive. They said the equipment in the photos had other possible uses and that such serious charges should not rest on the testimony of a single defector.

"There is no smoking gun," Heinonen said in an interview. "There is no one single piece which puts your mind at rest telling that this is solely for nuclear purposes and for nothing else."

Separately, a senior American official said the Central Intelligence Agency and Department of Energy had reviewed Kelley's report "line by line" and had rejected its findings. In Germany, officials said they were aware that Burma had bought the equipment shown in the defector's pictures (some of it was exported by German companies) but have concluded it is not being used to launch an atomic weapons program.

Some of the financial support for Kelley's research came from a seemingly unlikely source: The American taxpayer.

The defector, Sai Thein Win, was brought to Western notice by a Norway-based group of Burmese exiles called the Democratic Voice of Burma [11]. The exiles received $400,000 last year from the National Endowment for
Democracy [12], a U.S. foundation whose budget comes almost entirely from Congress. The NED was created in 1983 to foster democracy movements around the world and it does so through grants and advice. Its past beneficiaries include Poland's Solidarity movement and the anti-apartheid forces in South Africa.

NED officials said they encouraged the Democratic Voice of Burma to have Kelley vet the defector's allegations and later paid for the Vienna-based scientist to fly to Washington to present his findings [13]. NED officials said they consulted no other experts or officials before hosting the press conference at which Kelly unveiled his report.

Officials at NED defend their role in getting the Burma story out and say that they were simply serving the interests of democracy. The foundation's president, Carl Gershman, said his organization had no idea Webb was on his way to Burma. The grants to the Democratic Voice of Burma, he said, promote "free media in a country that doesn't have a free media."

Gershman, who has run NED since its creation, said he was not aware that U.S. intelligence agencies doubted the claims about Burma's nuclear effort but said the story had value even if it were ultimately disproved. "If they got it wrong, we'll know about it. And they'll learn something and maybe the world will learn something."

Vigorous public debate is part of an open society, he said. "You can't have everything perfect. You're going to have differences of opinion, that's what democracy is all about. You're going to make mistakes, people will have different views, and I think that's what's happening here."

The dispute among experts over Burma illustrates a larger issue confronting the international community about illicit weapons programs. The United States went to war in Iraq supported by the testimony of a defector codenamed "Curveball" who described Saddam Hussein's supposed efforts to build biological weapons. Gen. Colin Powell's case to the United Nations for invading Iraq was based in large measure on Curveball's testimony, which turned out to be fabricated [14]. No nuclear, germ or chemical weapons were ever found.

Some experts worry that the West may overreact to the Curveball debacle and fail to heed warnings from any defectors. But others say the Curveball incident was a cautionary tale about the need to closely study any claims of nuclear proliferation advanced by opponents of a regime.

Kelley acknowledged the potential conflict of interest in his report saying the opposition group, the Democratic Voice of Burma, and the defector "have strong feelings about the regime." Their objectivity, he said, "can be called into question."

But Kelley wrote that the evidence, combined with other previous disclosures about Burma, was persuasive. He likened the defector, identified as Major Sai Thein Win, to Mordecai Vanunu, the Israeli technician who provided photos of Israel's secret atomic weapons facilities [15] to a British newspaper in 1986.

Kelley said the analysis of Win and related evidence already public about Burma "leads to only one conclusion: this technology is only for nuclear weapons and not civilian use or nuclear power."

Kelley worked for years for Heinonen, who served as deputy director of the IAEA from 2005 until this year. Their work included high-profile investigations of Iran, Iraq and South Africa's nuclear program.

Heinonen said that on Burma, he parts ways with his former colleague.

Heinonen noted that Burma has reserves of uranium and said its work thus far could be used as fuel for nuclear power plants. "There might be someone looking for utilization for uranium, but we really don't know the purpose. There is no alarming factor triggering suspicions about nuclear weapons programs at this stage."
The bar for accusing a country of wrongdoing should be set higher, he said. "When someone takes the first molecule from ore, it doesn't mean that he's already developing a nuclear weapon. There's a long way to go."

The arguments among the experts revolve around arcane questions of engineering and science.

One photograph provided by the defector shows what is known as a glove box [16], a sealed space in which operators can handle dangerous materials.

Kelley said the box could be used to make uranium metal -- a step in the production of fuel for nuclear weapons. But Heinonen rejected this assessment. He said that creating uranium metal requires high temperatures. "When you look at the picture you see, for example, that the box has rubber gloves. You would not build a box with rubber gloves to do such a process." Heinonen said the operator would "burn his fingers literally," adding: "I don't think this box is for that purpose."

Another analyst who disputes Kelley's view of Burma is David Albright, the director of the Institute for Science and International Security, a Washington-based research institute. In January of this year, Kelley and Albright co-authored a paper [17] for ISIS with two other experts that debunked some of the earlier claims that Burma was building a bomb.

When challenged about some of the conclusions in his recent report, Kelley urged reporters to contact Albright.

Albright said in an interview that he did not agree with Kelley's findings. A close reading of the report, he said, suggests that Kelley assumed that Burma is attempting to make nuclear weapons and then looked at Win's pictures "in a biased way ascribing nuclear purposes to them." Albright said he believed each piece of equipment in the photos had alternate uses, some of which were non-nuclear. He noted that Win had no background in nuclear science or engineering.

"We learn the hard way," said Albright. "This is what the whole thing was about with Iraqi WMD."

"If you're going to make accusations that a country has nuclear weapons program, you have to have credible evidence that that is true," he said.

Much remains unknown about Win and his motives. On Friday, the day Burma's voters went to the polls in an election internationally derided as rigged, the British newspaper The Independent and the Norwegian paper Morgenbladet published interviews with him.

Win said Burma's nuclear efforts were incompetent but real. He said employees assigned to work on the program sat around drinking whiskey and waiting for designs to arrive.

"When we were alone, we sometimes talked about how stupid this was," he told the Independent [18]. "We called ourselves Nato -- No Action, Talking Only. We wasted our lives. I'm not a politician, I'm proud to be an engineer and an officer. I would be proud to be the first rocket scientist of Burma but I had no chance to apply what I had learned. It made me upset."

Win said that he saw documents in which the regime ordered a "nuclear battalion" to build a reactor, enrich uranium and create a bomb. But he said "I never got my hand on those documents. I had the chance to steal them, but I didn't."

According to The Independent, Win decided to come forward after watching a Democratic Voice of Burma documentary that mentioned rumors about Burma's nuclear efforts. He bought a camera, took his now-famous photos and began uploading the images. He told The Independent a security guard at the factory saw him take the pictures but didn't say anything.
ProPublica senior report Dafna Linzer contributed to this report.

1. http://www.pbs.org/wnet/need-to-know/schedule/
7. http://www.time.com/time/world/article/0,8599,2002713,00.html
11. http://www.dvb.no/
15. http://www.timesonline.co.uk/tol/news/article830147.ece
17. http://isis-online.org/isis-reports/detail/burma-a-nuclear-wanabee-suspicious-links-to-north-korea-high-tech-procurement/
19.

Comments [Accessed 20101113T15:40Z]

Alice Mcandrew
Today, 3:30 a.m.

I read Kelly’s nuclear report and he doesn’t say

“the (glove) box could be used to make uranium metal”

He says “Our interpretation for this glove box is that it is used for mixing UF4 with magnesium metal” FOR a bomb reactor which is then used to make uranium metal. He also specifically mentions the high heat involved with this process “One of the reactors has obviously been subjected to great heat and is discolored and paint has burned off as it would be if it had been used to reduce metal”

I think perhaps we should read reports like this very thoroughly before trying to discredit the information. People may doubt Kelly’s conclusions but don’t try and justify it by saying he made mistakes in his analysis where there aren’t any.

Bob Kelley
Today, 6:45 a.m.

Thank you for reading the report Alice! You got it just right and Olli got it just wrong. Nothing new there. If Olli believes that Burma’s uranium work is for fuel for nuclear power, then he needs to explain why Burma has not reported its activities to the IAEA as it is required to do. Significant mining of uranium and or conversion in
the apparatus pictured in the German factories is a violation of two of their safeguards agreements with IAEA. One of the two sources interviewed by Propublica, separately from Major Win, says they have been refining uranium at Thabeikkyin for five years.
QUESTION: On Burma?

MR. CROWLEY: Okay, Burma.

QUESTION: Okay, two questions I have on Burma. One, are you considering lifting of any sanctions from Burma, small or big, in view of the recent developments there?

MR. CROWLEY: Well, Lalit, and we would do that for what reason? I mean, we are prepared, as we have said many times, to have a different relationship with Burma, provided Burma takes significant steps forward. There are very clear requirements for Burma, and it’s not about the United States dictating to Burma. It’s about what is in Burma’s best interest. Obviously, the – we welcome the release of Aung San Suu Kyi, but that doesn’t solve the broader problem of the 2,000 political prisoners who still remain in custody in Burma. It doesn’t solve the challenge of the fact that the central government is still at war with many ethnic groups within its borders. It doesn’t solve the challenge of having a political system that allows broader participation so that you don’t have a faux election here that just, in essence, takes generals and makes them civilians and pretends that’s a different kind of government. It is the same kind of government.

So we will have – we are prepared to engage Burma. We’re prepared to change our relationship. That would include a lifting of sanctions, but Burma has to take affirmative steps to warrant that kind of consideration.

QUESTION: And second question about these WikiLeaks cables which says that Burma is building bunkers with the help of North Korea. I’m not asking you about the cables. The question is, in your assessment, what is the kind of relationship Burma has with North Korea?

MR. CROWLEY: We study that very closely. You’re right; I won’t get into any particular cables. We have concerns about the nature of the relationship between Burma and North Korea, and we have that concern because of North Korea’s recognized history as a proliferator of dangerous technology. But it is something that we continue to watch very, very closely.
Myanmar's Links With Pyongyang Stir Nuclear Fears
By JAY SOLOMON
DECEMBER 17, 2010

[EXCERPTS]

WASHINGTON—The United Nations' nuclear watchdog has written to Myanmar's military government in recent weeks asking to visit sites in the Southeast Asian country allegedly involved in clandestine nuclear activities, according to officials briefed on the correspondence.

[deletia]

The IAEA's Department of Safeguards, headed by Belgian Herman Nackaerts, wrote the letter to Myanmar's government seeking to visit suspect sites, according to these officials. It follows at least two other letters the IAEA has written to Myanmar in recent months, seeking clarification of its alleged efforts to develop nuclear technologies at sites in the country's north.

"[The IAEA] is now officially asking for a visit," said one of the officials briefed on the letter.

[deletia]

Myanmar's mission to the U.N. declined this week to comment on the IAEA request. The government has previously denied that it has any nuclear program or military cooperation with North Korea.

[deletia]
IAEA seeks permission from Myanmar for nuke inspectors to visit
By Ashish Kumar Sen
The Washington Times
8:21 p.m., Thursday, January 13, 2011

The United Nations' nuclear watchdog has asked Myanmar's reclusive military junta to allow the agency's inspectors to visit amid growing concern that the Southeast Asian nation's rulers may be trying to build a nuclear weapon.

The International Atomic Energy Agency's (IAEA) Department of Safeguards made the request, according to diplomatic sources who spoke on the condition of anonymity due to the sensitive nature of the matter.

A signatory to the nuclear Non-Proliferation Treaty, Myanmar has concluded a safeguards agreement with the IAEA with a Small Quantities Protocol (SQP). The SQP is designed for states that have little or no nuclear material and no nuclear material in facilities.

"Based on this agreement, Myanmar would be expected to inform the IAEA no later than six months prior to operating a nuclear facility," said Giovanni Verlini, an IAEA spokesman based in Vienna, Austria. "If Myanmar were to operate such a facility, it would be subject to IAEA safeguards inspections, like similar facilities in other states."

Mr. Verlini declined to confirm the agency's request to the regime.

Myanmar's nuclear program reportedly is managed by the Directorate of Defense Services Science and Technology Research Center (DDSSTRC), which is located in May Myo at the Defense Services Technological Academy.

The junta denies that it is trying to build a nuclear weapon.

Robert Kelley, a former director of the IAEA, expressed skepticism and said inspectors must visit Myanmar. "The legal question is 'Where do they go and on what basis?' If Burma says 'no,' there is no legal basis to force them right now," he said in a phone interview. Myanmar also is known as Burma.

In its efforts to promote wider adherence to its safeguards system, the IAEA has invited Myanmar to conclude an Additional Protocol to its safeguards agreement and amend its SQP in line with the revised text approved by the IAEA Board of Governors in September 2005.

The Additional Protocol would grant the IAEA expanded rights of access to information and sites, Mr. Verlini said.

On an earlier visit to Myanmar, IAEA inspectors had asked to see the factories where equipment for suspected facilities is manufactured, but ended up seeing only a university physics laboratory.

According to a 2004 U.S. Embassy cable, leaked by the anti-secrecy website WikiLeaks, a businessman said he had heard rumors that a nuclear reactor was being built near Minbu, in central Magway Division on the Irawaddy River in Myanmar.

Last summer, Maj. Sai Thein Win, who defected from Myanmar, told a dissident group that the junta was trying to build a nuclear weapon. Maj. Win had worked in factories that manufactured prototype components for missile and nuclear programs.
A report, commissioned by the Democratic Voice of Burma, said that while the military may not be successful in its efforts, "the intent is clear." It said its analysis led to "only one conclusion: this technology is only for nuclear weapons and not civilian use or nuclear power."

Mr. Kelley reviewed the data.

"We have satellite imagery of a mining-related facility in roughly the place identified by the source. I think it is likely a uranium mill, but to stake IAEA reputation on this is a bit shaky," Mr. Kelley said.

"I know a number of other sites I suspect and would recommend one if asked, but I have not been asked," he said. "I would expect the team will probably find nothing if they go, especially if they only visit the headquarters, a university or the factory."

Western officials suspect North Korea is assisting Myanmar's nuclear program.

The 2004 cable noted that there was no direct evidence of this alleged cooperation, however, "rumors of ongoing construction of a nuclear reactor are surprisingly consistent and observations of activity … appear to be increasing, as are alleged sightings of North Korean 'technicians' inside Burma."

Another leaked cable, written in November 2009 by the top U.S. official in Yangon, described Myanmar-North Korea cooperation as "opaque."

"Something is certainly happening; whether that something includes 'nukes' is a very open question which remains a very high priority for Embassy reporting," the cable said.
VIENNA, Jan 14 (Reuters) - The U.N. nuclear watchdog has written to Myanmar seeking information about its activities, diplomatic sources said on Friday, suggesting the agency wants to send inspectors to the military-ruled southeast Asian state.

One source said he did not believe Myanmar, which has rejected allegations by an exile group it was trying to develop atomic bombs, had responded to the letter sent late last year by the International Atomic Energy Agency (IAEA).

"The IAEA letter asked Myanmar to provide information about reports suggesting it was engaging in suspicious nuclear activities," the source said.

Most analysts believe the isolated, impoverished nation remains well short of any goal to acquire nuclear capability.

A Norwegian-based exile group said last June that Myanmar had a secret programme dedicated to developing the means to make nuclear weapons, following up on similar allegations by defectors from the reclusive state.

The IAEA, which declined to comment on its letter on Friday, said at the time that it was looking into the report.

Myanmar is a member of both the nuclear Non-Proliferation Treaty (NPT) and the Vienna-based U.N. nuclear agency.

Myanmar told the IAEA in September that the allegations were unfounded and that its nuclear activities had solely peaceful purposes.

The country, formerly known as Burma and under longtime military rule, has been under Western sanctions for two decades and analysts say a nuclearised Myanmar could trigger an arms race in the region.

U.S. Secretary of State Hillary Clinton said in 2009 that she was concerned about the possible transfer of nuclear technology to Myanmar from North Korea, which has left the NPT and tested two nuclear devices.

U.S. diplomatic cables published by WikiLeaks last month showed that Western diplomats are alarmed at cooperation between Myanmar and North Korea, but have not confirmed fears Pyongyang is sharing nuclear technology.

A series of cables from the U.S. embassy in Yangon showed diplomats have been monitoring the mysterious activities of North Koreans in Myanmar for years, particularly at a site near the town of Mimbu rumoured to be a planned nuclear facility.

But the former head of the IAEA's inspections worldwide, Olli Heinonen, has voiced doubt at the allegations that Myanmar was trying to develop atomic bombs. He told Reuters in November, three months after he left the IAEA, that available evidence did not support the claim.

(Reporting by Fredrik Dahl; editing by Mark Heinrich)
"We Don't Have a Smoking Gun; We Have Concerns"
By Lally Weymouth
Posted Sunday, Feb. 13, 2011, at 8:59 PM ET

Yukiya Amano, director general of the International Atomic Energy Agency, says it is unlikely the Stuxnet cyberattack on Iran derailed the Islamic republic's nuclear program. The Washington Post's Lally Weymouth talked to Amano last week in Vienna. Excerpts:

L.W.: What proliferation threats do you see beyond Iran? What about Myanmar, for example?
Y.A.: We are following the situation in Myanmar carefully and collecting information.
US senators urge N.Korea-Myanmar probe

(AFP)
20 hours ago [Accessed 2011-04-09T20:05Z]

WASHINGTON — US senators on Friday [2011-04-09] called for an unclassified report on Myanmar's cooperation with North Korea after shady accounts of military and nuclear cooperation between the isolated nations.

Senator Richard Lugar of Indiana, the top Republican on the Senate Foreign Relations Committee, introduced a bill that would ask President Barack Obama to present Congress with a probe on the two nations' ties.

"Greater attention should be focused on the details and scope of military equipment and technology transferred from North Korea to Burma," Lugar said, using Myanmar's earlier name.

"Events in other parts of the world should not detract from obtaining a reality check regarding the elevated military and strategic collaboration between North Korea and Burma," he said in a statement.

The resolution asks Obama to "provide leadership" for an international investigation into alleged crimes against humanity in Myanmar, where rights groups say troops regularly kill, rape and enslave ethnic minorities.

The Obama administration has voiced support for a UN-backed probe but has done little to turn it into reality, with Myanmar's neighbor China and other Asian countries believed to be opposed to such an effort.

US memos released last year by the website WikiLeaks said that Washington has suspected for years that Myanmar ran a secret nuclear program supported by Pyongyang, with one source saying he saw 300 North Koreans at an underground site.

Weapons are one of the only sources of income for North Korea, which has repeatedly threatened to proliferate during marathon denuclearization talks involving the United States.

Lugar's resolution was co-sponsored by Senator Mitch McConnell of Kentucky, the top Republican in the chamber, and Senator James Inhofe, a Republican of Oklahoma.
Myanmar developing nukes? We don’t think so, ASEAN says
Mustaqim Adamrah, The Jakarta Post, Nusa Dua, Bali
Thu, 07/21/2011 10:41 AM

It seems that ASEAN continues to place faith in Myanmar despite allegations that the reclusive country is developing nuclear weapons, without any attempts to verify the allegations.

“We have no valid or complete information on that. I think everybody who is involved in this discussion has some part of the information and [is] making a lot of conclusions based on some assumptions,” ASEAN Secretary-General Surin Pitsuwan told The Jakarta Post here on Tuesday in an interview.

“But there is no complete fact for us to draw an informed judgment.”

Foreign Ministry director general for Asia-Pacific and African affairs and acting director general for multilateral affairs Hamzah Thayeb said Monday that it was impossible for Indonesia as the current chair of ASEAN to verify the nuclear development allegations against Myanmar.

“It would mean breaching ASEAN’s principle of noninterference,” he told the Post.

He also said all ASEAN countries, including Myanmar, were bound to the Southeast Asia Nuclear Weapon Free Zone (SEANWFZ) agreement.

“It is a regional application, the regional umbrella agreement. We are even trying to get external powers, the nuclear powers, to sign on to our treaty, so that all member states of ASEAN have the legal application to abide by the treaty,” he said.

On Monday, ASEAN concluded four discussion points for the 2007-2012 plan of action as its member states’ common reference for future consultation with the nuclear weapon states — the US, the UK, Russia, France and China.

It is believed that the nuclear weapon states refused to sign the protocol largely due to US and French objections over the unequivocal nature of security assurances and the definitions of territory, including exclusive economic zones (EEZ). The treaty zone covers the territories, continental shelves and EEZs of the party states within the zone. China in particular objected to the treaty’s inclusion of the Southeast Asian signatories’ continental shelves and EEZs, arguing that this prejudiced its extensive claims in the South China Sea.

According to a source at the ministry, nuclear weapon states, in particular the US, objected to an ASEAN term that bans vessels carrying nuclear weapons or nuclear materials from entering EEZ of ASEAN countries, arguing that it is in violation of principles of the UN Convention on the Law of the Sea.

On May 26, navy destroyer USS McCampbell caught up with North Korean cargo vessel M/V Light, which was suspected of carrying missile technology to Myanmar, and asked to board it, The New York Times reported.

The North Koreans refused. Not wanting to force its way aboard, the US could not confirm its suspicions. Nonetheless, a few days after the US navy approached it, the North Korean vessel stopped well short of Myanmar and returned to its home port.

In a statement addressed before the 54th Annual Regular Session of the IAEA in Vienna in September 2010, the Myanmar government said the allegations were “unfounded” as Myanmar applied nuclear science and technology “only for peaceful developmental purposes and Myanmar will never engage in activities related to the production and proliferation of nuclear weapons”.

Clinton says Myanmar has to do more
By ROBIN McDOWELL, Associated Press
07.22.11, 02:28 AM EDT

BALI, Indonesia -- U.S. Secretary of State Hillary Rodham Clinton says Myanmar will lose the trust of the international community unless it releases its political prisoners and opens dialogue with the opposition. She also called on the government to address growing concerns about weapons proliferation.

Myanmar held elections late last year, officially handing power to a civilian administration after a half-century of military rule and releasing pro-democracy leader Aung San Suu Kyi from house arrest. But many say the changes are cosmetic and the army still holds sway.

"We look to the government to unconditionally release the more than 2,000 political prisoners who continue to languish in prison," Clinton told representatives from 10 Southeast Asian nations gathering in Indonesia.

Myanmar, also known as Burma, should also conduct meaningful and inclusive dialogue with the political opposition and ethnic minorities, she said.

Last year, U.S. officials said a North Korean ship, suspected of carrying weapons or missile heads, was intercepted as it headed to Myanmar. That raised fears the country has nuclear ambitions.

Clinton called on the government to "address growing concerns on non-proliferation by committing to respect and adhere to relevant UN Security Council Resolutions."

"The choice is clear," she said. "They can take these steps and gain back the confidence of their people and the trust of the international community. Or they can continue down the path they've been on."

Clinton also signaled subtle disapproval of efforts by Myanmar to assume ASEAN's chairmanship in 2014, as is now being discussed.

"We trust that ASEAN members will gauge whether a potential chair can advance the organization's credibility and leadership role in the region," she said.

The Obama administration has sought to engage Myanmar to improve conditions, but the policy has produced little concrete results and has not eased sanctions on the country.

Myanmar came under military rule in 1962 and has brutally suppressed political dissent since then. Suu Kyi's National League for Democracy swept 1990 elections but was barred from taking power.
CHIANG MAI - The appointment last week of the United States' first special envoy to Myanmar, Derek Mitchell, promises to refocus US policy towards the isolated country after previous engagement overtures failed to gain diplomatic traction. The US has maintained punitive economic sanctions against the military regime for over two decades.

President Barack Obama chose Mitchell to fill the position in April, around 18 months after the State Department announced its new Myanmar policy and almost three years after the position was mandated by the 2008 JADE Act. The new position, which is charged with developing a cohesive international approach to US policy and liaising directly with the Myanmar government, carries ambassadorial rank.

A well-respected Asia hand, Mitchell was formerly the Defense Department's deputy assistant secretary of defense for Asian and Pacific security and prior to that a policy wonk with different Washington-based think-tanks. He first visited Myanmar in 1995 while with the National Democratic Institute for International Affairs, where he met with both senior government officials and opposition leader Aung San Suu Kyi.

United States policy on Myanmar took a turn in September 2009 after a policy review was concluded by the State Department. The review concluded that a heavy reliance on sanctions and isolation had been counter-productive. Instead of changing the military junta's attitude, the assessment concluded, Washington's public support for Suu Kyi and focus on the regime's human-rights record only fueled the ruling generals' paranoia of a US invasion and further isolated the country.

Under the new policy, Washington opted for a more flexible policy approach that integrated both sanctions and engagement. The new approach was in line with Obama's stated dual-track approach of "principled engagement" to deal with what Washington considers unsavory nations.

In Myanmar's case, benchmarks for the removal of sanctions and normalization of diplomatic and commercial ties have centered on the release of over 2,000 political prisoners, reconciliation with the democratic opposition and ethnic minorities, increased respect for human-rights norms and adherence to United Nations nonproliferation agreements.

The policy has motivated several high-level visits by US statesmen and diplomats but so far has made little if any progress. US deputy assistant secretary of state Joseph Yun met in May with Suu Kyi and senior government officials including foreign minister Wanna Maung Lwin.

This was followed by a visit from prominent senator John McCain at the beginning of June. McCain was able to meet in Naypyidaw with first vice president Tin Aung Myint Oo and speaker of the upper house of parliament Shwe Mann. Both officials are former generals and key junta leaders. In Yangon, McCain met with opposition leaders Suu Kyi and U Tin Oo.

Secretary of State Hillary Clinton reiterated the policy during the Association of Southeast Asian Nations (ASEAN) Regional Forum (ARF) meet held last month in Bali, Indonesia. There, she called for the release of some 2,200 political prisoners, dialogue with the opposition and ethnic minority leaders, and compliance with UN Security Council resolutions, a reference to a suspected nuclear program Myanmar is developing with North Korean assistance.
Clinton also put ASEAN on notice that Washington was not in favor of granting Myanmar the chairmanship of the regional grouping in 2014 unless significant reforms were carried out. Mitchell echoed these concerns during his senate confirmation hearings last week.

Many analysts perceive the US's public concerns about human rights and democracy as cover for a harder security agenda. While human rights and democracy garner popular support domestically and in the international arena, Washington's concerns lie more with a desire to blunt China's influence and impair Naypyidaw's potentially regionally destabilizing relations with North Korea.

Another major US strategic concern is Myanmar's growing ties with North Korea, especially in regards to missile and nuclear technology. Mitchell said in his hearing that it is "absolutely critical" for Myanmar to abide by UN nonproliferation sanctions banning trade in military hardware with Pyongyang. Last year, American naval units shadowed a North Korean freighter suspected to be carrying weapons en route to Myanmar. The ship was eventually forced to turn around.

Brian McCartan is a freelance journalist. He may be reached at brianpm@comcast.net.
250 days later - Questions to Government on Burmese nuclear scheme remain unanswered
Media Release | Spokesperson Scott Ludlam
Wednesday 17th August 2011, 12:33pm

Questions over potential Australian action on Burma's alleged nuclear program have remained unanswered by the Government for 250 days, the Australian Greens said today.

Senator Scott Ludlam put the questions on notice to the Minister representing the Foreign minister in the Senate chamber in December last year.

"In May we were told the Government was concerned about Burma's alleged nuclear problem but 'the most' they could do was monitor developments. On December 6th I asked what had been done to monitor Burma's alleged weapons program. 254 days later - there has been no answer. I asked further questions on December 17th, still no answer."

Senator Ludlam said fears about collaboration between the North Korean and Burmese dictatorships were well founded and the Australia Government must take nuclear disarmament seriously.

"Last year I asked how Australia has used its position on the Board of Governors, and Australia's Mission in Vienna, to address this potentially very serious nuclear proliferation issue in our region. It's August - and there has been no explanation."

Senator Ludlam will formally ask the Government to explain the extraordinary delay in the Senate today at the conclusion of Question Time.
Burma's alleged nuclear program
Question | Spokesperson Scott Ludlam
Friday 2nd September 2011, 1:02pm

Question No. 364

Senator Ludlam asked the Minister representing the Minister for Foreign Affairs, upon notice, on 17 December 2010:

With reference to the monitoring of Burma's alleged nuclear program and the role of the Australian Safeguards and Non Proliferation Office (ASNO):

(1) (a) What efforts have been made to monitor developments in Burma relating to its alleged nuclear weapons program since May 2010; and (b) what role has ASNO played.

(2) At the September 2010 International Atomic Energy Agency (IAEA) Assembly in Vienna, the Burmese military junta's statement included a refutation of allegations of a nuclear weapons program. What has the IAEA done to investigate this statement.

(3) How has Australia used its position on the Board of Governors, and Australia's Mission in Vienna to address this potentially very serious proliferation issue in our region.

Senator Conroy - the following answer has been provided by the Minister for Foreign Affairs to the Honourable Senator's question:

(1) (a) and (b) refer to the response provided to Question No. 338 (1).

(2) Prior to the Burmese Government's September 2010 statement to the IAEA General Conference, the IAEA Director General said on 7 June 2010 that the IAEA was assessing allegations about a Burmese nuclear weapons program and, if necessary, would seek clarification from Burma.

The Department of Foreign Affairs and Trade is aware that the IAEA Secretariat has written to the Burmese Government. Such communication, is confidential to the parties.

Within the scope of Burma's safeguards obligations to the IAEA, IAEA Director General Amano, in his Safeguards Statement for 2010 (submitted to and noted by the IAEA Board of Governors at its June 2011 meeting) concluded that for 2010 "the Secretariat found no indication of the diversion of declared nuclear material from peaceful purposes". On that basis, the IAEA Secretariat stated that "declared nuclear material remained in peaceful purposes".

The Department of Foreign Affairs and Trade is aware that the IAEA holds regular discussions with Burma, including each year during the week of the IAEA General Conference (usually held in September or October). In July 2011, both Burma and the IAEA Secretariat attended the meeting of the Australia-initiated Asia-Pacific Safeguards Network.

(3) Refer to the response provided to Question No. 338 (3).
Question No. 338

Senator Ludlam asked the Minister representing the Minister for Foreign Affairs, upon notice, on 6 December 2010:

With reference to the role of the Australian Safeguards and Non Proliferation Office (ASNO) and nuclear weapons proliferation in Burma, and specifically referring to the statement made by Mr Allan McKinnon, First Assistant Secretary, International Security Division, Department of Foreign Affairs and Trade, in May 2010 during the Budget estimates hearings of the Foreign Affairs, Defence and Trade Legislation Committee, in which he indicated that the Government shared international concern about Burma's alleged nuclear problem, ‘but the most we can do at this time is to monitor developments in Burma’:

(1) (a) What efforts have been made to monitor developments in Burma relating to its alleged nuclear weapons program since May 2010; and (b) what role has ASNO played.

(2) In regard to the September 2010 International Atomic Energy Agency (IAEA) Assembly in Vienna, Austria, where the Burmese military junta's statement included a refutation of allegations of a nuclear weapons program, what are the steps that can be taken by the: (a) IAEA; and (b) Minister, given that Burma now has two obsolete IAEA agreements and has failed to execute the ‘Additional Protocol'.

(3) Given that the Burmese military junta also shields itself from questions and inspections using another out-of-date agreement called a ‘Small Quantities Protocol' which exempts states that only have small amounts of nuclear materials and no nuclear facilities from IAEA inspections and close oversight, how has Australia used its position on the Board of Governors, and its mission in Vienna to address this potentially very serious proliferation issue in our region.

Senator Conroy - the following answer has been provided by the Minister for Foreign Affairs to the honourable Senator's question:

(1) (a) and (b) DFAT (including ASNO) draws on a range of sources of information to monitor closely developments relating to Burma's alleged nuclear activities. This activity is ongoing.

(2) (a) The IAEA is continuing its efforts to strengthen safeguards in Burma including by urging Burma to bring into force a modified Small Quantities Protocol (Mod-SQP) and an Additional Protocol (AP) at the earliest opportunity.

(b) The Government will continue to discuss with Burmese authorities, other States and the IAEA how to strengthen safeguards in Burma (including conclusion of a Mod-SQP and an AP) and the allegations of a nuclear weapons program.

(3) Australia has called on the Burmese Government to be transparent about any nuclear activities, to abide by its obligations under the NPT, and to declare all of its nuclear facilities and material (including conclusion of a Mod-SQP and an AP). Australia is a prominent advocate in Vienna, and elsewhere, of strengthened safeguards and the need to ensure that the IAEA has the necessary capabilities to evaluate and act on safeguards issues of concern.
Myanmar says in "no position" to build atomic arms
By Fredrik Dahl
VIENNA | Thu Sep 22, 2011 3:15am IST

(Reuters) - Myanmar does not have "enough economic strength" to develop nuclear weapons, a senior diplomat from the Asian nation told the U.N. atomic agency on Wednesday, rejecting any such suspicions in the West.

Last year, a U.N. report suggested that North Korea might have supplied impoverished Myanmar as well as Iran and Syria with banned atomic technology.

In 2009, U.S. Secretary of State Hillary Clinton said she was concerned about the possible transfer of such technology to Myanmar from North Korea, which has left the nuclear Non-Proliferation treaty (NPT) and tested two nuclear devices.

But Tin Win, Myanmar's ambassador to the International Atomic Energy Agency (IAEA), told its annual member state meeting: "Myanmar would like to restate that Myanmar is in no position to consider the production and use of nuclear weapons and does not have enough economic strength to do so."

He told delegates that Myanmar in the past had "made arrangements" to carry out nuclear research with the help of Russia, but that this had been halted as the international community may "misunderstand" the country over the issue.

The aim of the research had been to ensure that it would "not lag behind other countries in that field and to improve the applications of nuclear technology in its education and health sectors."

While backing the non-proliferation of nuclear arms, Myanmar also supported every state's legitimate right to the use of atomic energy for peaceful purposes, the envoy added.

Myanmar has previously denied allegations by an exile group it was trying to develop atomic bombs and most analysts believe it remains well short of any goal to acquire nuclear capability.

But in January, Vienna-based diplomatic sources said the IAEA had written to Myanmar seeking information about its activities, suggesting it wanted to send inspectors there.

A Norwegian-based exile group said in mid-2010 that Myanmar had a secret programme dedicated to developing the means to make nuclear weapons, following up on similar allegations by defectors from the country.

The IAEA said at the time that it was looking into the report. Myanmar is a member of both the NPT and the IAEA.

Formerly known as Burma and under longtime military rule, the country has been under Western sanctions for two decades and analysts say a nuclearised Myanmar could trigger an arms race in the region.

U.S. diplomatic cables published by WikiLeaks last year showed that Western diplomats were alarmed at cooperation between Myanmar and North Korea, but have not confirmed fears Pyongyang was sharing nuclear technology.
US special envoy to Myanmar begins second visit following recent steps toward reform
By Associated Press,
Updated: Monday, October 24, 10:26 AM

[EXCERPTS]

YANGON, Myanmar — The United States’ special envoy to Myanmar began his second visit in less than two months on Monday amid hope that the country’s new government is serious about political reform.

Derek Mitchell will be in Myanmar for two days and will meet with democracy movement leader Aung San Suu Kyi, senior officials including Foreign Minister Wunna Maung Lwin, and representatives of civil society, U.S. State Department spokeswoman for East Asia and Pacific affairs Darragh Paradiso said in Washington.

“Ambassador Mitchell plans to visit Burma frequently to build on our ongoing principled engagement, including dialogue with the Burmese government and local stakeholders,” a U.S Embassy statement said. Washington uses the country’s old name, Burma, which is preferred by many opponents of military rule.

In his talks with government officials, Mitchell will raise “our long-standing core concerns, including the need for the release of all political prisoners, dialogue with the opposition and ethnic minorities, adherence to Burma’s international obligations on nonproliferation, and end to violence against ethnic minorities,” the statement said.

[deletia]
Burma pursued nuclear weapons with North Korea, U.S. senator says
By William Wan
Published: November 24 [2011]

[EXCERPT]

The Senate Foreign Relations Committee received information roughly five years ago that the Burmese government intended to develop nuclear weapons with the help of North Korea, according to Sen. Richard G. Lugar (R-Ind.).

The committee at the time relayed the details to U.S. officials but did not release the information publicly, according to Keith Luse, a committee staff member.

Lugar’s statement, to be released Friday [2011-11-25], comes ahead of a trip to Burma by Secretary of State Hillary Rodham Clinton, who will be the first of her rank to travel to the isolated and authoritarian country in half a century.

"With the upcoming visit, Senator Lugar wanted to throw a spotlight on this issue and make sure it’s on the table in our talks with the Burmese government," Luse said. Lugar is the ranking Republican on the Foreign Relations Committee.
US Aware of North Korea-Burma Nuclear Ties Since 2006
By WAI MOE
Friday, November 25, 2011

"My friends in Minhla told me that North Korean technicians are seen in the town and around the military factory sites of Malun and Konggyi villages," said Chit Tin, who won a constituency in the township in the 1990 election, which was not recognized by the Burmese junta, and is now exiled in Thailand.
US blacklists Burmese General Thein Htay over arms
2 July 2013 Last updated at 14:58 ET

The US has blacklisted a senior Burmese army officer who it accuses of making arms deals with North Korea in defiance of UN resolutions.

The US Treasury said that Lieutenant-General Thein Htay had continued to purchase military equipment and material from North Korea.

It said that he had contributed revenue towards North Korea's nuclear and missile programmes.

The statement said the Burmese government was not being targeted.

It said that the government had taken positive steps to cut its military ties with North Korea.

In May the US extended targeted sanctions against Burma - also known as Myanmar - for another year but lifted a visa ban on officials.

The state department said at the time that the move rewarded progress and aimed to prevent backsliding on reform in Burma.

It cited human rights concerns and the continued detention of political prisoners as factors in extending the annual sanctions order.

The US statement on Tuesday did not identify the military goods involved. There has been no word from the concerned general.

"Thein Htay has disregarded international requirements to stop purchasing military goods from North Korea, the revenues from which directly support North Korea's illicit activities," Under Secretary for Terrorism and Financial Intelligence David S Cohen said in the statement.

"We will continue our efforts, alongside our international partners, to shut down North Korea's dangerous and destabilising weapons proliferation."

The US is trying to enforce sanctions to put pressure on North Korea following its recent testing of nuclear devices and long-range rockets.
Press Release of Senator Lugar

Lugar: Burma North Korea Ties Should Be Disclosed

Monday, November 28, 2011

Following is Senator Lugar’s statement regarding developments in Burma.

"The United States is appropriately testing the appearance of reforms within Burma. The Congress in 2008 created the position of Special Representative and Policy Coordinator for Burma to explore ways of changing the regime’s behavior. President Obama nominated Derek Mitchell in April of 2011 to assume that role.

The sincerity with which a wide range of reforms has been promised by the Burmese government must be judged by whether the words are followed by actions.

Missing from the long list of good intentions has been reference to the growing relationship between North Korea and Burma, and close cooperation between their two militaries. North Korea is believed to be continuing development of its nuclear, biological and chemical weapons programs. Over five years ago, the Senate Foreign Relations Committee was informed and subsequently advised U.S. officials of Burma’s reported intention to develop nuclear weapons in coordination with North Korea. An early goal of the tentative U.S. re-engagement with Burma should be full disclosure of the extent and intent of the developing Burmese nuclear program."
The United States sees no sign of a major nuclear weapons program in Burma and hopes that the new regime will boost cooperation with the UN atomic watchdog, a US official said.

"We've looked at this fairly carefully and we do not see signs of a substantial effort at this time" on nuclear arms, the official told reporters accompanying Secretary of State Hillary Clinton on a landmark visit.
Hillary Clinton on historic Burma visit
Updated: 06:00, Thursday December 1, 2011

[EXCERPTS]

Secretary of State Hillary Clinton has arrived in Burma on the first top-level US visit for half a century, seeking to encourage a 'movement for change' in the military-dominated nation.

A State Department official traveling with Clinton said he expected Burma would move forward on one key US concern - allegations of past military co-operation with nuclear-armed North Korea.

The official said he was not convinced of defectors' accounts of nuclear co-operation between the countries and indicated that Burma may agree to sign an agreement with the UN's International Atomic Energy Agency to ensure that it is not pursuing atomic arms.

'We've looked at this fairly carefully and we do not see signs of a substantial effort at this time' he said, playing down the allegations of Burma's nuclear ambitions.

The senior official said the US was more concerned about North Korean exports of missile technology to Burma, which violate UN sanctions on Pyongyang.
Myanmar Vows to Upgrade IAEA Safeguards
Arms Control Today » December 2012
Daryl G. Kimball

Myanmar will take steps to give the International Atomic Energy Agency (IAEA) greater access to the country’s nuclear facilities, the office of Myanmar President Thein Sein said in a statement Nov. 19 [2012], the day of President Barack Obama’s arrival in the Southeast Asian country.

Myanmar, also known as Burma, will sign an additional protocol to its IAEA safeguards agreement and will “give effect to the modified standardized text of the Small Quantities Protocol,” the statement said. The move could put to rest lingering suspicions that Myanmar’s military junta had pursued a nuclear weapons program with assistance from North Korea and could open the door to further rapprochement with the international community.

[deletia]
Media Advisory 2013/22

Myanmar to Sign Additional Protocol with IAEA

16 September 2013 | Union Minister for Foreign Affairs of Myanmar, U Wunna Maung Lwin, and IAEA Director General Yukiya Amano will sign an Additional Protocol to the safeguards agreement for that country on 17 September at the Vienna International Centre (VIC).

The Additional Protocol is a legal document that, when concluded with States with comprehensive safeguards agreements (CSAs), equips the IAEA with important additional measures that provide for broader access to information about the State's nuclear programme, increased physical access by IAEA inspectors and improved administrative arrangements. The implementation of an Additional Protocol significantly increases the IAEA's ability to verify the peaceful use of all nuclear material in States with CSAs in force. There are currently 121 States with Additional Protocols in force.

A photo opportunity will be provided for the signing ceremony at 16:00 in the M02 foyer of the M-Building at the VIC, followed by a short question and answer session with the Minister and the Director General.
Burma Signs New Nuclear Deal With IAEA  
September 17, 2013

Burma and the U.N. nuclear agency have signed an agreement that will give international inspectors wider access to Burmese facilities.

The agreement, called an Additional Protocol, was signed Tuesday by Burmese Foreign Minister Wunna Maung Lwin and IAEA chief Yukiya Amano.

The move will help clear lingering suspicions that Burma had been trying to develop nuclear weapons during the country's long military rule that ended last year.

U Ye Htut, a spokesman for Burmese President Thein Sein, said the agreement will be very helpful. "Although we have initially said that we don’t have any plans to use nuclear energy to develop nuclear weapons, we have been under suspicion. First, by signing this Additional Protocol, it helps to clear away this doubt. The second, this will lead the way for Burma to get opportunities, assistance in nuclear technology for use of peaceful means energy, medical research, agriculture and other research work."

David Albright, President and Founder of The Institute for Science and International Security, said the new agreement is important, but the concerns over a Burmese nuclear weapons program are small.

"I don't think the suspicions are that strong. Whatever Burma did, it was small... small scale nuclear efforts. My organization reviewed a lot of allegations about Burma's nuclear efforts and we thought most of them were not substantiated."

Burma, which joined the Nuclear Non-Proliferation treaty in 1992, already is receiving IAEA assistance on matters such as accounting and control of nuclear material, and using radiation for medical and agricultural purposes.

This report was produced in collaboration with the VOA Burmese service.
Appendix A

Commentary and Supplemental Material
US President Barack Obama delivered the commencement address at West Point on May 28. In his speech, Obama commended Burma on, among other things, its “movement away from partnership with North Korea in favor of engagement with America.”

Obama is right in stating that, thanks to US “diplomatic initiative,” America is forging a friendship with Burma. What’s less clear is if Burma is in fact distancing itself from the DPRK, global juggernaut of oppression.

A multitude of leaked US Embassy cables reveal long-held concerns about North Korea-supported weapons projects inside Burma. In August 2009, then-top US diplomat to Rangoon Larry Dinger came to the conclusion that “Something is certainly happening; whether that something includes ’nukes is a very open question which remains a very high priority for Embassy reporting.”

Now more than ever, that “very open question” demands an answer.

For a while now, the US has been aware of a certain suspicious facility in a town called Minbu in western Burma’s Magwe Division. An embassy cable from August 2004 quoted a Burmese engineering officer saying surface-to-air missiles were being built at the site:

“Some 300 North Koreans are working at a secret construction site….They are forbidden from leaving the construction site and…Outsiders are prohibited from entering…The North Koreans, aided by Burmese workers, are constructing a concrete-reinforced underground facility that is ’500ft from the top of the cave to the top of the hill above.’”

(Note: The cable expressed doubt at the large number of North Koreans stated to be at the site)

Embassy cables of yesteryear are now reverberating with alarming vibrancy. In February, four journalists from Burmese media Unity Journal published a front-page story detailing a similarly suspicious (and visually, nearly identical) compound in the township of Pauk, Magwe Division. The article ran complete with photos and local testimonies detailing what was described as a secret chemical weapons facility complete with foreign staff, uber-heavy security measures, and senior military helicopter visits (check out a full breakdown of the complex here).

The Burmese government’s response? Confiscate all copies of the journal and jail all the journalists involved. The Unity journalists, along with their CEO, are sitting in jail right now on charges of violating the State Secrets Act.

UPDATE: On July 10, the five Unity employees were sentenced to 10 years in prison with hard labor.

If that doesn’t reek of uranium, or at least weapons, then I don’t know what does.

The man behind the Minbu and Pauk sites is Gen. Thein Htay, director of the military’s Directorate of Defense Industries (DDI). The United States knows Thein Htay is a shady character; he is individually sanctioned on the Treasury Department’s Specially Designated Nationals (SDN) list—specifically for engaging in “the illicit trade of North Korean arms to Burma.”

So it’s reasonable to assume that the United States suspects Burmese military goons like Thein Htay are up to no good with these hidden factories. Yet Washington chooses to distinguish between Thein Htay and the government he serves, noting that the Thein Htay sanctions “[d]o not target the Government of Burma.”
The renewed Burma-US relationship is clearly not deterring Thein Htay, as nonproliferation expert Jeffrey Lewis points out: “Since the Obama Administration began to engage Burma to encourage a transition to democracy, the Directorate of Defense Industries has expanded.”

When it comes to nonproliferation, Burma repeatedly pays lip service to the international community. The government has been saying for years that it’s “preparing” to ratify the Chemical Weapons Convention (CWC) that Burma signed in 1993.

Two decades seems like enough time to ratify a document. For comparison, the United States and China (among others) signed the CWC on Jan. 13, 1993 and ratified it in 1997.

Despite Burma’s failure to ratify the CWC, the first US/UK Nonproliferation Dialogue, “Myanmar and the Nonproliferation Regime: Sharing Perspectives,” held in Rangoon in February, was met with generally positive reviews. Some 45 participants, including nuke specialists, military officials and the like from Burma, the United States and Britain found that:

“Myanmar’s interest in opening to the world and in endorsing international rules and norms is real… [They have] begun and [are] fully committed to the process of ratifying and implementing the CWC…While other countries attack or condemn various ‘noncompliance’ lists, Myanmar focuses on how to get off these lists. The willingness is there; what’s needed is the capacity.”

Poor Burma. It wants to ratify the CWC and comply with international standards so bad; it just doesn’t know how.

The biggest takeaway from the talks should’ve been what the Burmese didn’t say:

“Myanmar participants did not comment on Myanmar-North Korea relations, even though the subject was raised several times by US and UK participants.”

Burma might not be great at ratifying international conventions, but they sure are good at misleading a crowd of Western countries. It helps when many in the West are bent on seeing the Burma that works best for them. President Thein Sein and his military-backed government threw out a little bait and the United States and others took it.

The United States needs to focus on ensuring that Burma makes good on its commitments, one of which should be that Burma ratify the CWC. This is especially important as the US military seeks to increase ties with Burma’s military, known as the Tatmadaw. Engaging with the Burmese military now would serve to embolden and legitimize the Tatmadaw; the United States should not endorse what it cannot see.

The notion that alleged democratization in Burma will magically answer the “very open question” of Burma’s nuclear ambitions is sorely mistaken. What compounds this miscalculation is the fact that, so far, Burma’s marshmallowy “transition to democratization” has been at best minimal and at worst farcical.

We’ve seen Burmese journalists thrown in jail for asking the wrong questions. The United States needs to step up and ask the Burmese government those very same questions: What are you and the North Koreans building up there in the hills?

Dan McDevitt is the communications and development coordinator for the US Campaign for Burma. A version of this article first appeared on the USCB blog on May 28, 2014.
Burma must sign international nuclear treaties
Robert Kelley
Bangkok
October 4, 2011 4:05 am

With the recent admission that Burma does not have the resources to contemplate pursuing nuclear weapons, the government has made an important step towards rejoining the world community.

It should take this opportunity to sign the international agreements it has praised, and join the club of responsible nations. Failing to do so could provide something of an acid test regarding allegations levelled against its military ambitions.

That Burma "cannot afford" nuclear weapons, as the ambassador to the International Atomic Energy Agency (IAEA), Tin Win, said in Vienna last week, may come as no surprise: its decision in 2005 to relocate the capital from Rangoon to Naypyidaw would have cost billions of dollars and strained the country's treasuries. Last year's expose by the Democratic Voice of Burma of a nascent weapons programme clearly stated that the project would likely prove too ambitious for the government.

But the admission last week could have myriad benefits for the country and its decrepit energy and health sectors. Burma has had an on-off agreement with Russia to build a nuclear reactor and research laboratory in the country since 2001. The agreement was formalised in 2007, but Russia has never been willing to complete the deal because Burma has obsolete agreements with the IAEA. No country could consider giving nuclear technology to Burma when it has insulated itself against any IAEA inspections.

Burma's treaty agreements with the IAEA stipulate that it has no nuclear materials and no nuclear facilities, and in practice, the IAEA waives the right to normal inspections in the country since both parties agree there is nothing to inspect. There has never been an inspection in Burma to verify the misuse of nuclear materials, and it's unlikely there ever will be, because according to the agreement there are no materials. This is, of course, an endless circular argument.

A research reactor would be a very ordinary research tool in a small country like Burma. It would represent no threat to world peace, particularly when it is subject to regular IAEA nuclear material inspections. But without inspections there would be constant concerns that even a small facility could be used for nefarious purposes. A research reactor would cost Burma about US$150 million, a very small sum for a country rich in mineral, timber and gas resources. If the government decides this is a strain on the budget, it is making a conscious choice in favour of other activities instead of spending on public health and welfare. The probable recipient would be the military, which accounts for more than a quarter of government spending.

It is not clear how Burma planned to use its research reactor. The most likely use would have been to produce medical isotopes for healthcare, a sector so fractured that it might be that the relatively high technology products for nuclear medicine go unused. The reactor could be used to train nuclear engineers for bigger projects in the distant future, for at present, Burma's decrepit technology base means that nuclear power is a distant dream.

Now that Burma has publicly renounced any nuclear activities, there should be no barriers to signing a modern nuclear materials safeguards agreement with the IAEA and modifying its existing codicils that essentially prohibit nuclear inspections in the country. Burma's current agreements are dated from the early 1990s and are completely obsolete.

Burma needs to consider signing the Model Additional Protocol, which grants the IAEA additional inspection rights. It requires Naypyidaw to submit more information on imports and exports of nuclear materials, and report...
on existing nuclear activities. Because Burma has declared that all planned nuclear activities have ceased, this should be no problem.

It would help to refute accusations by some exiles and analysts, including me, that the government is attempting to develop nuclear weapons. This evidence comes from activities in two mechanical workshops built around 2005 and equipped with modern European machine tools of high calibre. These tools are possibly building processing equipment that could produce uranium for a reactor or a bomb. The equipment was photographed by a Burmese army defector, who smuggled the images out of the country.

To be sure, even if Burma allows inspections under a modern IAEA agreement, the workshops would not be the immediate sites for vetting because they have no nuclear materials, but are only workplaces supporting a programme elsewhere. Fears surrounding these programmes are fuelled by reports of uranium mining, mostly in Shan state, and alleged nuclear activities at Thabeikkyin, north of Mandalay. None of this is being reported to the IAEA.

If Naypyidaw steps up to the table and signs a modern full inspection agreement with the IAEA, then Burma can put these claims to rest. IAEA supervision would also temper concerns about a research reactor.

Failing to do this, however, means that it remains in the small club of countries, alongside Iran and Syria, that have refused to sign the modern agreements, and will retain pariah status. Using the occasion in Vienna to reiterate Burma's commitment to international nuclear material safeguards and robust nuclear inspections holds little credibility unless it is followed with more tangible action.

Robert Kelley is a former director at the International Atomic Energy Agency.
Column: This is no time to slash defense spending, Kyl says
by Jon Kyl
Sept. 9, 2011 02:23 PM

[EXCERPTS]

On this day seared eternally in the American consciousness, we pause to consider nearly 3,000 lives lost and families forever affected.

In cities and towns across the United States, we offer prayers, moments of silence and heartfelt remembrances for loved ones, co-workers, acquaintances and fellow Americans taken abruptly from us 10 years ago, as well as those who have sacrificed to secure our safety since. These rituals are a natural and fitting way to honor the innocent victims of the terrorist attacks of Sept. 11, 2001.

Yet the greatest tribute we can pay is to confront head-on the terrorists and rogue regimes seeking to do us harm. Some scholars refer to this conflict as the Long War because the struggle against the radical political Islamists will likely take a very long time to conclude.

[deletia]

We must continue to pursue economic and political sanctions against states and terrorists seeking illicit biological, chemical and nuclear weapons. In addition to Iran, we remain concerned about the proliferation activities of North Korea, Syria and Myanmar (Burma). And we know that al-Qaida affiliates continue to seek to acquire materials to produce deadly poisons such as ricin and cyanide.

[deletia]

Jon Kyl is a U.S. senator from Arizona. He is the Senate Republican whip and serves on the Finance and Judiciary committees.
Burma claims it can't afford nuclear weapons. But its ties with North Korea are both convenient and troubling.

The Burmese and North Koreans are getting a little tongue-tied over their nuclear ambitions.

As I’ve mentioned recently, Burma's government insists it can’t afford the atomic ambitions that officials in the West fear Naypyidaw harbours, despite the enormous personal wealth generated by circles around the junta in recent decades.

Their wealth, combined with their unique relations with countries like North Korea and China, would be more than enough to at least kick-start the early stages of such a programme, and the noises out of Pyongyang have done nothing to dispel such suggestions.

This was highlighted by revelations in the United States of a stand-off between a North Korean ship suspected of containing banned weapons, and en-route to Burma, and a US Navy destroyer.

US officials sought and received approval from the Association of South East Asian Nations (ASEAN) and maritime authorities in Belize to engage the M/V Light, a Belize-flagged vessel known to have been previously used for weapons exports to Burma and the Middle East.

The ship was intercepted by the USS McCampbell in late May, however, the North Korean crew refused to let the M/V Light be boarded, insisting the boat was carrying industrial chemicals destined for Bangladesh.

The United States didn’t force the issue, nor did it want to risk a military confrontation as officials couldn’t be completely sure what cargo the ship contained. The standoff continued for several days before the vessel turned back and sailed for home.

Ties between Burma and North Korea have improved dramatically in recent years, a far cry from 1983, when North Korean agents detonated a bomb in Rangoon, killing several South Korean cabinet ministers and resulting in a severing of diplomatic relations.

The warming of ties is timely. Concerns persist over nuclear proliferation among questionable states like Iran, Pakistan, North Korea and Burma, and the issue is consistently at the top of the international diplomatic agenda.

Two weeks ago, the junta, which has run Burma for almost 50 years, told US Sen. John McCain that their country isn’t wealthy enough to acquire nuclear weapons. Burma would certainly like to convince the world it’s evolving from a military run junta to a government controlled by civilians. At the same time, about 2,000 political prisoners remain behind bars, and there has been no shift in international opinion, which widely regards last year’s elections as a sham.

If proven, Burma’s suspected trading links with North Korea would be in breach of UN Security Council resolution 1874 and 1718 barring Pyongyang from engaging in the arms trade. Resolution 1874 followed North Korea’s second nuclear test.

Burma deserves full marks for trying, but its attempts at persuading the wider world of its emergence as a regular country worthy of normal relations with everyone else are falling a little flat.
India must look away for a moment from the turmoil in the country’s western vicinity and spare a glance eastwards towards the “other border” as well, the one which India shares with another significant neighbour, Burma. Burma, formed part of Britain’s Indian empire till 1937 when it was declared a separate colonial entity. There is little ethnic or cultural connectivity eastwards, between the dominant Indo-Gangetic civilisation of India and that of the Irrawaddy heartland of Burma. In Burma, the traditional Indian presence has been of petty traders and subordinate-level bureaucracy of British Burma who did not endear themselves to the locals. Memories linger and, surprisingly, Indians even now are not generally well regarded.

The internal political and civil structure of Burma is fluid and complicated. There is Tatmadaw — the Burmese defence forces — in total charge of all aspects of governance, through the State Peace and Development Council (SDPC), which is a military junta of 11 generals, serving as well as retired, whose political fortunes fluctuate with their internal equations. With an estimated strength of 450,000 to 500,000, the Burmese Army is predominantly a light infantry force. Reputed as capable and professionally competent, it is combat-hardened by long experience of almost unbroken counterinsurgency and jungle operations against separatists almost since independence in 1948.

But its record of human rights has been severely criticised by the Western countries, particularly the United States, which regards the SDPC government as a rogue regime and is putting pressure on India to dissociate and condemn the country’s military junta. Burma carries the reputation of an enigmatic and somewhat prickly hermit kingdom which prefers to keep to itself. Inside the country, 19 major and minor ethnic groups are in distinctly uneasy diversity amongst themselves. The predominantly Christian tribal minorities along Burma’s mountainous, densely jungled outer periphery bordering Thailand, Laos, China, India and Bangladesh, are in almost permanent mutiny against the ruling Burman majority in the central heartland, who profess Buddhism and constitute 69 per cent of the population. The 1,643 km of porous, densely-jungled border shared by the two countries is comparatively loosely controlled, particularly on the Burma side and slow-burning; separatist tribal militarities of various persuasions against both New Delhi and Yangon smoulder across the entire region. Two-way traffic in border crime, drugs, weapons and other categories of smuggling have reinforced these insurgencies into a fairly major narco-conflict drawing sustenance from the Golden Triangle, in which Burma is the geographical pivot.

On the Indian side, the Indo-Burma border is, as usual, the relatively “forgotten frontier” in comparison with its western counterpart. Inter-sectoral priorities for allocation of resources are lower in the east and the Assam Rifles, that constitutes the Indian border guarding forces here, faces the usual paucity of troops. This, coupled with extremely difficult terrain and debilitating climate, makes effective border management tenuous, though still relatively better than on the Burma side.

Ethnic and cultural commonalities between the Naga, Mizo and Kuki tribes on the Indian side of the border in Arunachal Pradesh, Nagaland, Manipur and Mizoram, and those inhabiting the contiguous western and northwestern border regions of Burma add to the complexities of the situation, typified by the anti-India Naga insurgent group, the National Socialist Council of Nagaland-Khaplang (NSCN-K) in Nagaland and Manipur, which operates in India but is based in Burma and headed by S.S. Khaplang, a Hemi Naga from that country.

Relations between India and Burma are relatively low-key but on a generally even keel. India has no military problems with Burma and the focus is towards establishing a viable Indian politico-economic presence in the country. However, Burma is an area of well-entrenched Chinese interests and influence, and Indian interests
must contend with strong adverse factors, which transcend purely economic or corporate rivalries. Nevertheless, it remains a geo-political imperative for India to engage as closely as possible with Burma’s military dictatorship to progress its own entry into the region.

Association with an authoritarian military government whose record of human rights has been internationally criticised draws the disapproval of the US and the West, besides that of the growing internal movement for democracy within Burma led by student and liberal activists, centred around the personality of Aung San Suu Kyi. Her party, the National League for Democracy, swept to an overwhelming victory in the national polls in 1990, which was disregarded by the military rulers who placed her under house arrest in 1992. She was awarded the Nobel Prize for Peace in 1991, and many of her followers have escaped to India where they have been accorded sanctuary and are attempting to carry forward their movement from exile.

India for its part has to keep channels of communication open to both, the junta government and the democracy movement, using official as well Track II channels. It is an unenviable tightrope and for the present India has chosen to be pragmatic, becoming Burma’s fourth-largest trading partner (after Thailand, China and Singapore), besides involvement in major infrastructural projects in that country, including the 160-km Tamu-Kalewa-Kalaymyo road, completed in 2001 and funded totally by India, and the ambitious Sittwe-Kaladan river-Lawngtlai multi-mode sea-river road transport corridor scheduled to be completed in 2013, connecting Sittwe port in Burma with National Highway 54 at Lawngtlai in Mizoram.

However, for India, the real cloud on the horizon is Burma’s nascent nuclear programme. Burma as a signatory to the Non-Proliferation Treaty reached an agreement with Russia in 2007 for acquiring a 10-megawatt nuclear reactor for research purposes and generation of nuclear power. This cannot be a reason for concern in any manner, but there are more diffused reports of a clandestine nuclear weapons partnership with North Korea, with which Pakistan’s rogue nuclear scientist A.Q. Khan’s nuclear network is also allegedly associated. If true, this would definitely be a matter of concern for India, which hopefully has the means and capabilities to keep itself informed and prepared vis-a-vis such developments next door.

Meanwhile, it is to be hoped that the Burmese junta has taken note of the Arab Spring far away in West Asia, and may be considering options to ease the internal conditions within the country.

* Gen. Shankar Roychowdhury is a former Chief of Army Staff and a former Member of Parliament
Burma’s obfuscation hides a nuclear secret
By ROBERT KELLEY
Published: 13 June 2011

Burma recently told visiting US Senator John McCain that it has halted a peaceful nuclear program supported by Russia. This is an inconsequential event designed to obscure the ongoing military nuclear program that is being carried out in secret.

Burma has been flirting with Russia for about a decade over plans to buy a small nuclear research reactor. The intention was announced but no reactor or research laboratory was ever sold. The alleged “Russian support” was simply a commercial agreement to sell facilities to Burma, but Russia made it clear that Burma had to sign modern agreements with the International Atomic Energy Agency (IAEA) to provide adequate safeguards. Burma has not done so because it is probably already in violation of its old safeguards agreements.

Giving up this “peaceful program” that only existed on paper is obfuscation. The purpose of the reactor was allegedly for basic nuclear industrial research and the production of medical isotopes. This kind of reactor is common in the developing world and has no military significance. But when you consider that Burma is among the world’s lowest countries when it comes to per capita spending on healthcare, it makes no sense that they would be suddenly planning an expensive and complex nuclear medicine project, unless it is for a few elite.

So Burma has given up nothing but a plan. What are they not giving up? Several thousand young Burmese have been sent to Russia since 2001 for training in all manner of engineering subjects: nuclear, missile, chemical and civil. Many of the subjects studied are for military purposes. Is this going to stop? Defectors have identified uranium mining and chemical processing sites, and factories have been built under false pretences to produce chemical equipment.

The man in charge of building the factories used to head Burma’s Department of Atomic Energy; the Burmese engineers building this equipment were told it was part of the military nuclear program. A comprehensive assessment of each of the pieces of equipment shows their possible uses, and when you assemble the known pieces in a step-by-step process it all fits into an industrial uranium production program. The end result of the step-by-step uranium production has nothing whatsoever to do with the “abandoned Russian program”. The factories are also working on missiles which are not peaceful. Will all of these activities stop?

The announcement to Senator McCain was facile on the surface and has no value. Giving up a non-existent program is a shallow gesture. Now Burma needs to get serious about declaring what it has been doing. It needs to disclose all of its arms deals with North Korea. There are many areas of cooperation between Burma and North Korea in the fields of ballistic missiles and small military hardware, and although no nuclear connection between the two has been proven, the US believes it may exist. It is time for Burma to stop wasting its peoples’ resources on military adventures that are unlikely to even be successful, given the backward state of technology. Burma must allow verifiable inspections from ASEAN and the IAEA to reveal what it has been doing and to prove that it has stopped.

Robert Kelley is a former director at the International Atomic Energy Agency (IAEA).
Experts Keep Spotlight on Burma's Nuclear Aspirations
By LALIT K JHA
Tuesday, April 12, 2011

WASHINGTON—The authoritarian Burmese military regime wants to develop nuclear technologies despite having little apparent civilian requirement for such capabilities, American experts said on Monday at a day-long conference on “Myanmar and the Two Koreas: Dangers and Opportunities.”

“The key question remains whether North Korea has sold or will sell Burma’s military regime equipment for a nuclear reactor or a gas centrifuge plant or otherwise will help the regime’s nuclear effort,” said David Albright and Christina Walrond from the Institute for Science and International Security (ISIS), a Washington D.C.-based think tank.

Albright, who is the ISIS president, presented excerpts from the latest ISIS paper at the conference, which was organized by the US Korea Institute in association with various other organizations. She [sic] said that without an increase in the military regime’s willingness to cooperate, Burmese opposition groups will likely remain a main source of new information and assessments about Burma’s nuclear ambitions.

She also said that because Burma’s declared nuclear activities are small, these activities are exempt from compulsory inspections by the International Atomic Energy Agency. Moreover, she said that the regime largely ignored IAEA letters sent in mid-2010 asking for additional information and clarification about reports of nuclear development, and the IAEA had little recourse.

Any suggestions of a secret WMD program, let alone one conducted by a state like Burma, require careful consideration, noted Andrew Selth of the Griffith Asia Institute.

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Any suggestions of a secret WMD program, let alone one conducted by a state like Burma, require careful consideration, noted Andrew Selth of the Griffith Asia Institute.

“Some of the information that has leaked out of the country appears to be credible, and in recent years other snippets of information have emerged which, taken together, must raise suspicions,” he said.

“Without hard, independently verifiable information, it is very difficult to know whether the regime’s apparent desire for a nuclear weapon is simply wishful thinking, or has indeed prompted a serious effort to acquire weapons of mass destruction,” Selth said.

Priscilla Clapp, an independent analyst and former US charge d'affaires in Rangoon, expressed confidence that things seem to be moving in a positive direction after the establishment of the new government in Burma. The new government in Burma is a work in progress, she said, but was quick to add that the Snr-Gen Than Shwe still holds the keys to power in the country.

Clapp said that things could change quickly in Burma in the aftermath of the demise of Than Shwe. The National League of Democracy, lead by Aung San Suu Kyi, is still a strong political force in the country, she said.

David I Steinberg, distinguished professor of Asian Studies at Georgetown University, said that even though last year's elections were flawed, the new government established thereafter brings a significant potential for change in Burma.
Technical Note: Revisiting Bomb Reactors in Burma and an Alleged Burmese Nuclear Weapons Program

By David Albright and Christina Walrond

Introduction

The debate over Burma’s nuclear ambitions continues. At ISIS, we have assessed that Burma’s military regime is a nuclear wannabe. It wants to develop nuclear technologies despite having little apparent civilian requirement for such capabilities. However, sparse information, limited international inspection mechanisms, and regime opacity limit the ability to assess allegations of secret nuclear activities in Burma. The key question remains whether North Korea has sold or will sell Burma’s military regime equipment for a nuclear reactor or a gas centrifuge plant or otherwise will help the regime’s nuclear effort.

The Burmese opposition groups and experts affiliated with these groups dominate the development of new information and allegations of covert nuclear weapons programs. But like information from any group opposed to a regime, their information and assessments should be approached critically. In the case of Iran, and earlier, Iraq, opposition groups’ nuclear claims have had a mixed record at best. In addition to the poor quality of much of their information, too often their assessments are biased. Moreover, experts independent of these groups rarely review such assessments prior to publication.

In the debate about Iran’s nuclear capabilities, assessments by the International Atomic Energy Agency (IAEA) and a variety of governments have served to create a more accurate and balanced debate. However, governments and the IAEA have so far shown little willingness to weigh in publicly on the allegations about alleged Burmese nuclear activities.

Because Burma’s declared nuclear activities are small, these activities are exempt from compulsory IAEA inspections. Moreover, the regime largely ignored IAEA letters sent in mid-2010 asking for additional information and clarification about reports of nuclear development, and the IAEA had little recourse. Nonetheless, the IAEA sent a letter late last year, as first reported by the Wall Street Journal and confirmed by ISIS, asking Burma to visit multiple sites related to information obtained by the exile new agency, the Democratic Voice of Burma (DVB). Thus far, the Burmese regime has not responded to the IAEA’s request.

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1 In 1995, Burma signed a Small Quantities Protocol (SQP), which holds certain reporting responsibilities in abeyance. Under this protocol, Burma can produce yellowcake, but it is not obligated to report its production unless the yellowcake is exported to a non-nuclear weapon state or if it purifies the yellowcake to nuclear grade. The SOP permits Burma to hold up to one effective kilogram of nuclear material without reporting it to the IAEA, but if Burma purifies this material to nuclear-grade, regardless of the amount, it must tell the IAEA about the facility which purified this material.

Without an increase in the military regime’s willingness to cooperate, Burmese opposition groups will likely remain a main source of new information and assessments about Burma’s nuclear ambitions. ISIS believes that their information deserves serious and ongoing consideration, despite the frequent finding that it lacks merit. ISIS also believes that a robust debate can over time improve the quality of both the information and the assessments. In this report, ISIS returns to a key finding in a report issued by the Democratic Voice of Burma in May 2010 that has attracted controversy.

**Purpose of Bomb Reactors**

In May 2010, Robert Kelley and Ali Fowle authored a report, *Nuclear Related Activities in Burma*, published by the DVB. The report evaluates the purpose of equipment seen in a set of photographs and other information provided by a defector, a former Burmese army major named Sai Thein Win. The report finds that “analysis leads to only one conclusion: this technology is only for nuclear weapons and not civilian use or nuclear power.” It continues, “[This information] is consistent with a program to make UF6 (uranium hexafluoride) for enrichment by MLIS (molecular laser isotope separation) or centrifuge and uranium metal for a possible bomb core.” Because Win did not attest to the existence of a nuclear weapons program in Burma, the technical evaluation of these pictures is at the core of the authors’ conclusions. However, other experts queried by ISIS have differed with the authors in their interpretation of the purpose of the equipment in these photographs.

One example of this disagreement concerns the authors’ interpretation of one particular piece of equipment shown in photos and documents that represents a key part of the authors’ certainty of the existence of a Burmese nuclear weapons program. The pictures are of reduction vessels taken by Win, and the documents show a schematic of a reduction vessel (see figures 1 and 2). Also known as “bomb reactors,” these vessels are used to contain violent chemical reactions. While they can contain the reaction of uranium tetrafluoride and magnesium or calcium, bomb reactors are also widely used to make other metals.

An industry expert with decades of expertise in metal production, including the Ames process that dates to the Manhattan Project, stated to ISIS that the vessels in the photographs would generally be used to contain a calciothermal process to make metals that would melt at temperatures below 1,500 degrees centigrade. Although the vessels would be suitable for the production of uranium metal, they could also be used to produce rare earth metals or metals such as titanium or vanadium. Based on the pictures and schematic of the bomb reactor (figures 1 and 2), this expert assessed that it would be impossible to tell whether the vessels are more likely to be used to produce uranium or another metal. He estimated that kilogram quantities of metal could be produced in this reactor; the authors of the DVB report estimated 20-25 kilograms.

The DVB report indicates that the use of bomb reactors outside the scope of a nuclear program is “relatively rare.” The industry expert, however, has many years of experience in creating metals other than uranium using this type of technology. In fact, the production of kilogram quantities of rare earth metals using the calciothermal reduction process has a long history in civilian research and industry. Rare earth metals have many civilian applications. Burma has substantial rare-earth deposits. This past December, Burma signed an agreement with South Korea to develop this resource.

One possibility not considered by the authors of the report is that the bomb reactors could be part of a research and development program to make rare earth metals useful for military, nuclear, or civilian uses. For example, see U.S. patent no. 3,014,797 [INSERT LINK] shows a vessel that is similar to the vessels shown in the photographs provided by the Burmese defector. The description of the device indicates that it is used to prepare pure rare earth metals and metals such as titanium, zirconium, and hafnium. Although the figures in this patent show a vessel that has similarities to the vessel in the DVB photos, this ISIS report does not assess these similarities.

Often, rare earth deposits contain uranium. The production of high purity rare earths requires the removal of any impurities—including uranium. In processing rare earths, Burma can also separate uranium as a byproduct.

example, according to the expert, these vessels would be suitable for the production of cobalt-samarium metal. This metal can be used to create powerful magnets for a wide variety of civil and military purposes. They can also be used in missile or gas centrifuge programs. Research and development of cobalt-samarium metal could be consistent with Burma’s actual or attempted procurement with North Korea’s assistance of dual-use equipment useful in making precision magnets. Such a possibility heightens concerns that Burma may receive foreign assistance if it pursued nuclear weapons. With a track record of nuclear proliferation, North Korea is a likely candidate to help Burma seek the wherewithal to make nuclear weapons. However, this analysis does not lead to a definite conclusion about the existence of either a program to make cobalt samarium magnets, a gas centrifuge program, or a nuclear weapons program.

To justify their assessment, the authors of the DVB report also rely on Win’s information that the bomb reactors were to be used in the “special substance production research department.” However, the defector did not identify the “special substance.” The authors speculated that it is uranium, perhaps even highly enriched uranium (HEU). However, given the vast number of different types of metals that these vessels could produce, “special” is a highly subjective term. Determining what the military regime might call a “special substance” in a country known for intense secrecy is difficult at best.

HEU Metal?

The DVB report implies that the vessels could be used to create HEU metal. This claim appears to be based largely on the relatively small size of the vessel, a poor indicator of its use. This conclusion alludes that Burma has HEU or is planning to produce some in a domestic enrichment plant. Yet Win offers no such information, and reports of such capabilities are based on the testimony of other defectors whose credibility has been widely challenged by experts and government officials. As mentioned above, these vessels could be used for natural uranium metal production. A nuclear weapon could use natural uranium metal as a tamper, but this is still not a compelling indicator of the existence of a nuclear weapons program. These vessels themselves do not indicate that Burma is pursuing any kind of uranium enrichment, much less working on a nuclear weapons program.

It is difficult to see how all this uncertain information could lead to the conclusion that Burma is developing nuclear weapons. While it could be a possibility, based on the evidence other outcomes are also possible. The claim that a country is pursuing a nuclear weapons program should not be made lightly or without significant evidence. A lesson of the Iraqi weapons of mass destruction (WMD) fiasco is that defectors purveyed by groups opposing a regime should be vetted thoroughly, and their claims about nuclear weapons programs need strong confirmation. The DVB has not provided thorough vetting or confirmation in this case.

Other Possibilities to Consider

For several years, Burma has pursued uranium mining on at least a small scale. It would be logical that Burma would seek a capability to mill and possibly further process uranium. Burma’s interest in buying a safeguarded research reactor from Russia is also well documented. In its statement to the IAEA General Conference in September 2009, Burma indicated that such “a research reactor with experimental facilities would be an indispensable tool for education and training, research and other peaceful applications in nuclear science and

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7 “This is consistent with a program to make ... uranium metal for a possible bomb core,” Robert Kelley and All Fowler, *Nuclear Related Activities in Burma*, May 2010.
technology. The small Burmese nuclear establishment could be researching uranium mining, milling, and conversion capabilities as part of its interest in this reactor. In fact, its interest in processing uranium would more likely correspond with nuclear reactor technology than with a nuclear weapons program. This is further supported by Win’s statement to the DVB report authors that at the location of the same organization that ordered the bomb reactor, Win also saw a crude system to drive a control rod for a reactor. If the bomb reactor is intended for processing natural uranium into metal, this interest may also be a spillover from Burma’s interest in a Russian-supplied reactor. The schematic of the bomb reactor has no specifications; it looks as though it were reverse-engineered, implying a rather rudimentary effort, which Kelley and Fowie point out about the entire effort. One can legitimately interpret this schematic and the bomb reactor as part of a halfhearted effort to better understand uranium processing.

Even if Burma is pursuing these activities, this does not represent evidence of a nuclear weapons program. Without further information, which is currently lacking, it is impossible to determine conclusively that the bomb reactors depicted in the defector’s photos are part of any nuclear program.

Increasing Transparency

While the information provided by Win does not translate to Burma having a nuclear weapons program, his information does raise an important issue: how can the international community evaluate these and other claims of covert nuclear activities in Burma? Concern that North Korea could secretly sell the regime a nuclear reactor or gas centrifuges only increases the urgency of sorting rumors from fact.

The IAEA is the appropriate international authority to investigate these concerns. The IAEA should continue pressuring the regime for more answers and access to suspicious sites. The IAEA’s efforts to convince the military regime to agree to more effective safeguards arrangements are also critical. If Burma continues to refuse IAEA requests for more transparency, the Board of Governors should consider this issue and take appropriate action.

The United States intelligence community should declassify key findings of its intelligence assessments about Burma’s nuclear activities. One way to do that is for the intelligence community to report its findings to Congress, as it does for several other countries of concern. Likewise, other countries focused on Burma’s nuclear activities, such as Germany and Japan, should publicly report on their own views of alleged nuclear activities.

Another approach focuses on United Nations Security Council resolutions aimed at North Korea. A priority is to ensure that Burma does not engage in banned cooperation with North Korea. Toward this end, information about alleged Burmese/North Korean cooperation should be forwarded to the Security Council and its expert panel charged with overseeing resolutions on North Korea.

Although the IAEA and governments should continue to press the Burmese regime for more transparency, this stalemate calls for more rigorous assessments by outside experts and non-governmental organizations in determining the actual nuclear situation in Burma. Burmese opposition groups, including DVB, have obtained important information about the regime’s secret and repressive activities. Win provided important confirmatory and inside information about two long suspected military factories outfitted by the regime’s illicit procurements. Win’s photos were taken inside of these buildings. However, regime opposition groups often utilize unconfirmed nuclear allegations to increase international pressure on the regime. Burmese opposition

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*“Statement by the Leader of Myanmar Delegation H.E. U Tin Win to the 53rd Annual Regular Session of the IAEA General Conference,” September 14-18, 2009.*

*Burma: A Nuclear Wannabe; Suspicious Links to North Korea, High-Tech Procurements and Enigmatic Facilities, ISS Report, op. cit.*
groups are largely no different, and their results are not surprising. Thus far, defector claims of secret Burmese nuclear facilities or nuclear weapons programs have been debunked or are unconfirmed.

Enough suspicions remain about the Burmese regime’s ambitions that more scrutiny is needed. This scrutiny needs careful balancing and a thorough review. Otherwise, important information risks being discarded or devalued, diverting necessary and sustained attention that the nuclear intentions of the Burmese regime deserve.
Figure 1: Bomb Reactors

Source: DVB
Source: DVB
Nuclear Matter
Simon Roughneen
November 29, 2010

New revelations about North Korea's nuclear weapons program could have implications for Burma, after U.S. scientist Siegfried Hecker revealed last week that he had been shown "more than 2,000 centrifuges" for enriching uranium—part of the process for making nuclear fuel or weapons—during a recent visit to North Korea, where he said he also viewed a new light-water reactor, which, when fueled with uranium, is the most common type of nuclear reactor.

"This is obviously a disappointing announcement," said Stephen Bosworth, the U.S. envoy on North Korea, adding that "it is also another in a series of provocative moves."

Dr. Robert Kelley, the former International Atomic Energy Agency (IAEA) scientist, said that the Americans who saw the North Korean centrifuge plant last week were stunned by the sophistication they witnessed. "It has a completely modern control room, nothing like what those Americans have seen in other DPRK [North Korean] facilities," he said, and concluded that the United States "underestimated them."

Kelley contributed to a Democratic Voice of Burma (DVB) report that aired on Al-Jazeera on June 4, which was based on documents and photographs smuggled out of Burma by Sai Win, a defector from the country's military. Kelley maintains that "what we have seen in Burma is intent to build a nuclear program."

The latest North Korea revelations come amid some contention regarding Burma's alleged nuclear weapons program. On November 15, as the world focused on the release of Aung San Suu Kyi, a ProPublica/PBS report cited Olli Heinonen, the former deputy director of the IAEA and one-time colleague of Kelley's, who said that the evidence provided in the DVB report is inconclusive. "There is no one single piece which puts your mind at rest telling that this is solely for nuclear purposes and for nothing else," said Heinonen.

This report follows a June 29 critique of the DVB report published by the Institute for Science and International Security (ISIS), at the request of U.S. Senator Jim Webb, who advocates engagement with the military junta in Burma. In his ensuing letter to Senator Webb, ISIS Director David Albright dismisses DVB as having "a strong agenda" and later suggested that Kelley assumed that Burma is attempting to make nuclear weapons and then looked at Win's pictures "in a biased way ascribing nuclear purposes to them," according to a report on the ProPublica website.

ProPublica is a U.S.-based investigative news organization, and winner of a Pulitzer Prize in 2010 for work on the aftermath of Hurricane Katrina by journalist Sheri Fink. According to the ProPublica article, which is linked to the ISIS page focusing on Burma, "an examination by ProPublica and the PBS program "Need to Know" has found that the question of Burma's nuclear ambitions is much less settled than Kelley contends."

Kelley says that ProPublica approached him two weeks after the DVB report came out, saying that they had "their own information that they said supported our assessment of a nuclear weapons program in Burma."

According to Kelley, "They provided two separate Burmese defector debriefings of their own that did specifically talk about a Burmese nuclear weapons program and provided details that supported our main source, such as training in Moscow universities."

Kelley was interviewed by ProPublica in June, but its offer to take him to Thailand to meet the two other defectors never came to fruition, he says.
Kelley has pointed out on the ProPublica website that Heinonen misread his report for DVB, and says that before the DVB report was broadcast, "Albright declined to even look at the information when I offered to share it with him when it was brand new and collaborate on a joint analysis." Later, Albright told Webb in his letter that "the standards of analysis in the recent reports regarding the conclusion that there exists a nuclear weapons program in Myanmar were not very high."

Kelley says that he is coming under a lot of pressure to back away from his assessment that Burma is working on a nuclear weapons program. However, the latest revelations about North Korea might prompt some additional concern about what might be taking place in Burma, even if the hearsay so far about direct nuclear cooperation is "too weak to cite," in Kelley's words.

However, there is ample evidence of ballistic missile and other conventional military cooperation between the two countries. Kelley warns "that we should not underestimate Burma, especially if they get outside help."

Speaking at Thailand's Foreign Correspondents Club recently, prior to the weekend revelations about North Korea, Kelley said of Burma's alleged nuclear weapons program, "There is no threat tomorrow, unless the DPRK, which has been helping, decides to do more, or Pakistan, which has been selling nuclear secrets to anyone who will buy, decides to help."

In a report published by ISIS in January, which Kelley and Albright co-authored, they said, "There remain legitimate reasons to suspect the existence of undeclared nuclear activities in Burma, particularly in the context of North Korean cooperation."

ProPublica reported that the Norway-based organization is "a leading opposition group," rather than a credible media outlet in its own right. However, according to a spokesperson for Reporters Sans Frontiers (RSF), "To be impartial is pretty hard for media," but added that "of course, some of the exiled media have clearly a stand in favor of the pro-democracy movement."

Prevented from operating commercially in their natural market, Burmese exile media groups such as DVB and The Irrawaddy are funded by a combination of philanthropic organizations, donor governments and agencies, as well as commercial media sales. In the eyes of RSF, "The fact that [exiled Burmese media] are funded by some international donors is not really impacting their editorial line." ProPublica itself is funded by a number of philanthropies, including the Sandler Foundation, The Ford Foundation and the Bill and Melinda Gates Foundation, among others.

Burma is regarded as one of the least free media environments in the world, with a history of imposing lengthy jail terms on reporters caught sharing information with foreign or exile media, including DVB reporters. The exile media works closely with clandestine journalists inside Burma, seeking to bridge the information and news gap in the absence of Burmese alternatives that can operate without being curbed by the junta's censors.

Nine news journals in Rangoon were suspended on Monday for coverage of the release of Aung San Suu Kyi, while foreign journalists were barred from entering the country to cover the November 7 elections. Amid widespread voter apathy and allegations of forced voting, advance voting and ballot stuffing, the regime proxy party took 76 percent of the vote. Before the election, "pro-engagement" voices propagated the view that the elections would open up some form of democratic space in Burma, even if they would not be free and fair.

This article was originally published by The Irrawaddy: www.irrawaddy.org/.
Two former directors of the world’s top atomic energy watchdog have clashed over claims that Burma is trying to develop nuclear weapons.

In an article released by investigative group ProPublica that provided the basis for the ‘Burma’s Nuclear Puzzle’ documentary on PBS, Olli Heinonen, former deputy director of the International Atomic Energy Agency (IAEA), said the evidence is inconclusive. The article was a reaction to a documentary by DVB and a report authored by nuclear scientist Robert Kelley, released in June this year.

Kelley’s 30-page report based on his analysis of DVB’s material concluded that “it is likely that Burma is trying to attempt many of the nuclear program steps reported by previous sources”, but that “success may be beyond Burma’s reach”.

Nevertheless, he said, the intent is clear. And despite the crude and unprofessional nature of the evidence that indicates a program still at extremely early stages, Kelley advised the international community to react quickly to avoid Burma reaching the stage that North Korea has.

Heinonen rejects the findings of the report, however, saying, “There is no smoking gun”. Kelley claims that Heinonen has misinterpreted his conclusions.

“Heinonen did not read our report enough to judge our conclusions. He is quoted as saying ‘There is no one single piece which puts your mind at rest telling that this is solely for nuclear purposes and for nothing else’. We reached the same conclusion after reviewing information from several other human sources, satellite imagery and other information. It is the many pieces of information fitted together that are convincing”

Kelley, himself a former director in the IAEA, also sought to clarify confusion in the ProPublica report about a piece of equipment shown in DVB’s photographs: ProPublica claims that Kelley alleged a ‘glove box’ could “be used to make uranium metal”, which he did not.

Kelley points out that Propublica and Heinonen have misread the report and confused a glove box with a bomb reactor. ”Our report says no such thing,” he said. “The caption under the photo shows the bomb reactors and describes the high temperatures that one has been exposed to.”

Another area of contention was the comparison of DVB’s source, Sai Thein Win, to “Curveball”, an Iraqi defector who falsely described Saddam Hussein’s supposed efforts to build biological weapons. But while Sai Thein Win produced images and documents confirming both his status in the military and his position in the long-speculated factories, “Curveball” could not.

Heinonen, who worked under Kelley in his weapons team in South Africa in the early 1990s, says that Burma’s work thus far could be used as fuel for nuclear power plants. However, in so doing Burma would have broken international legal agreements and would be obligated to report its research to the IAEA.

And Kelley does not think the report went too far. “It was written very, very carefully because of the seriousness of our allegation. But at 30 pages, the report is too long for some people to read the entire thing so they cherry pick words here and there and miss the meaning.”
Nuclear Confusion
By SIMON ROUGHNEEN
Wednesday, October 27, 2010

Nuclear scientist and former director of the International Atomic Energy Agency (IAEA) Dr. Robert E. Kelley hit the headlines earlier this year when he wrote a report claiming that Burma's military junta was mining uranium and working toward developing a nuclear reactor. His report was commissioned by the exile Burmese news agency Democratic Voice of Burma (DVB), which was, in turn, shortlisted for this year's Nobel Peace Prize.

Kelley recently spoke to The Irrawaddy's Simon Roughneen about the alleged nuclear weapons program, and said that despite the claims in his report there has been little or no international effort to investigate. He said he believes that the Association for Southeast Asian Nations (Asean) should be at the forefront of efforts to address the nuclear weapons issue.

Question: Remind us of the content of the documentation that you reviewed as part of the DVB exposé of the Burmese military junta's alleged nuclear weapons program. Can you tell us the significance and implications of this material?

Answer: Firstly, the jargon and terms that people were using were reminiscent of insider knowledge, not just general mentions of “a nuclear program in Burma.” I got a chance to interview the defector source, Sai Win, when he came out, and the photos he brought out were of pieces of chemical processing equipment at the factories he worked in. I recognized one of those objects as a bomb reactor, which is a very strong steel vessel for producing metal and chloride compounds, usually uranium or plutonium. What I found was a set of photos showing uranium compounds for use in a nuclear program, either for fuel in a nuclear reactor or metal parts in a nuclear bomb. I didn't see much other purpose for those things, or for keeping it all secret, for doing it in military factories or for lying to the Germans inspecting those factories—unless it were for a nuclear weapons program.

Q: Have any significant updates or new information come to light since the DVB report came out in June?

A: Probably the most insight I’ve got is that I have tried to understand the organization that lies behind the program—who has the money, who calls the shots. I understand that a little better now. There is a confusing division between the army and the Ministry of Science and Technology. That has led to a slowdown in the program, I think; but in the long term, the winner of that power struggle could take control of the program and really drive it on.

Q: We are in Bangkok now. One of the “weapons” in the non-proliferation “arsenal,” for want of better words, is the Bangkok Treaty, How can that be used to prevent or preempt any nuclear weapons program? Or, what can or should the international community be doing in response to what might be taking place inside Burma?

A: There are three classes of organizations that could deal with this. Firstly, the IAEA has two obsolete agreements with Burma, which most countries that have nothing to hide have updated—the Small Quantities Protocol [SQP] and the Additional Protocol. The IAEA would have to benefit from heavyweight diplomatic support to get back into Burma, which is very hard to do. The SQP has been amended in many countries and updated, but Burma refuses to engage on this. Secondly, there are sovereign states who may want to jump in, but these have issues in Iraq and Afghanistan, and may not want to get involved. The third party that could address this is Asean. It is their neighborhood, their problem, their treaty that is being violated, so maybe with everyone else busy with other issues it should be down to Asean to address this.
Q: You have said that the Burma program, from what you can see, is limited and unsophisticated in terms of its technical scope. Does this mean that a more cautious approach is needed in addressing or assessing whether or not Burma really is building a nuclear bomb?

A: There is no threat tomorrow, unless the DPRK [North Korea], which has been helping, decides to do more. Or Pakistan, which has been selling nuclear secrets to anyone who will buy, decides to help. There is the chance that there is more to this than meets the eye, as what I can analyze is based only on the information and documentation that I have seen. There may be other work taking place elsewhere in the country that we do not know about, and that the source Sai Win does not know about—other parts of the government structure.

Q: What does it mean for the international non-proliferation system if this is not addressed or dealt with?

A: Do we intend to enforce the non proliferation treaty—ever? Or do we just sit and say someone else has got the best of us, and maybe we will stop them next time? For me, the next time is this time. The IAEA has already been pushed out of the game for now, and therefore I think, it is Asean's problem. This is the time to show that you have to will to solve a problem that you have discovered, and nip a problem in the bud.

Q: Since the report came out, is anything actually happening to investigate whether Burma is undertaking a nuclear weapons program?

A: One of the problems here is that the organizations involved in this work do not typically say what they are doing. Burma has told the IAEA three times that there is nothing to investigate. To the best of my knowledge, there has not been a lot of follow-up—from the entities or agencies that one would expect to be involved—on the material or with the sources that exposed what may be going on in Burma with regard to a nuclear weapons program.
Burma's Nuclear Adventure—The Real Threat

By ROBERT KELLEY

Wednesday, October 27, 2010

For several years reports have been emerging from Burma about its nuclear ambitions, supported by claims of varying provenance about equipment purchases and overt attempts to buy nuclear technology from Russia.

Now a brave military officer, who defected from the secretive state, has provided photographs of specialized machine shops building chemical equipment that is almost certainly designed for processing uranium chemical compounds to enrich uranium.

The only reason for Burma to be taking this secretive path is to embark on a weapons program. There is no other logical fit for the pieces.

The good news is that the technology is far too complex for Burma to master easily. The photos and information provided by the defector show a dysfunctional program. It has made terrible technology choices and the quality of the workmanship we can observe is primitive.

If Burma stays on this course there is a good possibility the program will never succeed, although we must remember, however, that the photographs and descriptions available for examination come from a single source.

It is possible there are other areas where the program is better managed and more advanced. Nonetheless from what we can see, there is no immediate threat to Burma's neighbors.

Yet should another country step in to assist Burma with knowledge, equipment and nuclear materials this could rapidly change. Pakistani nuclear scientists reportedly fled to Burma in 2001, and North Korea, closely allied with the Burmese regime, provides it with conventional weaponry. North Korea has detonated two nuclear devices of its own. It is suspected of sharing this technology.

And that's the bad news: there is every reason to be alarmed by reports that a state, regardless of its technical limits, may be toying with the development of nuclear weapons. The dye [sic] has long been cast: nuclear arms merchants and their suppliers are a chilling aspect of nuclear proliferation. The nuclear weapons dreams of despots cannot be readily dismissed. What they may themselves be unable to produce they can purchase.

At risk in this high stakes game is not only the security of the would-be nuclear proliferator's neighbors but the international non-proliferation regime.

I have been serving the goals of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) for 20 years. We have always come from behind in trying to stop proliferators. We succeeded just in time in Iraq when we discovered a clandestine program in 1991. We arrived too late in North Korea, even though there were unmistakable signs that proliferation was occurring. Pakistan, which did not sign the NPT, openly produced nuclear weapons while we stood by helplessly, exploded test devices, and then contrived to re-export its nuclear knowledge to an unknown number of persons and states that had signed the NPT.

In the non-proliferation community, we have argued for more and better tools to detect potential proliferators. Now we have used some of those tools to identify one, but the response from many quarters is that it is too soon, too difficult and too hard, to investigate and stop Burma.
But when is the right time? When it is too late? What tools will the world use then? Sanctions? Bombs? These are key questions. Intelligence analysis has done its job: it's identified the parts of a potential smoking gun. Now is the time to act.

Burma has been caught earlier and more completely than any other would-be proliferator. It's against such risks that the NPT and its system of safeguards was established. Its complement, the Bangkok Treaty, establishing a Nuclear Weapons Free Zone encompassing Asean states, is a further buttress against proliferation.

If we fail to act in a timely manner to respond to this poorly executed but obvious threat, we render meaningless the NPT and the tenets of the Bangkok Treaty. It is time to invoke Articles 12 and 13 of the Treaty that allow the group to begin an investigation of these assertions and force Burma to come clean. Citizens of this populous region may not feel threatened today or next year, but they will never know when they can feel safe without resolution of this issue.

Robert Kelley is a recently retired director of the IAEA in nuclear non-proliferation efforts. This article appears on Thailand's English-language newspaper The Nation on October 26.
Myanmar nuclear plan could speed up with NKorea help: expert
BANGKOK, Oct 27 (AFP)
Oct 27, 2010

Myanmar is carrying out a secret atomic weapons programme that could "really speed up" if the army-ruled country is aided by North Korea, according to a top nuclear scientist.

The comments follow a June documentary by the Norwegian-based news group Democratic Voice of Burma (DVB) that said Myanmar was trying to develop nuclear weapons, citing a senior army defector and years of "top secret material".

Robert Kelley, a former director of the International Atomic Energy Agency (IAEA), inspected the files smuggled out of Myanmar by Sai Thein Win and said the evidence indicated "a clandestine nuclear programme" was underway.

"This is not a well-developed programme. I don't think it's going very well," he told the Foreign Correspondents' Club of Thailand late Tuesday.

"But if another country steps in and has all of the knowledge, the materials, and maybe the key to some of the things that are plaguing them, including bad management, this programme could really speed up."

Kelley said North Korea was "certainly the country I have in mind".

Myanmar, which is holding its first elections in two decades on November 7, has dismissed the reports of its nuclear intentions and brushed aside Western concerns about possible cooperation with North Korea.

The DVB documentary gathered thousands of photos and defector testimony, some regarding Myanmar's network of secret underground bunkers and tunnels, which were allegedly built with the help of North Korean expertise.

The United States has expressed concern about military ties between the two pariah states, and said it was assessing the nuclear allegations against Myanmar, which would be "tremendously destabilising" to the region.

The Southeast Asian nation has also come under fire for the upcoming polls, which Western governments believe are a sham aimed at entrenching the rule of the army generals behind a civilian guise.

Kelley doubted their nuclear programme would succeed without outside help.

"I think it's safe to say the people of Thailand are safe for the next few years because these people don't know what they're doing. I wouldn't want to give them more than a few more years," he said.
Myanmar's Nuclear Ambitions
By Andrew Selth
Survival: Global Politics and Strategy, vol. 52, no. 5,
October-November 2010, pp. 5–12

[EXCERPT]

First 500 words: In June 2010, the Oslo-based activist organisation Democratic Voice of Burma (DVB) released a documentary film about Myanmar’s nuclear ambitions, and published a detailed report entitled ‘Nuclear Related Activities in Burma’. Since then, there has been a sense in some circles that the regime’s secret nuclear-weapons programme has finally been exposed. Indeed, commentators on both sides of the debate have cited the DVB’s material to justify their earlier positions. Yet there are still major gaps in the public record and critical questions remain unanswered.

According to the DVB, Myanmar’s military government feels threatened, by the United States in particular, and is convinced that possession of a nuclear weapon will provide an effective deterrent against external intervention. Despite major differences in their strategic circumstances, Myanmar apparently looks to North Korea, and its nuclear-weapons programme, as a model. With this in mind, the regime in Naypyidaw has reportedly charged elements of the armed forces with constructing a nuclear reactor, enriching uranium and developing the world’s first Buddhist atomic bomb. To this end, the DVB claims, the regime has built several specialised facilities, acquired dual-use equipment from abroad and begun a range of nuclear-related experiments.

The DVB’s revelations have been seized upon by activists, journalists and others who believe that this information finally puts to rest any doubts about the claim that Myanmar’s military government is determined to develop a nuclear weapon. The data provided to the DVB by a ‘defector’ from the Myanmar armed forces, including a large number of photographs and documents, has been put forward as the hard evidence of a secret programme that more sceptical observers have long demanded. Some activists now describe Myanmar as a security threat to the Asia-Pacific region that warrants immediate international action.

But the DVB’s film and report are also cited by analysts who have approached this issue more cautiously. They endorse the report’s judgement that many of the claims made to date have been ‘technically incredible’. These include stories that up to three nuclear reactors are currently under construction in Myanmar, and that the regime could have a nuclear weapon by 2014. Such analysts also accept that Myanmar’s nuclear programme, as described by the DVB’s main source, has been rather disjointed and marked by a lack of relevant expertise. There are also suggestions of poor management and a lack of coordination, if not incompetence. For example, the sophisticated (and very expensive) machine tools imported from Europe have been so poorly maintained that they are now useless.

Interpretations of the regime’s intentions vary, but both sides of the debate seem to agree that the generals are interested in at least investigating the possibility of developing a nuclear weapon. This in itself must be a cause for concern and argues for closer scrutiny of Myanmar by the International Atomic Energy Agency (IAEA). If the DVB’s material is accurate, however, Naypyidaw’s nuclear programme does not seem to have progressed much beyond crude and at times misdirected experiments.

[remainder unavailable]
Myanmar going Nuclear
By RSN Singh
Issue: Vol 24.4 Oct-Dec 2009
[Date: 20 October, 2010]

There has been an unmistakable spurt in the development and acquisition of nuclear weapon capabilities by the Military Junta regime in Myanmar. Given the level of progress in this regard, it is reckoned by various agencies that this would be realized by the year 2014. The media in the Southeast Asian region is rife with insinuations that this project is in progress, in active collaboration with North Korea under the aegis of China.

The Association of South East Asian Nations (ASEAN) is seized of the matter. Recently at the ASEAN Regional Forum Meet at Phuket in Thailand in July 2009, the US Secretary of State, Ms Hillary Clinton voiced her concern over reports about military cooperation between Myanmar and nuclear armed North Korea. This statement should be viewed in the backdrop of the incident wherein a North Korean 2000-tonne freighter ‘Kang Nam-I’, allegedly carrying illegal cargo, and headed for Myanmar, was tracked in June 2009 by a US Navy destroyer USS John S McCain and was forced to reverse course, reportedly at the behest of China. UN Resolution 1874 permits North Korean ships suspected of carrying illegal cargo to be searched. North Korea conveyed that any such move would be considered as an ‘act of war’.

Since the year 2000, there have been reports about North Korean ships off loading construction and other material at Thilawa port in Myanmar. It is intriguing that these activities were taking place during the period when North Korea and Myanmar did not have diplomatic relationship since 1983, which was restored only in 2007. The relations between the two countries were snapped, following the bombing of Martyr’s mausoleum in Yangon by North Korean agents in an attempt to assassinate the visiting South Korean president, Chun Doo-hwan.

Since the restoration of diplomatic relations in 2007, there has been a flurry of secret visits by Myanmar officials to North Korea, which could not have been possible without a reasonable level of engagement and cooperation between the two countries during the so-called ‘diplomatic freeze’. No sooner had the diplomatic relations been restored, a Myanmar delegation led by Lt Gen Myint Hlaing, the Chief of Air Defence, followed by another delegation headed by Lt Gen Tin Aye, Chief of the Office of Chief Defense Industries, visited North Korea. The composition of these delegations suggests that besides cooperation for procurement and development of conventional weapons, there are aspirations on Myanmar’s part to seek assistance in nuclear weapons and missile technology. If it was only conventional weapons, China is well placed to meet its requirements.

As it is Myanmar and China have thriving defence cooperation and more than 70 percent of Myanmar’s military arsenal is of Chinese origin. Moreover, North Korea lags far behind China in conventional weapon technologies. But as far as transfer of nuclear and missile technologies is concerned, it has been the wont of China to supply them through their proxies like North Korea so as to deflect international opprobrium. Pakistan is one such glaring example.

Sources have revealed that the Myanmar-North Korea rapprochement was painstakingly brought about by China. It is believed that when the Myanmar authorities approached China for supply of ‘howitzer guns’, the Chinese authorities expressed their inability on the plea of shortages, but said that the same could be obtained from North Korea in exchange for rice. During that period, North Korea was facing severe food shortages due to drought. At the behest of China, ambassadors of Myanmar and North Korea to Thailand met each other. The desperation on China’s part to facilitate the rapprochement process between the two internationally pariah nations, extremely close and beholden to China, is a pointer towards the evolution of a new Chinese strategy in the region.
It is believed that these secret delegations from Myanmar to North Korea had gone to seek further cooperation as part of the tunneling project already underway in a mountain complex (Setkhaya Mountains) in Naung Laing village in south east of Pyin Oo Lwin in Mandalay Division. The off-loading of a special construction material by North Korean ships on several occasions partially vindicates the belief. There are images available to suggest extremely large network of tunnels (some 800 in numbers) being excavated, apparently with the help of North Korea. The North Korean assistance is corroborated by the fact that Myanmar does not have tunneling capability. Meanwhile, Uranium is also being activated in at least ten locations. It may be pertinent to mention that the Kachin state of Myanmar is rich in Uranium, which reportedly in the past was being clandestinely excavated by Japan with the tacit indulgence of regional leaders during the period when the state was virtually out of control of the central authority.

The design of the reactor at Naung Laing, as sources reveal, uses water to provide carbon dioxide used in the cooling loop, and bears resemblance with the reactor at Yongbyon and the reactor in Syria, being constructed allegedly by North Korean assistance, which was eventually bombed by the Israelis in September 2007.

There are other indications with regard to Myanmar’s quest for nuclear weapons technology. Soon after Pakistan carried out its nuclear tests in May 1998, Myanmar’s Head of State, Senior General Than Shwe signed the Atomic Energy Law on 08 June 1998. The timing of this event clearly reveals a strategic pursuit with regard to nuclear technology rather than any benign designs of quest for nuclear energy for peaceful purposes.

Importantly, post 9/11, two Pakistani nuclear scientists, Suleiman Asad and Mohammad Ali Mukhtar took refuge in Myanmar in November 2001 when the US intelligence began to investigate the nexus between Pakistani nuclear scientists and the Al-Qaeda. This could not have been possible without intimate nuclear cooperation between the two countries, certainly with the tacit approval of China. The whereabouts of these two scientists is still unknown. It was alleged earlier that they were sheltered in the Muslim dominated area of Mandalay by the Myanmar authorities. There is not a word about them from the Pakistan authorities and even the US has become flaccid in its hunt for them.
The military government established a Department of Atomic Energy in 2001 under U Thaung, a known proponent of nuclear technology who currently heads the Ministry of Science and Technology. He made a secret visit to Pakistan, the chief agenda being nuclear cooperation. During the same period, in 2001, three Pakistani Naval vessels, i.e. a submarine, a tanker and a destroyer visited Yangon port. This was an unprecedented development, since till then, Myanmar had steadfastly maintained that it would not permit foreign naval vessels to visit the country’s ports. The goodwill visit by the Pakistan Naval ships was immediately followed by the visit of General Parvez Musharraf, the then Chief Executive of Pakistan. The Myanmar authorities, which met General Musharraf also included U Thaung.

There has been a fresh impetus in defence cooperation between Pakistan and Myanmar since the year 2000. Myanmar has been soliciting Pakistan’s assistance in some very key areas like setting up of an air-defence network, upgradation of airfields, and establishment of the University of Aeronautical and Space Education (Meiktila). Myanmar has also sought Pakistan’s assistance in cartographic survey and mapping. Given Chinese strategic sensitivities with regard to Myanmar, such growing bonhomie between Pakistan and Myanmar cannot be possible without Chinese prodding and support.

It was also during this period that Russia, at Myanmar’s request, announced its intention to build a research reactor in Myanmar. In 2002, Myanmar’s deputy foreign minister, Khin Maung Win, announced that Myanmar had decided to build a nuclear research reactor for producing radio-isotopes for medical purposes. It may be reiterated that the health-care facilities in Myanmar are of abysmal standards and there are very few hospitals equipped and trained to handle radio-isotopes. The agreement with Russia for setting up a 10 megawatt reactor near Magwe in Myanmar was signed only in May 2007 due to financial difficulties.

Nevertheless, hundreds of military personnel had been sent to Russia between the year 2001 and 2007 for training in nuclear science and technology. In some instances, their training duration was extended as the Russian instructors found a significant number of personnel without the requisite basic knowledge and being slow on the uptake.

Thus, Myanmar in the last decade or so has been able to create a pool of personnel trained in harnessing nuclear technology for civil application. On the flip side, and by conscious design, they were also grounded in the basic knowledge of nuclear technology, which is being honed and utilized for nuclear weapons development programmes. Sources, however, maintain that Myanmar’s technological manpower resources despite all the efforts are still not competent enough to handle nuclear facilities or programmes.

Therefore, Myanmar has adopted a two pronged strategy for development of its nuclear weapons programme. The setting up of the 10 megawatt reactor by Russia is a parallel venture to act as a ruse for nuclear weapons development activities with the active collaboration of North Korea. Although Myanmar is signatory to the Nuclear Proliferation Treaty (NPT), it is yet to agree to the Additional Protocol, which allows the International Atomic Energy Agency (IAEA) to conduct more intrusive monitoring of nuclear facilities and operations.

In May 2007, the US State Department spokesman, Mr Tom Casey, said that the US had a “general sense”, that Burma had “neither the regulatory or legal frame nor safeguard provisions” for a country to be able to handle such a programme. He expressed the apprehension that there were “no accounting mechanisms or other kinds of security procedures” to prevent nuclear fuel from being stolen. He added: “We would be concerned about the possibility for accidents, for environmental damage, or for proliferation simply by the possibility of fuel being diverted, stolen or otherwise removed.”

Following the resumption of diplomatic relations between Myanmar and North Korea, Myanmar’s Military Junta permitted North Korean transport planes going to Pakistan and Iran to re-fuel in the Yangon airport. The clandestine cooperation between North Korea and Iran in the field of nuclear weapons and missile technology is well known. Defectors from Myanmar allege that the Junta has sent uranium deposits from its mines to Iran, as also Russia, for evaluation.
The nuclear weapons programme that Myanmar embarked on a decade ago characterizes the coalescing of its strategic imperatives with an indulgent China. The involvement of North Korea, Pakistan and to an extent Iran, for furtherance of China’s regional and global agenda is in keeping with their status as proxy powers of the latter.

Myanmar’s determined bid to acquire nuclear capability is ‘not India-centric’. It does not perceive any threat from India, which is apparent from the deployment pattern of its military. Further, it has no fixed defences along the 1463 km long Indo-Myanmar border, which is largely undisputed. In fact, Myanmar clearly desisted from denouncing the Indian nuclear tests in May 1998. Myanmar is pursuing the nuclear course for the very survivability of the military regime. In that it is probably guided by the North Korean example. The military regime in Myanmar has also been circumspect about turning into a vassal state of China. However, the regime’s survival compulsions have outweighed other considerations, which China has been ruthlessly exploiting.

Internationally, the isolation of Myanmar has rendered it into a desperate political and economic situation. Therefore, the nuclear capability in the plausible reckoning of the Military Junta will invest it with the much needed diplomatic maneuver space in the international arena, in the absence of which Myanmar has no one to turn to, except China. Indeed, it is the international isolation of Myanmar in the 90s that compelled it to become beholden of China. Nevertheless, China’s patronage and even its admission into the ASEAN as a full member have not mitigated its political and economic problems. The western world continues to view the Myanmar regime as totalitarian, repressive and regressive.

The military dispensation in Myanmar, very much like the regime in North Korea is paranoid about being dislodged by intervention, military or otherwise, by the US and its allies. The nuclear weapons capability, the Myanmar regime contends will strategically insulate it against any such design.

For China, a nuclear armed Myanmar will further bolster its strategic encirclement of India, the major challenge to its regional supremacy. In the global context, proxy nuclear states serve as robust strategic pawns in the prevailing uni-polar international order.

Myanmar’s nuclear power status will have serious ramifications for the ASEAN. Besides driving the wedge in the grouping, it will act as a counterpoise to the ASEAN countries considered close to the US. It may be mentioned that all members of the ASEAN signed the South East Asian Nuclear Weapons Free Zone Treaty, which came into force in 1997.

The most disturbing part of Myanmar’s nuclear programme is the China-North Korea-Myanmar-Pakistan-Iran axis. Some analysts reckon that it is the part that Myanmar’s nuclear programme is not entirely of its own volition, but is a strategic maneuver by China and its proxies. They maintain that the large number of tunnels being done in Myanmar is to store nuclear material of these countries under the international scanner. Myanmar being an isolated and closed country is ideal for the purpose. In other words, Myanmar may be becoming a nuclear hub of all nuclear pariah states under the leadership of China.

About the author

North Korea and Myanmar: A match for nuclear proliferation?
By Catherine Boye, Melissa Hanham, and Robert Shaw
27 September 2010

Article Highlights

- The idea that North Korea and Myanmar are collaborating on a nuclear weapons program represents only one possible scenario among several that deserve closer examination.

- Myanmar's goal might be to improve its missile program or trade in illicit technology rather than build nuclear weapons.

- Myanmar's receipt of illegally-exported or questionable dual-use items should cause the international community to reexamine export controls and policies specific to trade with the Southeast Asian country.

Is Myanmar developing nuclear weapons, perhaps with the help of North Korea? That worrisome possibility, prompted by Myanmar's receipt of dual-use technology via an illegal North Korean procurement network, has garnered considerable speculation. Compelling evidence amassed in reports published this year by the Institute for Science and International Security (ISIS), the Democratic Voice of Burma (DVB), Jane's Intelligence Review, and Al Jazeera indicates that, as the ISIS report put it, "There remain sound reasons to suspect that the military regime in Burma [Myanmar] might be pursuing a long-term strategy to make nuclear weapons."¹

The possible existence of such a program cannot and should not be discounted, but it is far from the only explanation that can account for Myanmar's unusual imports. The dual-use technology sent to Myanmar -- including a cylindrical grinder and magnetometer -- are considerably beyond the country's current technical capabilities, according to the DVB report. Such sophisticated devices, which could be used to produce nuclear- or missile-related parts, may point to a well-planned, long-term nuclear weapons program, perhaps assisted by North Korea.

However, alternate explanations also warrant consideration to better understand the nature of DPRK-Myanmar trade in such technologies. Plausible alternative scenarios include the use of Myanmar as a transshipment hub for items ultimately destined for North Korea, an evolving conventional missile program, procurement errors or other planning missteps, or some combination of these possibilities.

Myanmar as a transshipment hub. In late 2009, the Yokohama District Court in Japan found the president of Toko Boeki (a small Tokyo-based trading company) guilty of coordinating illegal WMD-related exports to Myanmar.² Investigators determined that Toko Boeki had acquired cylindrical grinders and a magnetometer at the behest of New East International Company, a North Korean front company based in Hong Kong.³ Although New East International directed Toko Boeki to deliver the equipment to Myanmar, it is possible that the devices were not intended to remain there; Myanmar may have been a transfer point before the goods were shipped to another location -- perhaps even North Korea.

Indeed, Myanmar has distinct advantages to North Korean procurement networks that want to circumvent sanctions and illegally divert dual-use equipment to Pyongyang. (See Editor's Note.) Although it is also subject to sanctions, Myanmar is not as isolated as North Korea, and legitimate shipments originating from Japan, for example, can provide suitable cover for WMD-related deliveries.

In addition, Myanmar's flourishing illegal trade networks -- including drug and human trafficking -- represent a familiarity with the kind of knowledge required to covertly transship deliveries to countries with more advanced
WMD programs (such as North Korea). The rampant corruption associated with the military regime further enables illicit trade.

The revival of diplomatic and military relationships between Myanmar's ruling junta and Pyongyang is another reason to consider whether North Korea, and not Myanmar, may have been the final destination for the dual-use equipment. Chartered or diplomatic air transport, necessary to ferry officials between capitals, is less susceptible to interdiction, offering an ideal conduit for the transfer of some types of dual-use equipment from Myanmar to North Korea. A UN panel of experts on Resolution 1874 (which strengthened sanctions on North Korea after its second nuclear test) highlighted such a scenario in a May 2010 report PDF, suggesting that Pyongyang may turn to illicit air cargo shipments as a preferred mode of transport for its illegal trade.

**A conventional missile program.** Myanmar may be an ideal transshipment hub, but reports from ISIS and DVB indicate that dual-use machine tools from Japan and Europe are not simply being stored in Myanmar, but also used there. This could indicate that the devices may actually be intended for use in Myanmar's indigenous missile program.

Although Myanmar's overall technological development appears limited in comparison with North Korea, the majority of the questionable dual-use items received by Myanmar may truly be for its own missile development effort. Acquisition of conventionally armed short- and medium-range ballistic missiles would provide the junta with a significant strategic advantage over regional and domestic rivals, and short-range missiles could be useful to fight insurgent groups that challenge the junta's authority.

Further, Myanmar's defense industry already produces artillery and mobile rocket launchers, and the country reportedly has spent more than a decade improving its missile production capabilities. This practical experience could facilitate Myanmar's eventual creation of larger missiles, such as Scarabs or early Scud derivatives.

**Alternative scenarios.** It is also possible that, after some of the questionable dual-use equipment had already been received, a North Korea-Myanmar proliferation relationship fell into disarray due to the enormous complexity that plagues all WMD programs. Payment disputes (similar to those that held up Myanmar's negotiations with Russia for a 10 megawatt research reactor) could be one cause. Myanmar's acquisition of equipment beyond its technical capabilities could also be explained by a procurement error or an overestimation of indigenous know-how, as the DVB report acknowledges. In 2002, Myanmar expressed interest in buying a mini-submarine from Pyongyang, according to Jane's, but abandoned the idea due in part to its lack of expertise.

The transfer of such advanced equipment could also be an example of aggressive sales of unsuitable technology to a naïve junta, similar to Geoffrey Forden's suggestion that North Korea has been selling subpar missile technology to states in the Middle East. It is also plausible that a core group of scientists has the ear of the junta -- as well as its funding -- and may have over-promised deliverables. These scientists might include U Thaung, the pro-nuclear energy minister of science and technology, and Ko Ko Oo, who is director general of the Department of Atomic Energy and former director of the Department of Technical and Vocational Education (DTVE). The two departments shared the same address, phone number, and fax number until Myanmar's capital was moved to Naypyidaw, and the DTVE is an end-user of some of the questionable dual-use equipment that Myanmar has acquired, according to ISIS.

Another possible scenario is that Myanmar could be "warehousing" devices for North Korea under a barter agreement that allows Myanmar to train personnel on the dual-use equipment (and thereby gain valuable hands-on experience with the devices) before it is ultimately moved to North Korea. It is possible that Myanmar may even be viewed as an offshore production hub for transfer of items to North Korea or other interested parties.
Sanctions make it nearly impossible for Pyongyang to acquire controlled, technically advanced equipment that requires installation and maintenance by foreign technicians; North Korea and Myanmar may have therefore collaborated to purchase the equipment, install it in Myanmar, and use the machines to produce advanced missile or nuclear parts that could then be more easily routed via air cargo to North Korea (or elsewhere).

**Conclusion.** The possibility that Myanmar is pursuing a nuclear weapons program is just one of many potential explanations for its importation of technologically advanced dual-use items. The alarming prospect of a nuclear-armed Myanmar cannot be ignored, but neither should it prevent the assessment of other feasible scenarios. More research is needed to determine precisely why Myanmar received questionable dual-use items and to discover their final destination, if Myanmar is a transshipment point. Export control regimes should take note of the potential for diversion of dual-use items through Myanmar, and to protect regional stability, governments in Asia should reexamine their trade policies toward the Southeast Asian country.


4 Myanmar and North Korea re-established diplomatic relations in 2007, although there are indications that earlier military trade between the two countries took place in 2006. See Bertil Linter, “Clouded Alliance: North Korean and Myanmar’s Covert Ties,” Jane’s Intelligence Review, September 17, 2009.

5 This could be especially true if the missiles were fitted with the chemical weapons that Myanmar has been accused of producing. See “Production Capability (Myanmar), Chemical,” Jane’s CBRN Assessments, March 18, 2010.


8 Bertil Linter, “Clouded Alliance: North Korean and Myanmar’s Covert Ties,” Jane’s Intelligence Review, September 17, 2009

Is Burma's Junta Trying to Join the Nuclear Club?

By Christopher Shay

Friday, Jul. 09, 2010

Updated on July 10, 2010.

It may seem counterintuitive, but Burma has a lot going for it. Blessed with abundant natural resources, the nation is home to the last of the world's ancient teak forests; it produces tens of thousands of tons of jade every year; it's at the center of the global ruby trade; and most important, it has natural gas. Lots of it. Burmese gas already powers half of Bangkok, and it will soon start flowing to China, making billions of dollars of profit. For many though, it's how the money is being spent that's worrying.

Up until a few years ago, Burma's military government, cut off from trade with the West, led a "hand-to-mouth existence," says Sean Turnell, an economics professor at Macquarie University in Australia. Now, thanks in no small part to its resource-hungry neighbors, the pariah state has $6 billion in cash reserves, according to Turnell. As cash is flowing in, the military junta that has run the country since 1962 is spending lavishly. With about a third of the country in poverty, the junta could invest in health, education or job creation, but instead, new evidence suggests Burma is spending billions on outlandish military projects, including, perhaps, a secretive nuclear weapons program. Turnell says the junta is "absolutely paranoid about international interference in the country."

A documentary released last month by the Norway-based NGO Democratic Voice of Burma (DVB) purports to detail the beginnings of a Burmese nuclear program. Though much of the documentary's evidence comes from a single defector living in hiding, the NGO contends that hundreds of color photographs lend support to the rumors swirling for the past few years that Burma has been pursuing the bomb. The Burmese Ministry of Foreign Affairs calls DVB's accusations "baseless," but Robert Kelley, a former director of the International Atomic Energy Agency and weapons scientist at Los Alamos National Lab, concluded from the DVB evidence that the technology in the photos "is only for nuclear weapons and not civilian use or nuclear power."

The documentary's primary source, a former Burmese army major named Sai Thein Win, is a Russian-trained missile expert — not a nuclear engineer — who says he was second in command at a top-secret military factory that made parts for Burma's nuclear weapons program. The photographs that Sai Thein Win supplied to DVB dovetail with other evidence that suggests Burma is undertaking a massive nuclear project. Dictator Watch, a U.S.-based opposition watchdog group, provided TIME with a list of some 660 Burmese students studying engineering and military-related fields in Russia, more than 65 of whom are studying nuclear-related subjects. According to Roland Watson of Dictator Watch, the list is just a batch from 2009; he claims he has heard from multiple independent sources that there are more than 3,000 Burmese military researchers who have studied in Russia over the past decade. In the film, Sai Thein Win estimates that the number could be as high as 10,000. In fact, Sai Thein Win says he was in the first group of Burmese students sent to Russia, in 2001, where he studied missile technology at the Moscow Engineering Physics Institute, once the primary training ground for Soviet nuclear weapons experts.

Even if DVB is right about Burma's nuclear ambitions, the country is likely years away from any kind of bomb. Kelley told TIME that Burma's apparent attempt to enrich uranium using laser isotope separation — a complex and expensive method that has stumped many richer nations — was "kind of dumb." That may be news to the junta leader Than Shwe, according to the Irrawaddy, a Burmese newsmagazine in exile based in Thailand, which reported that Than Shwe was furious at his officials after learning that Kelley's report for the DVB said a nuclear weapon "may be beyond Burma's reach" at this time.
Meanwhile, the people in Burma continue to suffer. In a 2000 World Health Organization ranking, Burma had the second worst health system in the world, sandwiched between the Central African Republic and Sierra Leone. This shouldn't be a surprise, given that only 1.8% of Burma's total public expenditure is on health, also the second lowest in the world, according to the United Nations Development Program. "This is not a modern, developmentally focused government like China or Vietnam," Turnell says, adding that the country's irrational military spending "is the great scandal. Its poor have so many needs." (See TIME's special on the battle for global health.)

If this sounds similar to another Asian pariah state, it should; Burma is trying to follow the North Korean model, according to Khin Maung Win. Than Shwe reportedly admires Kim Jong Il for standing up to the international community, and ever since the countries formalized relations in 2007, the two states have deepened their military connections, say DVB sources. Relations between the two countries, however, have not always been so amicable. In 1983, North Korean operatives attempted to assassinate the South Korean President in a Rangoon bomb attack that killed 21, and Burma severed official diplomatic relations for more than two decades. Recently, though, the countries seem to have bonded as joint pariah states, with the junta's No. 3 general, Shwe Mann, visiting North Korea in 2008. Nowadays, Khin Maung Win says there are North Korean military experts who sneak into Burma through China and act as advisers to key parts of Burma's defense industry.

There is no evidence that the North Koreans are directly helping with Burma's alleged nuclear weapons program, but analysts worry this might not always be the case. Burma has cash, and North Korea needs it — desperately. Defectors say Burma wants a bomb; U.S. intelligence says North Korea already tried helping build a nuclear reactor for Syria before Israel bombed it. "A couple years ago, I would've pooh-poohed the whole thing," says Turnell of Burma's nuclear weapons program. But now, he says, "The whole story is a perfect fit."
Burma’s Nuclear Ambitions Could Divert International Focus
By MARK FARMANER
Thursday, July 8, 2010

Rumors about a secret nuclear program in Burma have been circulating for years. They were so persistent it seemed likely there was something behind them, but there was no evidence to back the claims. Some individuals published exaggerated and unsubstantiated claims, which had the opposite effect they had intended, making observers more sceptical, believing the claims were politically motivated.

However, in recent months there have been a series of reports from defectors claiming Burma does have nuclear ambitions. The latest, in a documentary made by the Democratic Voice of Burma (DVB), and broadcast on Al Jazeera, have gained international attention. The reports even led American Senator Jim Webb to cancel a visit which he had planned to use as a launchpad for persuading the US to adopt a policy of appeasement towards the war criminals ruling Burma.

The documentary has detailed photographic evidence which has been verified by experts. Burma’s generals may still be a long way from developing weapons, but it appears that at the very least, the intention is there.

Burmese exiles and others around the world who support Burma’s democracy movement have jumped on this news, hoping that this is what it will finally take to get the international community to take action. Here is yet more evidence, they say, that the dictatorship is a threat to international peace and security, and of how they misuse the country’s resources while the population slips deeper into poverty. Surely now the international community will finally wake up and pay attention? Can they really allow these people to remain in power?

But rather than persuade the international community to finally take action against Burma’s generals, the opposite could happen. If allegations of Burma’s nuclear program are comprehensively proved, then the focus of the international community is likely to move away from human rights and democratization, and onto an agenda of nuclear disarmament that could include economic and political ‘carrots’ that will entrench the dictatorship.

One example of how international focus can be diverted by a dictator's nuclear ambitions is Iran. Human Rights Watch has described the country as a ‘human rights disaster.’ Many of the human rights abuses committed by the government will be familiar to people from Burma, even if they are not on the same scale: the detention and torture of political activists; the suppression of free speech including jailing of journalists; the use of sexual violence; and the repression of ethnic minorities. But how much attention is paid to these human rights abuses in Iran by the UN Security Council and international community?

There is also evidence that Iran funds and arms groups in neighboring countries, which means the Security Council could intervene. There have been six Security Council resolutions and one Presidential Statement on Iran. None are on human rights.

"While the international community has focused on Iran's nuclear ambitions, Tehran has been methodically crushing all forms of dissent inside the country," said Joe Stork, the deputy Middle East director at Human Rights Watch. "Journalists, lawyers and civil society activists who used to speak to foreign media and human rights groups are increasingly reluctant, fearing phone and internet surveillance."

The international community’s approach to Iran fails to give much hope for those wanting action on Burma. The approach to North Korea leaves even less hope.
North Korea’s record on human rights is even worse than Burma’s. There are more than 200,000 political prisoners, and in the 1990s the dictatorship allowed around 1 million people to die from famine. Like Burma, North Korea qualifies for UN Security Council attention as a non-traditional threat to the peace.

There have been four UN Security Council resolutions on North Korea. None are on its human rights record. The entire focus has been on persuading North Korea to drop its weapons program. The USA and international community were even prepared to fund and build ‘proliferation proof’ nuclear reactors for North Korea, providing the dictatorship with tens of millions of dollars for this purpose.

In 2007, as part of another deal to try to persuade North Korea to abandon its nuclear program, the US released $20 million in frozen banks accounts of North Korea’s corrupt and brutal rulers. Human rights just were not a factor.

The lesson from Iran and North Korea is that human rights takes second place to stopping nuclear proliferation. Another lesson is that even when a nuclear program is involved, China and Russia are still likely to block effective economic sanctions.

Doubtless, Burma’s dictators would be delighted if international attention moved away from their human rights record.
Burma-North Korea Ties: Escalating Over Two Decades
By WAI MOE
Wednesday, July 7, 2010

A recent New York Times op-ed article by Aung Lynn Htut, formerly a high-ranking Burmese military intelligence officer who defected in 2005 while he served as an attaché at the Burmese embassy in Washington, shed new light on the history of the still murky relationship between Burma and North Korea, two of the world’s most isolated, secretive and oppressive regimes.

Burma broke diplomatic relations with North Korea in 1983, when North Korean agents attempted to assassinate the South Korean president on Burmese soil. But according to Aung Lynn Htut, shortly after current junta-chief Snr-Gen Than Shwe assumed power in 1992, he surreptitiously moved to renew ties with Pyongyang.

Gen Shwe Mann (left) and Gen Kim Gyok-sik exchange copies of a memorandum of understanding at the Defense Ministry on November, 2008.

“Than Shwe secretly made contact with Pyongyang. Posing as South Korean businessmen, North Korean weapon experts began arriving in Burma. I remember these visitors. They were given special treatment at the Rangoon airport,” Aung Lynn Htut said in his June 18 article.

The junta kept its renewed ties with North Korea secret for more than a decade because it was working to establish relationships with Japanese and South Korean businesses, Aung Lynn Htut said. By 2006, however, “the junta’s generals felt either desperate or confident enough to publicly resume diplomatic relations with North Korea.”

In November 2008, the junta’s No 3, Gen Shwe Mann, visited North Korea and signed a memorandum of understanding, officially formalizing military cooperation between Burma and North Korea. Photographs showed him touring secret tunnel complexes built into the sides of mountains thought to store and protect jet aircraft, missiles, tanks and nuclear and chemical weapons.

According to Aung Lynn Htut, Lt-Gen Tin Aye, the No.5 in the Burma armed forces and the chief of Military Ordnance, is now the main liaison in the relationship with Pyongyang. Tin Aye has often traveled to North Korea as well as attended ceremonies at the North Korean embassy in Rangoon.

In September 2009, The New Light of Myanmar reported that Tin Aye went to the anniversary celebration of the Democratic People’s Republic of Korea (DPRK), held in a hotel in Rangoon. In February, Tin Aye, along with other senior officials, attended the birthday event of the Dear Leader of North Korea at the embassy.

Flights and ships from North Korea to Burma have been carrying more than just Burmese generals. Analysts, including Burma military expert Andrew Selth, say that for years Burma and North Korea have used a barter system whereby Burma exchanges primary products for North Korean military technologies.

In June 2009, a North Korean ship, the Kang Nam I, was diverted from going to Burma after being trailed by the US navy. Then in April, another North Korean ship, the Chong Gen, docked in Burma carrying suspicious cargo, allegedly in violation of the UN Security Council Resolution 1874, which restricts North Korea from arms deals and from trading in technology that could be used for nuclear weapons.

In May, the seven-member UN panel monitoring the implementation of sanctions against North Korea said in a report that Pyongyang is involved in banned nuclear and ballistic activities in Iran, Syria and Burma with the aid of front companies around the world.
According to the UN report, a North Korean company, Namchongang Trading, which is known to be associated with illicit procurement for Burma's nuclear and military program and is on the US sanctions list, was involved in suspicious activities in Burma.

The report also noted three individuals were arrested in Japan in 2009 for attempting to illegally export a magnetometer—a dual-use instrument that can be employed in making missile control system magnets and gas centrifuge magnets—to Burma via Malaysia allegedly under the direction of another company known to be associated with illicit procurement for North Korea's nuclear and military programs.

The UN experts also said that the Korea Kwangson Banking Corporation has handled several transactions involving millions of dollars directly related to deals between Burma and the Korea Mining Development Trading Corporation.

With this string of events and the suspicions surrounding them as a dramatic lead in, on June 4, Al Jazeera aired a news documentary prepared by the Democratic Voice of Burma (DVB) which was written by Robert Kelley, a nuclear scientist and former director of the International Atomic Energy Agency (IAEA). The DVB report claimed that the ruling military junta in Burma is "mining uranium, converting it to uranium compounds for reactors and bombs, and is trying to build a reactor and/or an enrichment plant that could only be useful for a bomb."

The IAEA wrote to Burma’s agency representative, Tin Win, on June 14 and asked whether the information provided in the DVB report was true. Burma, which is a member of the IAEA, a party to the Nuclear Non-Proliferation Treaty and a signatory to the Southeast Asia Nuclear-Weapon-Free Zone Treaty, responded with a letter stating that the DVB report allegations are “groundless and unfounded.”

"No activity related to uranium conversion, enrichment, reactor construction or operation has been carried out in the past, is ongoing or is planned for the future in Myanmar [Burma],” the letter said.

The letter also noted that Burma is a signatory of the Nuclear Non-Proliferation Treaty and the agency's so-called safeguards agreement. "As stated in the safeguards agreement, Myanmar will notify the agency if it plans to carry out any nuclear activities,” the letter said.

The regime, however, has not signed the IAEA's Additional Protocol, meaning that the agency has no power to set up an inspection of Burma's nuclear facilities under the existing mechanism known as the Small Quantities Protocol.

Previously, on June 11, Burma’s state radio and television news had reported the Foreign Ministry's denial of the allegations in the DVB report. The denial claimed that anti-government groups in collusion with the media had launched the allegations with the goal of "hindering Burma’s democratic process and to tarnish the political image of the government."

The Foreign Ministry denial also addressed Nyapyidaw’s relationship with Pyongyang. “Following the re-establishment of diplomatic relations, Myanmar [Burma] and the DPRK, as independent sovereign states, have been engaging in promoting trade and cooperation between the two countries in the same way Myanmar is dealing with others,” the ministry said in its statement.

The regime did acknowledge that the Chong Gen docked at Thilawa Port near Rangoon in April. But the statement said the North Korean vessel was involved in importing cement from North Korea and exporting rice from Burma.

But in an article for Asia Times online, Burma analyst Bertil Linter noted that, “if carrying only innocuous
civilian goods, as the statement maintains, there would seemingly have been no reason for authorities to cut
electricity around the area when the Chong Gen, a North Korean ship flying the Mongolian flag of convenience,
docked on the outskirts of Yangon.”

“According to intelligence sources, security was tight as military personnel offloaded heavy material, including
Korean-made air defense radars. The ship left the port with a return cargo of rice and sugar, which could mean
that it was, at least in part, a barter deal. On January 31 this year, another North Korean ship, the Yang M V Han
A, reportedly delivered missile components also at Yangon's Thilawa port,” Linter said.

Strategypage.com, a military affairs website covering armed forces worldwide, said, “Indications are that the
North Korean ship that delivered a mysterious cargo four months ago, was carrying air defense radars (which are
now being placed on hills up north) and ballistic missile manufacturing equipment. Dozens of North Korean
technicians have entered the country in the last few months, and have been seen working at a military facility
outside Mandalay. It's unclear what this is for. Burma has no external enemies, and ballistic missiles are of no
use against internal opposition.”

In his Asia Times online story, Lintner noted that on June 24, the DVB reported that a new radar and missile base
had been completed near Mohnyin in Myanmar's northern Kachin State, and he reported that work on similar
radar and missile bases has been reported from Kengtung in eastern Shan State, 160 kilometers north of the Thai
border town of Mae Sai.

“Since Myanmar is not known to have imported radars and missile components from any country other than
North Korea, the installations would appear to be one of the first visible outcomes of a decade of military
cooperation,” Linter said.

Lintner also reported that Western intelligence sources know that 30 to 40 North Korean missile technicians are
currently working at a facility near Minhla on the Irrawaddy River in Magwe Division, and that some of the
technicians may have arrived overland by bus from China to give the appearance of being Chinese tourists.

North Korea has also issued adamant denials with respect to allegations regarding its relationship with Burma.

According to the Korean Central News Agency (KCNA), on June 21 Pyongyang said, “The US is now making
much fuss, floating the sheer fiction that the DPRK is helping Myanmar [Burma] in its nuclear development.”

The KCNA often highlights the close relationship between North Korea and Burma.

On June 20, the Pyongyang news agency reported that ex-Col Than Tun, deputy chairman of the Union of
Myanmar Economic Holding Ltd., sent a statement cheering Kim Jong Il’s 46th anniversary at the Central
Committee of the ruling Workers' Party of Korea.

On April 18, Korean state-run media reported that Than Tun also issued a statement cheering the 17th

“Kim Jong Il’s field inspection of KPA [Korean People’s Army] units served as a main source that helped bolster
[North Korea's] self-reliant defense capability in every way,” the statement noted.

Military sources said the Union of Myanmar Economic Holding Ltd, managed by the junta, is responsible for
purchasing imported weapons for Burma's armed forces, including transferring money to overseas banks such as
Korea Kwangson Banking Corporation.

Meanwhile, in addition to its escalating relationship with North Korea, the Burmese military regime has recently
boosted ties with Iran, which according to the UN report is also allegedly receiving nuclear and missile
technologies from North Korea.

In recent years, Burmese and Iranian officials visited their counterparts homeland for the purported purpose of improving economic ties. Observers, however, said Than Shwe has made a tactical decision to develop relationships with other “pariah states,” particularly enemies of the US, to relieve Western pressure on his regime.

Iranian Deputy Foreign Minister Mohammad Ali Fathollahi met Burmese Foreign Minister Nyan Win and Minister of Energy Lun Thi during his trip to Burma on June 15-17.

“The two sides reiterated their desire to further expand the ties of friendship and economic cooperation and to increase cooperation in the regional international forums such as [the] United Nations and Non-Aligned Movement,” The New Light of Myanmar reported on June 18.

Fathollahi’s visit came three months after Maung Myint’s visit to Iran on March 8-11, when he met Iranian Foreign Minister Manochehr Mottaki and Deputy Minister of Petroleum H. Noghrehkar Shirazi.
Evidence continues to surface suggesting Myanmar’s possible interest in launching a covert nuclear power program with potential North Korean assistance, Frank O’Donnell and Graham Ong-Webb comment for ISN Security Watch.

By Frank O'Donnell and Graham Ong-Webb

As part of the continuing saga of North Korea’s deviant machinations, new information has surfaced on Pyongyang’s suspected assistance to Myanmar (Burma) to develop what may be a nuclear weapons program.

To be sure, Pyongyang’s suspected complicity with Burma’s possible nuclear ambitions is not entirely new. A strategic dossier published by a high-profile think tank in late 2009 sought to determine if the country’s aspirations of having a civilian nuclear reactor had any military applications.

The dossier’s main finding was that the 10MWt light-water reactor Myanmar has been seeking to build with Russian assistance since 2002 would not produce enough weapons-usable plutonium to build a basic nuclear weapon. However, it could not rule out the reasons as to why Myanmar’s insecure military junta would want to become a nuclear-armed state.

Although it did not receive international approval, Russia’s offer of assistance to Myanmar, which was driven solely by commercial interests, seems relatively benign. Moreover, a deal with the Russians may not likely close: Myanmar has trouble paying Moscow in hard currency and the Russians refuse the junta’s bartering currency of teak, rice and rubber.

This is perhaps where the North Koreans come in. There are three reasons why Pyongyang would want to help Myanmar. Firstly, North Korea has developed its nuclear arsenal and ballistic missile capabilities into a revenue source for the regime. Secondly, starved of basic resources, it is open to bartering. Thirdly, Pyongyang could do with an additional strategic ally.

Pyongyang’s participation in the AQ Khan proliferation network allowed it to quietly transmit nuclear and missile knowledge to international contacts in return for profit. An example is the Pakistani 1,500km-range Ghauri missile, developed in coordination with North Korea, and which bears significant design resemblance to the North Korean Nodong model.

The AQ Khan network was exposed in 2003, and several states discontinued their participation in its activities. It is unclear whether the remnants of the AQ Khan network presently operate as independent cells, or with an overall manager.

What is clear, however, is that Pyongyang has notably been active in attempting to salvage those elements of the proliferation ring most valuable to it. It has set up a coordinating agency,’Office 99’, to manage its missile technology commerce with Iran. North Korea closely assisted Syria in building the al-Kibar covert nuclear reactor destroyed by Israel in 2007. These developments may point to Pyongyang as becoming an organizing hub of a reconstituted AQ Khan proliferation ring.

The key danger is that North Korea may be willing to provide Myanmar what the Russians would not: The technology, resources and expertise that will allow the junta to build a larger reactor similar to the one at Yongbyon, which had a 25MWt output. That reactor is the mainstay of North Korea's nuclear weapon's program.
The assumed link between North Korea and Myanmar should be taken seriously, and vigilance is needed by intelligence agencies and interdiction instruments to close any illicit proliferation links.

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The views and opinions expressed herein are those of the author only, not the International Relations and Security Network (ISN).
Allegations of Burma’s nuclear ambitions hit the newswires on June 3rd with a report by a former U.N. nuclear expert claiming the military regime is seeking to develop an atomic bomb.

Commissioned by the Democratic Voice of Burma (DVB), the report clearly raised the stakes about this newest threat to international security and peace, which previously had been recognized only within intelligence circles and Burma’s pro-democracy movement. In response, US Senator Jim Webb even cancelled his planned trip to the Burmese capital where he was due to meet the generals in charge. Thus it’s clear the nuclear allegations are serious and yet there has long been a deafening silence about Burma’s nuclear ambitions.

In 2008 an Act of Congress was promulgated in the United States requiring the US State Department to disclose findings on Burma’s nuclear capabilities. The initial date for this mandatory annual disclosure was January 2009, and at this stage there should have been two such reports. To date, though, the Administration has been silent. The law in question is the Tom Lantos Block Burmese JADE (Junta’s Anti-Democratic Efforts) Act of 2008. Its intent is to promote human rights, and it includes sanctions and embargoes on such things as halting gemstone profits to Burma’s repressive dictatorship. The law also includes measures supporting democratic reforms and humanitarian needs for the people of Burma.

More specifically, however, in Section 10 of the Act there is a requirement that the State Department publicly report to Congress about Burma’s military programs and suppliers, including their “weapons of mass destruction and related materials, capabilities, and technology, including nuclear, chemical, or dual use capabilities.” This requirement extends to the ominous task of listing the countries that provide such aid to Burma and that such be reported by none other than the US Secretary of State.

Yet it’s as if the JADE Act never existed. All is silent from Secretary Clinton, President Obama, the State Department, Congress and most everyone else in Washington. Those concerned with US law and nuclear proliferation have seemingly gone into hibernation.

Well, not all however, there are some pro-democracy groups - “Dictator Watch” for one, that has been publishing evidence of Burma’s nuclear ambitions for years. Their latest move was in April 2010, months before the DVB report was released, when they filed a freedom of information act application (FOIA) to the US State Department. The application specifically demanded why Section 10 of the JADE Act is being ignored.

I spoke to Roland Watson, the director of Dictator Watch, about this action and he provided a chilling description of Burma’s nuclear ambition. He also congratulated the Democratic Voice of Burma for getting their report in the public eye, for he believes Burma’s nuclear proliferation has been ignored far too long. He believes international action is needed to curtail Burma’s plans as it poses a multiple threat to international security. The regime is not only trying to acquire nuclear weapons; there is good evidence that it is selling refined uranium (yellow cake) to North Korea and perhaps even Iran. Watson’s organisation has conducted extensive research on the Burma nuclear issue, and has accumulated intelligence from ten different sources. These include Burmese military defectors who were trained in Russia on nuclear and related military technologies. The key to unlock the mysterious silence on the JADE Act is intricately linked to Burma’s dealings with North Korea, Russia, China and Iran.

Watson states that the Burmese military rulers first expressed an interest in becoming a nuclear power in the 1960s but that things escalated in 2001 when the regime, then under the dubious name SLORC, “struck a deal with Russia to buy a reactor.” The Burmese regime, now called the State Peace and Development Council (SPDC), was due in 2010 to have already completed this reactor. Hard evidence of this is lacking, though, but the deal with Moscow has long been public and ever since the SPDC has been sending military officers to Russia for training. The SPDC refers to this
training as their State Scholar Program and Watson reports they have “sent anywhere from 3000 to 5000 officers to
Russia, where they’ve been studying sciences related to tunnelling, aviation, ships, missiles, and all sorts of military
related technologies.” These studies include nuclear sciences.

Dictator Watch has had access to information from two defectors of the SPDC’s State Scholar Program who had
exposure to the nuclear program. These defectors reported that the SPDC is pursuing uranium enrichment, and also
that it has acquired equipment for “plutonium activation,” from North Korea. The two sources of fissible material
for an atomic weapon are highly enriched uranium, and plutonium that is produced as a reactor by-product. It appears
that Burma is following both tracks towards developing a bomb.

Watson provided a summary of Burma’s nuclear evidence. “First, Burma has uranium deposits and they have long
admitted it themselves.” The SPDC in fact published such on their own Ministry of Energy website, identifying
numerous sites. He reiterated that not only have commercially viable uranium deposits been found and are being
mined, but that they are “being milled into yellow cake and offered for sale on the black market to anybody willing to
pay the price.” Indeed, Watson said “Dictator Watch has information about such sale attempts.”

The international customers for Burma’s yellow cake include North Korea and some intelligence sources suggest
Iran as well. It is believed that the large quantity of yellow cake that Iran purchased from South Africa in the
1970s has run out. Iran’s enrichment program is substantial, and growing, and Tehran clearly needs to secure
new uranium supplies.

Burma’s links to Iran and North Korea are extremely troubling, and it was in 2009 that a publicized incident
occurred between the US Navy and a North Korean vessel - a known weapons carrier called the Kang Nam I.
This North Korean ship was reportedly carrying advanced weaponry (possibly nuclear technology) destined for
Burma and a US Destroyer was dispatched to interdict it. The Kang Nam I eventually turned back to North
Korea with cargo intact. Watson reports, however, that the ship had already gone to Burma at least once, possibly
two times previously and unloaded its cargo at Rangoon - at night. On one of those occasions the Kang Nam I
continued on to Iran. In 2008 the United States through diplomatic requests to India also blocked a cargo flight
from North Korea from flying to Iran after it stopped in Burma.

It is further believed that the interdicted Kang Nam I shipment from 2009 was successfully delivered to Rangoon
port in April 2010.

Dictator Watch has evidence that North Korea has long been selling Burma an array of weaponry, including
missiles and nuclear technology. The weapons include Scud missiles (short range ballistic missiles), and the
SPDC is reportedly pointing them towards military bases in Thailand.

With all this nuclear and weapons skulduggery going on it’s a wonder why Burma hasn’t been brought before the
United Nations Security Council. For Watson the threat is clear, “If you have uranium mining, milling and then
bartering of yellow cake to North Korea and Iran you have a significant threat to international security and
peace, including divergent rogue trafficking of yellow cake to terrorists.” However, China and Russia are
permanent members of the Security Council and have historically protected the SPDC from international
repercussions. On Beijing’s role Watson laments, “The Chinese are the godfathers of Kim Jong Ill and Than
Shwe and on an issue as big as this they couldn’t work together if China didn’t say ok.”

One thing seems clear, the world does not need another rogue nuclear state, especially one with a human rights record
as brutal as Burma’s. As for the long silence on Burma’s nuclear mystery, the DVB report and Senator Webb’s
cancelled visit suggest it may be unravelling. The JADE Act has been ignored however, and thus only time will tell if
Dictator Watch’s FOIA filing too will be brushed aside.
BANGKOK - Myanmar's military government issued pro-forma denials after al-Jazeera aired an investigative report by the Oslo-based Democratic Voice of Burma (DVB) alleging that Myanmar is attempting to develop nuclear weapons and ballistic missiles. But as the international community weighs the evidence, the regime could soon face United Nations-imposed sanctions for its military dealings with North Korea.

On June 11, a week after the television network showed the program, Myanmar's Foreign Ministry issued a statement claiming that "anti-government groups" in collusion with the international media had made the allegation with the goal of "hindering Myanmar's democratic process and tarnishing the political image of the government". Myanmar "is a developing nation" which "lacks adequate infrastructure, technology and finance to develop nuclear weapons", the statement continued.

The North Koreans issued a similar denial, blaming the United States for the report. Ten days after the Myanmar denial, the official Korean Central News Agency reported: "The United States is now making much fuss, floating the sheer fiction that the Democratic People's Republic of Korea [North Korea] is helping Myanmar in its 'nuclear development', not content with labeling the DPRK 'provocative' and 'belligerent'."

In its next sentence, the report denounced US State Department spokesman Philip J Crowley for what Pyongyang seemed to consider an equally serious crime. Crowley, the KCNA stated, had been "making false reports that the DPRK conducted unlicensed TV relay broadcasts about the World Cup matches".

While the North Korean statement could be dismissed as comical, the Myanmar Foreign Ministry's denial is more revealing. It did not mention Myanmar's program to develop ballistic missiles or the extensive network of bunkers, culverts and underground storage facilities for the military that has been constructed near the new capital Naypyidaw and elsewhere where the North Koreans have reportedly been active.

More intriguingly, the Foreign Ministry found it necessary to deny reports that a North Korean ship that docked in Myanmar on April 12 this year was carrying military-related material. The ship, the ministry said, "was on a routine trip to unload cement and to take on 10,000 tons of Myanmar rice".

However, if carrying only innocuous civilian goods, as the statement maintains, there would seemingly have been no reason for authorities to cut electricity around the area when the Chong Gen, a North Korean ship flying the Mongolian flag of convenience, docked on the outskirts of Yangon.

According to intelligence sources, security was tight as military personnel offloaded heavy material, including Korean-made air defense radars. The ship left the port with a return cargo of rice and sugar, which could mean that it was, at least in part, a barter deal. On January 31 this year, another North Korean ship, the Yang M V Han A, reportedly delivered missile components also at Yangon's Thilawa port.

Rogue ties

In November 2008, General Shwe Mann, the third-highest ranking member of the ruling junta, the State Peace and Development Council, paid a visit to North Korea. It was supposed to be a secret trip, but the visit was leaked to Myanmar exiles and reports of his rounds appeared on several Internet news sites. During the visit, Shwe Mann was taken to a missile factory and an air defense radar facility and a memorandum of understanding was signed to outline the nature of cooperation between the two countries, which only recently reestablished diplomatic relations.
However, the full extent of the North Korean presence in Myanmar is still a matter of conjecture. The first report of a delegation from Myanmar making a secret visit to Pyongyang dates to November 2000, where the two sides held talks with high-ranking officials of North Korea's Ministry of the People's Armed Forces. In June 2001, a high-level North Korean delegation led by Vice Foreign Minister Park Kil-yon paid a return visit to Yangon, where it met Myanmar's Deputy Defense Minister Khin Maung Win and reportedly discussed defense-industry cooperation.

In 2003, the first group of North Korean technicians were spotted at naval facilities near the then-capital Yangon. North Korean planes were also seen landing at military airfields in central Myanmar. Three years later, North Korean tunneling experts arrived at Naypyidaw, and Myanmar military sources began to leak photographs of the North Koreans as well as the underground installations they were involved in digging under and near the new capital.

On June 24, the DVB reported that a new radar and missile base had been completed near Mohnyin in Myanmar's northern Kachin State. It is not clear in which direction the installations are pointed, as Mohnyin is located on the railway line that cuts through Kachin State and is approximately equidistant between the Indian and Chinese borders.

Work on similar radar and missile bases has been reported from Kengtung in eastern Shan State, 160 kilometers north of the Thai border town of Mae Sai. Since Myanmar is not known to have imported radars and missile components from any country other than North Korea, the installations would appear to be one of the first visible outcomes of a decade of military cooperation.

Until recently reports of such cooperation were met with skepticism among analysts because Myanmar had severed diplomatic relations with North Korea in 1983 after three secret agents planted a bomb at Yangon's Martyrs' Mausoleum and killed 18 visiting South Korean officials, including then-deputy prime minister So Suk-chun and three other government ministers. But the two pariah states seem to have built a bond around their common antagonism with the United States.

**Expert confirmation**

The DVB investigative report shed new light on the nature of this secretive cooperation and of Myanmar's nuclear ambitions. Photographs and documents smuggled out of the country by a defector from the Myanmar army, Major Sai Thein Win, were scrutinized by international arms experts and found to be credible. Among the experts was Robert Kelley, a former Los Alamos weapons scientist who was a director with the International Atomic Energy Agency (IAEA) from 1992 to 1993 and again from 2001 to 2005. Now based in Vienna, he conducted weapons inspections in Libya, Iraq, and South Africa, as well as compliance inspections in Egypt, Turkey, South Korea, Taiwan, Syria, Tanzania, Pakistan, India, and Congo, among others.

Kelley concluded after a careful study of material produced by Sai Thein Win and other Myanmar military defectors: "Our assessment of multiple sources is that Burma [Myanmar] is really developing nuclear technology, that it has built specialized equipment and facilities, and it has issued orders to cadre to build a program."

It remains to be proven that the North Koreans are involved in Myanmar's fledgling nuclear program. Even if they are, it is not clear how advanced Myanmar's program may be. Many skeptics assume the project is an illusion of grandeur bordering on megalomania among Myanmar's ruling generals.

North Korean involvement in Myanmar's missile program is more certain, but even so it is unclear that the country's largely unskilled technicians would be able to produce a missile that works. One intelligence source described it as more of a "phallic fantasy", a large projectile that Myanmar's generals would like to show off at
the annual March 27 Armed Forces Day parade. "Just imagine how proud they would be to see a truck towing a big and impressive missile past the grandstand," the source said.

Western intelligence sources are aware of the current presence of 30 to 40 North Korean missile technicians at a facility near Minhla on the Irrawaddy River in Magwe Division. At least some of the technicians reportedly arrived overland by bus from China, to make it appear as if they were Chinese tourists.

According to a Myanmar source with knowledge of the area: "There are several defense industries, DI, around Minhla. More importantly, these are not very far from the Sidotara Dam and suspected DI-20, Pwintbyu and Myaing. In other words, there are many military activities in that area."

In power-starved Myanmar, it is logical that defense production facilities have been situated near a power-generating dam. Myaing is where Sai Thein Win worked as deputy commander of a top-secret military factory before he defected earlier this year. While Myanmar authorities have denied his testimonies publicly, intelligence agents swooped on his home town of Kyaukme in Shan State soon after the DVB report was aired internationally. His family has been interrogated, but so far no one has been arrested.

On the contrary, the Shan Herald Agency for News, an exile-run news group in Chiang Mai in northern Thailand, reports that Sai Thein Win has become somewhat of a local hero since he went public with his revelations. "Among the security officials who visited Kyaukme, one was also reported to have said that he admired Sai's courage and his 'well done expose'," the news group reported.

If accurately reported, that sentiment would reflect one reason why Sai Thein Win decided to defect: Myanmar's experiments with nuclear technology and missiles amount to little more than a waste of money in a country that desperately needs more funds dedicated to public health and education.

Meanwhile, the regime's budding cooperation with North Korea threatens to cost the country more internationally. US Senator Jim Webb, a staunch advocate of engagement with Myanmar's ruling generals, was forced to cancel his scheduled visit to the country when he learned al-Jazeera would air the DVB report while he was there.

As it becomes increasingly apparent that both countries have violated United Nations Security Council Resolution 1874, which bans North Korea from exporting all types of weapons, Myanmar could soon be penalized with more international sanctions. The prospect of that happening - and already deep dissatisfaction over the close relationship with a pariah regime like Pyongyang, which is even more isolated than the one in Naypyidaw - is reportedly stoking resentment among the Myanmar officer corps.

Other officers like Sai Thein Win may therefore be waiting in the wings for an opportunity to defect and shed more light on Myanmar's deep and dark nuclear secrets.

Bertil Lintner is a former correspondent with the Far Eastern Economic Review and the author of Great Leader, Dear Leader: Demystifying North Korea Under the Kim Clan. He is currently a writer with Asia Pacific Media Services.
Myanmar's nuclear ambition is apparently real and alarming
Robert Kelley, Jakarta
Fri, 06/25/2010 11:38 AM

Less than two months after the conclusion of President Obama's Nuclear Security Summit in Washington, DC, a recently-released documentary exposed the nuclear ambitions of Myanmar, a deeply troubled and highly repressive state in Southeast Asia.

The evidence presented in the Democratic Voice of Myanmar's documentary, "Myanmar's Nuclear Ambitions", is thorough, compelling, and alarming.

Although Myanmar's pursuit of nuclear weapons has long been rumored, the DVB's documentary contains new information from a recent defector who provided the DVB with hundreds of photographs, documents, and a view from inside the highly secretive military that should finally put to rest any doubt about Myanmar's nuclear ambition.

The evidence includes chemical processing equipment for converting uranium compounds into forms for enrichment, reactors and bombs. Taken altogether in Myanmar's covert program, they have but one use - nuclear weapons.

Prior to the airing of the documentary, the DVB, a Burmese-language shortwave radio and satellite TV news organization, invited a team of leading international experts, including individuals with experience in military tunneling, missiles, nuclear proliferation, and weapons inspections protocol to review its information and assess its conclusions.

The evidence was so consistent - from satellite images to blue prints to color photographic evidence to insider accounts to detailed budgets - and so copious that I agreed to appear in the documentary to offer my expert advice concerning Myanmar's nuclear ambitions.

As a former Los Alamos analyst and a director of the International Atomic Energy Agency (IAEA), I have spent the better part of 30 years investigating allegations of this nature. After a careful review of the information, I became convinced that Myanmar's pursuit of nuclear technology violates the limits imposed on it by its agreements with the IAEA.

I authored a report on the findings, "Nuclear Activities in Myanmar," which explains the evidence and concludes that Myanmar is probably in violation of several international agreements concerning nuclear proliferation.

However, the IAEA is limited in its leverage over Myanmar. Myanmar has failed to upgrade its two obsolete IAEA agreements and has failed to execute a new agreement with the IAEA called the "Additional Protocol", which would give the IAEA greater powers to question Myanmar's leaders and to demand inspections in the country. The Additional Protocol was a priority of former IAEA director general and Nobel Peace Prize winner Mohamed ElBaradei.

In May, Chad became the 100th country to have signed the Additional Protocol, while only a few remain outside its reach, including Iran and Syria.

Myanmar also shields itself from questions and inspections using another out-of-date agreement called a "Small Quantities Protocol". This protocol exempts states that only have small amounts of nuclear materials and no nuclear facilities from IAEA inspections and close oversight.
The new evidence presented in the DVB documentary makes a compelling case that Myanmar's pursuit of nuclear weapons now places it in the category of countries where the "Small Quantities Protocol" would no longer apply.

With out-dated protocols governing its participation with the IAEA, Myanmar may believe that it can resist IAEA demands. However, given the serious and troubling nature of the allegations of Myanmar's nuclear ambitions, the IAEA and the international community must vigorously pursue all of the tools at their disposal to compel the State Peace and Development Council's cooperation.

For starters, the IAEA can unilaterally cut off all aid to Myanmar in improving its nuclear infrastructure through expert visits, grants and equipment purchases, and to any other state that has not signed the Non-Proliferation Treaty or agreed to the Additional Protocol.

While these new agreements are voluntary, the provision of so-called technical cooperation funds is a voluntary act on the part of the IAEA as well. It would send a clear message to Myanmar that the IAEA and the international community takes this issue seriously and that it will no longer tolerate anything less than Myanmar's full cooperation with the international community on the monitoring of Myanmar's nascent nuclear program.

Although some of the aid (US$1.3 million in 2008-2009) goes for medical and humanitarian assistance, other programs support training nuclear experts and professionals in Myanmar, which is clearly inconsistent with the IAEA's interest in trying to nip a covert nuclear program in the bud.

The new information on Myanmar's nuclear ambitions is now available to experts and governments around the world. Yet, even before the IAEA has even officially enquired about it, the Burmese government has denied it. Given Myanmar's track record in working with the international community on issues much less threatening than proliferation, there is little doubt what Myanmar's answer will be when they are formally asked.

DVB's reportage brought to light Myanmar's nuclear ambition; it is also a call to anyone in Myanmar who knows more about covert programs in nuclear, missile technology, and other weapons of mass destruction to come forward. Other defectors, such as Major Sai Thein Win, are likely to come forward. Many people know the truth and it will take only a few more brave souls to expose the program for the world to see.

Too many states have proliferated while the world stood back and watched year after year. The A. Q. Khan network sold nuclear weapons technology from Pakistan and operated observed but untouched for possibly twenty years. The possibility that Myanmar is trying to build nuclear weapons has been a suspicion for the last decade but now the evidence is much clearer. The world needs to get serious about choking off Myanmar's covert program through export controls via the Nuclear Suppliers Group and strengthening the hand of the IAEA.

Myanmar is one of the world's most repressive and secretive regimes. Its ample natural wealth, including gas and oil reserves that will bring in billions of dollars annually in hard currency, make it a natural buyer for North Korea and other countries with nuclear know-how to sell.

Last month the UN Security Council received a 47-page report issued by a seven-member panel of experts on North Korea's exporting nuclear technology. The UN experts noted "suspicious activity in Myanmar".

Myanmar's pursuit of nuclear weapons requires immediate international attention. Allowing yet another dictatorship to acquire the world's most powerful weapons is not an option.

The writer is a former director of the IAEA.
WASHINGTON — This is a sensitive moment in relations between the United States and the world’s most corrupt regime: the military junta that has plundered Burma for decades as if it were a private fiefdom.

The Obama administration has attempted to apply a strategy dubbed “pragmatic engagement.” As it works to rethink its position amid the present cacophony of foreign and domestic crises, there is a danger that Washington might give Burma short shrift and unwittingly soften its stance toward the country’s military leaders. It should be careful not to do so. And it should take the junta’s nuclear-weapons ambitions seriously.

The regime in Burma has a history of deceiving American officials. I know; before defecting to the United States in 2005, I was a senior intelligence officer for the war office in Burma. I was also the deputy chief of mission at Burma’s embassy in Washington.

In the autumn of 2003, a senior staff member for a U.S. senator came twice to our embassy in Washington to call on Ambassador U Lin Myaing and me. At about the same time, officials from the U.S. State Department and the National Security Council also met in New York with U Tin Win, from the office of Burma’s prime minister, and Colonel Hla Min, the government’s spokesman.

The American officials were checking reports that Burma had secretly renewed ties with North Korea — one of the three pillars of George W. Bush’s “axis of evil.”

Burma had severed ties with North Korea in 1983, after North Korean operatives attempted to assassinate South Korea’s president, Chun Doo Hwan, during a state visit to Rangoon. Chun was unhurt, but 17 senior South Korean officials — including the deputy prime minister and the foreign and commerce ministers — were killed.

The head of Burma’s junta, Senior General Than Shwe, instructed us to lie to the Americans. We did. We blamed Burma’s political opposition for the “rumors” that Rangoon had renewed ties with Pyongyang. The Americans wanted proof. Than Shwe then ordered Foreign Minister U Win Aung to send a letter denying the reports to Secretary of State Colin Powell. The British government knew the truth. London’s ambassador to Rangoon rightfully called U Win Aung a liar.

Why did Burma renew ties with North Korea? Regime preservation.

In the aftermath of the 1988 nationwide uprising in Burma, many foreign joint ventures for the production of conventional weapons were cancelled. Than Shwe began the secret re-engagement with North Korea in 1992, soon after he took control of Burma’s ruling clique.

He argued that Burma faced potential attack from the United States and India, which at the time was a champion of Burma’s democracy movement. He wanted a bigger army. He wanted more modern weapons. He even wanted nuclear arms. He cared not at all for the poverty of Burma’s people.

Than Shwe secretly made contact with Pyongyang. Posing as South Korean businessmen, North Korean weapons experts began arriving in Burma. I remember these visitors. They were given special treatment at the
Rangoon airport. With a huge revenue bonanza from sales of natural gas to Thailand, Burma was soon able to pay the North Koreans cash for missile technology.

The generals thought that they could also obtain nuclear warheads and that, once these warheads were mounted on the missiles, the United States and other powerful countries would not dare to attack Burma and have much less leverage on the junta.

Than Shwe hid these links with North Korea as long as he could from Japan and South Korea, because he was working to lure Japanese and South Korean companies to invest more in efforts to plunder Burma’s natural resources. By 2006, the junta’s generals felt either desperate or confident enough to publicly resume diplomatic relations with North Korea.

Burma has worked for almost a decade to expand its production of missiles and chemical warheads. General Tin Aye — chairman of the Union of Myanmar Economic Holdings, the military’s business arm — is the top manager of ordinance production and main liaison with North Korea.

According to a secret report leaked last year, the regime’s No. 3 man, General Shwe Mann, also made a secret visit to Pyongyang in November 2008. He signed an agreement for military cooperation that would bring help from North Korea for constructing tunnels and caves for hiding missiles, aircraft, even ships.

That this information was leaked by Burmese military officials working on such sensitive activities shows both the degree of Than Shwe’s military megalomania and the existence of opposition within the regime itself.

The words “pragmatic engagement” should not become synonymous with any weakening of Washington’s firm opposition to Burma’s rulers.

The United States and other nations must continue to question the legitimacy of Than Shwe and the regime. They should not believe his promises to hold free and fair elections this year.

Only coordinated pressure from around the globe will be effective in dealing with this master of deceit.

Aung Lynn Htut is a former senior intelligence officer in Burma’s Ministry of Defense. He is working on his memoirs.
Hapless Doesn't Mean Harmless
Burma has a nuclear program. It's a mess, but it's still a nuclear program.
BY CHRISTIAN CARYL
JUNE 14, 2010

If you're interested in international security, I strongly recommend that you check out a new documentary titled Burma's Nuclear Ambitions. The film comes from the Democratic Voice of Burma (DVB), an Oslo-based nongovernmental organization that has made a name for itself as a source of good independent reporting on events inside that benighted country. The reporters at DVB spent the past five years collecting the material for this project, which makes a persuasive case that the generals who run Burma (aka Myanmar) have spent vast sums on a program to develop weapons of mass destruction. Robert Kelley, an ex-U.S. nuclear scientist and former U.N. nuclear inspector who collaborated with the filmmakers, told me that their effort offers a unique opportunity to blow the whistle on a rogue state's nuclear plans earlier rather than later. "This is a small program at early stages," he says. "I hope that by releasing this information we're letting the cat of the bag, and that no one can put it back now. There should be a public debate."

There will be -- though so far a lot of major media outlets (including the New York Times and CNN) have notably failed to pick up on the story. And that's a pity -- not only because this scoop has broad ramifications for Southeast Asia and the future of the long-suffering Burmese people in particular, but also because it will almost certainly raise new concerns about the scandalous ineffectiveness of the existing international system to prevent the proliferation of nuclear weapons. (Yep, looks like the International Atomic Energy Agency (IAEA) has been caught asleep at the wheel once again.)

The documentary -- which aired earlier this month on the English-language version of Al Jazeera -- shows how Burma's reigning generals have used their profits from the sale of natural resources to fund the purchase of sophisticated equipment and the training of thousands of Burmese engineers abroad (mostly in Russia). The DVB reporters had been plugging away at the story for years without getting beyond the level of tantalizing hearsay. They'd heard that the government was spending billions on vast underground command centers and an underground fiber-optic communications system to go with them. They'd learned about the attempts to train Burmese engineers in various military-related disciplines outside the country, and they knew -- like the U.S. government -- that the generals in the test-tube capital of Naypyidaw were engaging in various kinds of suspicious cooperation with North Korea.

But they still didn't have hard evidence. So they decided to beam a message back into Burma by satellite, asking for sources to come forward. In February of this year someone finally responded. An army major by the name of Sai Thein Win defected to Thailand, bringing with him a trove of photos and detailed knowledge of a military-run defense plant where he had worked as a manager. Sai, who had spent five years in Russia studying engineering, revealed how he and his colleagues at the factory had used German-made precision machine tools to manufacture rocket parts. At another installation he saw -- and photographed -- equipment that was allegedly intended for uranium enrichment. (Kelley, who served as a consultant to the DVB production, confirmed that it was highly likely that the equipment shown in the photos was being used for nuclear purposes.)

And of course there is the highly incriminating back story of North Korean involvement in Burma. It should be said that, though the DVB documentary includes photos showing purported North Korean advisors giving the Burmese help with large-scale tunneling (one of the few areas in which the North Koreans have world-class expertise), it doesn't provide any solid evidence that Kim Jong Il has shared his nuclear technology with the generals. That isn't to say there isn't good reason to harbor suspicions, though. The film does include photos of the Burmese regime's No. 3 general visiting his jovial counterparts in Pyongyang in November 2008. (The
person who passed the photos on has apparently since been shot.) Bertil Lintner, an expert on Burmese politics who also collaborated with the filmmakers, says that Western diplomats have verified the presence of North Korean technicians at a Burmese missile production facility.

And what, for example, was on board the Kang Nam 1, the North Korean ship freighter that was sailing for a Burmese port last year until the U.S. Navy persuaded it to turn around? U.S. Secretary of State Hillary Clinton expressed concern about deepening ties between the two pariah states at a meeting of regional leaders last year. In May, U.S. Assistant Secretary of State Kurt Campbell issued a statement calling on the Burmese leaders to comply with the U.N. sanctions imposed on North Korea after Pyongyang's nuclear test a few years back.

The question that arises from all this, of course, is why Burma would want to get into the WMD business in the first place. The country has no threatening neighbors, no regional rivals that want to take it over. But that, say the experts, would be to underestimate the regime's xenophobia and pathological suspicions of the outside world. The film offers clues. One Burmese ex-diplomat defector interviewed on camera puts it like this: "In 1992, when General Than Shwe came to power, he thought that if we followed the North Korean example, we would not need to take account of America or even need to care about China. In other words, when they have nuclear energy and weapons, others will respect us." Burma analyst Lintner points to the domestic context as well. "According to the people I have talked to, the Burmese generals believe they need a strong deterrent to remain in power, against the outside world as well as their own population." In 2007, it should be recalled, hundreds of thousands of demonstrators took to the streets to protest against the country's leadership. If having nukes would make it that much harder for outsiders to pressure them, that would, conceivably, make life harder for internal opponents as well.

We could, perhaps, take some consolation from the fact that the Burmese WMD program doesn't seem to be terribly sophisticated. Geoffrey Forden, a Massachusetts Institute of Technology expert who examined the evidence on the Burmese missile program, gives them five to 10 years to get a rocket launched and built -- and much longer to come up with one that would have serious range. Kelley says that, based on the evidence, the nuclear program looks even less serious. The generals don't appear to have any coherent strategy for actually making a functioning nuclear weapon. The only enrichment technique they seem to be using so far is the laser isotope method, which several developed countries have tried and dropped as unduly complicated. Kelley speculates that bureaucrat-scientists might be leading the generals on a bit (something, he says, that's been known to happen in other countries where political leaders are eager to get their hands on powerful weapons). One of the defectors tells a story about the scientists demonstrating a laser to visiting higher-ups by burning a hole in a piece of wood. One of the attending generals was so discomfited by this mysterious device that he immediately asked them to stop.

Yet there is still plenty of cause to worry. For one thing, the generals have plenty of cash. Over the next few years they'll be earning tens of billions of dollars from natural gas sales to the Chinese -- and much of that money is apparently slated for the nascent WMD program. And even though the Russians halted work on a promised reactor project when they started to harbor doubt about Burmese intentions, it's clear that there's little the international community can do to prevent the junta from doing what it wants inside the country. (It turns out that the IAEA basically gave Burma a pass a few years ago when the country essentially declared itself a nonnuclear power, and has little leverage to exert as a result.) Our best bet, it would seem, is that the brutal, paranoid, and astrology-driven generals who run Burma really are just as wasteful and incompetent as they appear to be from the outside. So why doesn't that seem especially comforting?
Asean's New Dilemma: Burma's Nuclear Ambition
By KAVI CHONGKITTA VORN
Sunday, May 30, 2010

The US action was swift following confirmation of a North Korean ship with suspicious arms cargoes docking in Burma last month in violation of the UN Security Council Resolution 1874. A few days later, in the third week of April, the US State Department dispatched an urgent message to the Asean capitals recommending the scheduled Asean-US Economic Ministers' roadshow in Seattle and Washington DC, from May 3-5, proceed without the Burmese representation at "all levels." The drastic move surprised Asean leaders.

The American ultimatum was not a bluff but a genuine show of frustration. This time Washington wanted to send a strong signal to Burma and the rest of Asean that unless something was done about Burma's compliance with the relevant UN resolutions on North Korean sanctions, there would be dire consequences. Political issues aside, Burma's nuclear ambition can further dampen Asean-US relations in the future. Already, there was the first casualty when the US downgraded the high-powered economic roadshow which was meticulously planned months ahead between the Office of US Trade Representatives and Asean economic ministers through the US-Asean Business Council.

Since nearly all Asean countries, except Singapore, decided to dispatch their trade or industry ministers to join the campaign, they agreed the roadshow should continue without the Burmese delegation as requested by the US. After some bargaining, the US softened its position agreeing to accept a representation at the charge d'affaires level from the Burmese Embassy in Washington DC. But Rangoon chose to opt out as it wanted diplomats directly dispatched from Rangoon. Without a consensus in Asean, a new name—absurd as it seemed—was in place, as the Southeast Asia Economic Community Road Show. It would be a one-time only designation.

When Kurt Campbell, assistant state secretary for East Asian and Pacific Affairs returned to Burma for the second time recently, he was blunt in telling the junta leaders to abide and fully comply with the UN Security Council Resolution 1874. That has been Washington's serious concern due to the growing link between North Korea and Burma and their existing transfer of nuclear-related technology. Last June, a North Korean ship, the Kang Nam, was diverted from going to Burma after being trailed by the US navy.

Since 2000, Western intelligence sources have been gathering evidence of North Korea providing assistance to Burma to build a nuclear reactor that can produce graded plutonium that could be used in assembling future weapons of mass destruction. Last year, reports were released using data collected from two defecting Burmese military officers, intercepted calls and messages as well as human intelligence along Thai-Burmese border, all pointing to Burma's nuclear ambitions.

When they came out last fall, skepticism was high among military experts and strategists on the junta's nuclear intentions. Most said there was insufficient evidence. Some viewed them as attempts to further discredit the regime's international standing. As additional interviews were conducted, especially with a former major in the Burmese Army, Sai Thein Win, who was directly involved with the recent secret nuclear program it has become clearer that Burma is investigating nuclear technology. This week, a special report on a huge new body of information, with expert comment from a former official working for the International Atomic Energy Agency, will be released.

As such, it will have far-reaching implications on Asean and its members, who signed the 1995 Southeast Asian Nuclear Weapons Free Zone (SEANWFZ) and Non-proliferation Treaty. Asean is currently working hard to persuade all major nuclear powers to sign the protocol to the SEANWFZ. The grouping has even delayed China's eagerness to accede to the protocol.
Further complicating the issue, Asean has not reached a consensus on how its members would move forward with a common approach on nuclear energy and security. In general, Asean backs nuclear disarmament, which the Philippines has played a leading role as chair of the just concluded Review Conference of State Parties to the Treaty on the Non-Proliferation on Nuclear Weapons. Asean also backs the ongoing efforts of US and Russia over non-proliferation.

One sticky problem is that Thailand, Brunei Darussalam, Burma, and Indonesia have yet to ratify the Comprehensive Test Ban Treaty. In the case of Indonesia, it is on the Annex 2 list of the treaty which, to enter into force, must be ratified by all 44 states on this list. At the upcoming Asean summit in Hanoi (October), Asean leaders will study a matrix of common positions that have been or could be taken up by Asean. It remains to be seen how Asean would approach some of the sensitive issues such as the South China Sea, climate change and issues related to nuclear technology.

At the recent Nuclear Summit in Washington DC, leaders from Vietnam, Indonesia, Malaysia and Thailand were invited by US President Barack Obama to share their views on non-proliferation and peaceful use of nuclear energy. They supported the summit's plan of action to prevent nuclear terrorism. All these Asean members have long-term plans to build nuclear power plants for peaceful use as energy sources. Vietnam has long decided on building two, while Thailand is planning one in the next ten years. Indonesia has serious parliamentary support to explore a nuclear option. Even the Singapore Economic Strategies Committee has recommended nuclear energy should be considered as a possible long-term solution to the island's energy security. Obama will certainly raise the issue again when he visits Indonesia in the second week of this month.

What is most intriguing has been the lack of serious attention from the Thai security apparatus regarding the nuclearization of Burma. Apart from the two informal meetings convened by the Defence Council at the end of last year, the topic has been discussed only among a handful of military intelligence officials who have worked closely with their Australian counterparts. The National Security Council still does not believe Burma has that kind of ambition, not to mention the overall nuclear capacity to embark on the controversial program. Concerned officials argued that domestic problems still have precedence.

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Burma-North Korea Ties Worry the World
Andrew Selth
May 18, 2010

For the past 10 years, Burma has been accused of trying to acquire a nuclear weapon. A number of developments during this period — notably Burma’s growing relationship with North Korea — have raised international concerns. Yet, to date, no hard evidence of such a plan has been produced.

Claims of a secret nuclear weapons program date back to 2000, when Burma’s military government announced that it was going to purchase a small research reactor from Russia. These accusations were repeated in 2003, when it was suggested by a respected news magazine that North Korea had taken over from Russia as the source of Burma’s nuclear technology. In the years that followed, the issue resurfaced periodically on activist Web sites, but in August 2009 it attracted global attention when a story appeared in the Sydney Morning Herald citing Australia National University professor Des Ball and the Thai-based journalist Phil Thornton.

The SMH claimed that there were in fact two nuclear projects running in Burma. The first was the Russian research center, which was to be operated under international safeguards. (Contrary to the SMH story, construction of this reactor has not yet begun). The second was said to be a secret project to build a reactor and associated nuclear fuel processing plants with North Korean help. According to the SMH, if all went according to plan Burma would have a nuclear weapon by 2014 and “a handful” of such devices by 2020. The main sources for these claims were two Burmese “defectors” and commercial satellite imagery of suspect facilities in Burma.

Needless to say, such claims have been the subject of close scrutiny by the United States and other governments. There have also been comprehensive studies of the issue by think tanks like the International Institute for Strategic Studies in London and the Institute for Science and International Security in Washington.

The US government has expressed its concern about the defense ties that appear to have developed between Burma and North Korea over the past decade. These links reportedly include the sale of conventional arms to Burma, North Korean help with the development of Burma’s defense infrastructure (including the construction of various underground facilities), assistance to Burma’s arms industries and training in fields like air defense. In 2004, the US blocked the sale of North Korean short-range ballistic missiles to Burma.

The Obama administration has also stated its wish to discuss a number of proliferation issues with Burma, including the possible transfer of nuclear technology from North Korea. Significantly, however, at no time has the US government stated that Burma is attempting to develop a nuclear weapon, with or without North Korean help. Indeed, despite considerable pressure from members of Congress, activists and journalists, Washington has refused to be drawn on the subject. Its position seems to reflect either a belief that Burma does not have a secret nuclear weapons program, or a lack of hard evidence to support such a claim.

This approach has been shared by other countries, including Britain and Australia, both of which have referred only to “unconfirmed” reports of a secret nuclear program. For their part, the IISS and ISIS have both stated that there is insufficient evidence to support the claims. The IISS, for example, said in late 2009 that Burma “has no known capabilities that would lend themselves to a nuclear weapons program.”

Even so, both governments and think tanks remain suspicious of Burma’s intentions, and point to a number of factors which they believe warrant continuing close attention.
Of all Southeast Asian countries, Burma has the strongest strategic rationale for a nuclear weapons program. Since the abortive pro-democracy uprising in 1988, the military government has feared armed intervention by the United States and its allies. The regime has also suffered from economic sanctions and other punitive measures. Burma’s generals envy North Korea’s ability to resist such pressures and still win concessions from the international community. They reportedly believe that this influence derives from Pyongyang’s possession of nuclear weapons.

In addition, Burma has for some years been working closely with two North Korean trading entities that have a record of proliferating sensitive nuclear and missile technologies. Also, Burma has imported a number of sophisticated machines and items of dual-use equipment from Europe and Japan that could conceivably be used in a nuclear program. The number of Burmese sent to Russia for nuclear-related training seems to be more than that required for a peaceful research program. Furthermore, some of the claims made by the “defectors” are plausible.

None of these factors in themselves prove that Burma has embarked on a nuclear weapons program. After the mistakes of the Iraq war, no government wants to rush to judgment based on incomplete or unverified intelligence. Having been caught napping a few years ago, however, when it was discovered that Syria was building a reactor with North Korean help, the international community is now looking carefully for hard evidence of a secret Burmese nuclear program.

East Asia Forum

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Nuclear Rangoon
by Doug Bandow
03.30.2010

For years the West has treated Burma as primarily a humanitarian crisis. Now the issue is complicated by evidence that the ruling junta is interested in nuclear energy, and perhaps even in nuclear weapons. Still, the idea of an atomic arsenal in Rangoon is both distant and far-fetched. The more immediate challenge for Washington is dealing with one of the most repressive regimes ruling over one of the poorest peoples. The United States should promote more democratic governance and increased international engagement, which ultimately would reduce any incentive for Burma, also known as Myanmar, to consider atomic options.

Burma has suffered under military rule for five decades. The junta foolishly held an election in 1990, which was won overwhelmingly by Aung San Suu Kyi’s National League for Democracy. The regime voided the poll and arrested numerous democracy activists. The so-called State Peace and Development Council (SPDC) has brutally suppressed human rights ever since. Suu Kyi, a Nobel Prize Laureate, has spent decades under house arrest. The SPDC now is preparing to hold elections organized to ensure permanent military control.

Promised autonomy by the British, ethnic groups like the Karen, Karenni, Chin, Shan, Kachin, and Wa long have battled the central government. Fighting in the nation’s east has killed and injured tens of thousands, forced hundreds of thousands to flee over the border into Thailand, and displaced millions more within Burma.

In recent years the regime has reached cease-fire agreements with several groups, but basic political issues remain unresolved and tensions have been rising. The government is pressing groups to disarm and disband, without offering any political protections. Karen National Union General Secretary Zipporah Sein warns that there is the “greatest possibility of renewed conflict.” The Burmese army and ethnic forces are preparing for renewed hostilities.

In 2008 Cyclone Nargis ravaged Burma, killing an estimated 140,000 people and leaving more than three million homeless. The country remains desperately poor, with a per capita GDP estimated to run no more than $1,200. Yet this tragically misgoverned and impoverished nation has been accused of developing nuclear weapons.

Last year the Sydney Morning Herald reported: “Rumors have swirled around refugee circles outside Burma about secret military installations, tunnels dug into the mountains to hide nuclear facilities, the establishment of a ‘nuclear battalion’ in the army and work done by foreign scientists.”

Defectors cite plans to construct nuclear bombs. Last year Secretary of State Hillary Clinton voiced concern over possible nuclear cooperation between North Korea and Burma.

Discerning the SPDC’s capabilities and intentions is not easy. After all, the fanciful claims of Ahmed Chalabi’s famed defector, “Curveball,” helped justify the U.S. invasion of Iraq. Author Catherine Collins acknowledges that “the evidence of malfeasance so far is slight” but worries that similar whispers of Israeli nuclear activity in the 1950s turned out to be accurate.

In fact, Burmese interest in nuclear power runs back decades. That does not, however, mean the regime has an interest in developing nuclear weapons.

Burma is a most unlikely nuclear weapons state. It has only about half of North Korea’s per capita GDP. Lack of funds is thought to have held up planned Russian construction of a nuclear research reactor—which would operate under international safeguards.
The regime must spend heavily on the army to suppress domestic protest and ethnic resistance, purposes for which atomic weapons would be useless. And the regime faces no serious outside threats.

What of paranoia and prestige? Author Bertil Lintner contends: “There is no doubt that the Burmese generals would like to have a bomb so that they could challenge the Americans and the rest of the world.” Perhaps, though just being thought to have the possibility of making one might have some deterrent value. And Andrew Selth of the Griffith Asia Institute points to “a siege mentality among Burma’s leaders. Even now, they fear intervention by the United States and its allies—possibly even an invasion—to restore democracy to Burma.” However, he believes that at most “a few Burmese generals envy North Korea’s apparent ability to use its nuclear weapons capabilities to fend off its enemies and win concessions from the international community.”

In fact, the best evidence is against a nuclear weapons program. The Irrawaddy News Magazine cites understandable suspicions, but opines: “It is admittedly premature to conclude that Burma intends to undertake the complicated and perilous process of reprocessing uranium to get weapons-grade plutonium.”

A recent report from the London-based International Institute for Strategic Studies (IISS) concluded that Burma:

- has no known capabilities that would lend themselves to a nuclear weapons program, apart from limited uranium deposits and some personnel who have received nuclear training overseas. If it is built, a 10 MWt research reactor and associated training from Russia could provide the basis for an eventual civilian nuclear power program, but few of the skills required for such a program are readily transferable to nuclear weapons development. Specialized reprocessing or enrichment facilities would be necessary to produce weapons-usable fissile material, and any attempt to divert plutonium from the reactor is likely to be detected by IAEA inspectors.

Are there secret facilities? Noted a January study from the Institute for Science and International Security (ISIS) in Washington, D.C.: the “sheer number of alleged secret sites posited by these defectors by itself raises doubts about their claims.” North Korea has assisted the SPDC in building tunnels near its new capital of Naypyidaw, but the little available intelligence suggests that they have non-nuclear purposes. Concluded the ISIS: “Despite the public reports to the contrary, the military junta does not appear to be close to establishing a significant nuclear capability. Information suggesting the construction of major nuclear facilities appears unreliable or inconclusive.”

In past years the Singapore government said the possibility was “unlikely” and the British government found no evidence of uranium reprocessing or enrichment. Washington consistently has excluded Burma when discussing nonproliferation issues.

America and other states still have reasons to be watchful and wary. There is no crisis, however. Noted the ISIS: “Because Burma’s known program is so small, the United States and its allies have an opportunity to both engage and pressure the military regime in a manner that would make it extremely difficult for Burma to acquire a nuclear weapons capability, let alone nuclear weapons.”

Unfortunately, the West’s ability to influence the SPDC in any regard is quite limited. The regime places its survival above all other objectives, while the U.S. and EU already apply economic sanctions against Burma. Most of Burma’s neighbors invest in and trade with the regime. Russia and China have blocked UN sanctions; the latter also has helped arm the junta. Regime change obviously is desirable for the people of Burma as well as Western governments, but if the junta believes that it faces a military threat—one reason it apparently rejected American cyclone aid sent via U.S. warships—it is likely to be less willing to consider political reform and more willing to pursue a nuclear weapons program. Thus, Washington should seek to reduce the junta’s fears.
Andrew Selth makes a reasonable argument that the “aggressive rhetoric, open support for opposition figures, funding for expatriate groups and military interventions in other undemocratic countries have all encouraged the belief among Burma’s leaders that the America and its allies are bent on forcible regime change.” The United States should continue to press for improved human rights, but should demonstrate by word and deed that there are no plans to take military action against Burma. In fact, Selth believes that “the SPDC’s fears of an invasion seem to have diminished in recent years.”

At the same time, America, the EU, Canada, and Australia should together offer to relax trade and diplomatic sanctions if the regime takes steps which genuinely open the political system and reduce ethnic conflict. At the same time, the Western states should encourage India, Japan, South Korea, and the ASEAN states to apply coordinated diplomatic and economic pressure on the SPDC, backed by the threat of imposing targeted sanctions against junta leaders and business partners. The pain should be personalized against decision-makers rather than applied against the entire population. Washington should use the potential, however slim, of a Burmese nuclear program to encourage greater Indian and Russian involvement, in particular.

Both nations routinely resist intervention to promote human rights, but they might be more willing to press for political reform if doing so would reduce the likelihood of nuclear complications.

The United States should similarly engage China. American officials should make the argument that Beijing, too, is harmed by instability in Burma, especially if the latter becomes a nuclear state. China recently was angered by a Burmese military offensive which pushed refugees across its border. Surely Beijing does not want another isolated, unpredictable nuclear weapons state as a neighbor.

Moreover, promoting political change in Burma would enhance China’s international reputation. Washington also should pledge—a promise worth repeating for North Korea—that United States would not take military advantage of any Burmese liberalization. There would be no American bases, naval deployments, or training missions irrespective of the government.

Burma might not respond positively. Yet in the months after Cyclone Nargis the International Crisis Group reported that “it is possible to work with the military regime on humanitarian issues.” Frank Smithuis of Doctors Without Borders similarly said that “the military at times has actually been quite helpful to us.”

Burma is one of the world’s greatest international tragedies. Nuclear weapons would turn it into one of the greatest international challenges. Unfortunately, current U.S. policy is doing nothing to help the Burmese people. It is time to try a different approach in an attempt to simultaneously aid political liberalization and end talk of a Burmese Bomb.

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Burma’s North Korea Gambit
Will the State Department get hoodwinked again by the generals?
By KELLEY CURRIE
MARCH 16, 2010, 4:13 P.M. ET

United States Assistant Secretary of State Kurt Campbell gave an understated assessment of the Obama administration's Burma policy last week, characterizing the lack of positive results from engagement with the junta as "not what we hoped for." His admission came as the junta denied his recent request to visit the country and announced deeply problematic new regulations for upcoming elections. "Smart power," it seems, has run headlong into the street-wise tactics of the hard men in Naypyidaw.

The question now is, what next? There are worrying signals that frustrated U.S. officials may start to focus more narrowly on an area where they feel they have a better chance of success: Burma's increasing coziness with Pyongyang. An anonymous senior State Department official was recently quoted in the Washington Post as saying, "Our most decisive interactions have been around North Korea. We've been very clear to Burma. We'll see over time if it's been heard.”

Privately, administration officials have indicated that the junta's burgeoning relationship with Pyongyang was a driving force behind the shift toward engagement. Given the junta's clear rejection of Washington's overtures regarding domestic political processes, North Korea is quickly becoming the primary reason for continued direct contacts.

It would be a strategic error for the Obama administration to make North Korea the centerpiece of engagement with Burma. That's not to say that Naypyidaw's exchanges with Pyongyang aren't extremely worrying. The growing trade in conventional weapons—including reports of Burmese purchases of North Korean-made short-range ballistic missiles—and increasing evidence of nuclear cooperation is deeply troubling. These are clear violations of United Nations sanctions on North Korea, and the U.S. should be clear about the costs of continuing this cooperation with Pyongyang.

But the U.S. also runs the risk of playing to the generals' diplomatic strengths by focusing too narrowly on the Burma-North Korea relationship. The Burmese regime has a history of adeptly manipulating and methodically wearing down its interlocutors. The junta is expert at doing just enough to keep the pressure off, engaging in sporadic unproductive talks with officials from the U.S. and the U.N., well-timed manipulations of the confinement of Aung San Suu Kyi and other political detainees, and endless machinations around the promised 2010 elections. Such moves have tantalized the international community for decades, but all have ultimately proven fruitless, as they merely obscured the regime's determined efforts to institutionalize and legitimize military rule.

Engaging the regime on the basis of its relationship with North Korea would be no different. Burma's generals would use their contacts with Pyongyang as leverage to win U.S. compromises on issues that are arguably of greater importance to them: removal of sanctions, and lessened support for Burma's democracy movement. Far from fearing U.S. opprobrium, junta leaders are thrilled to talk to the Americans about North Korea, because such a conversation by its nature excludes Ms. Suu Kyi. Prioritizing bilateral concerns about North Korea would also exacerbate the 10-member Association of Southeast Asian Nations' tendency toward inertia, undermining years of effort to push Burma's neighbors toward a more forward-leaning posture on political reform.

The U.S. should recognize the junta's nuclear gambit for what it is: a symptom of unaccountable and illegitimate rule. If Burma had an elected, accountable government concerned with providing for the basic needs of the Burmese citizenry, it is highly unlikely that nuclear cooperation with North Korea would be on its agenda. The
best, most sustainable means of eliminating the threat posed by Burmese-North Korean cooperation is movement
toward a more representative, responsible Burmese government, difficult though this may be.

As Mr. Campbell has said, the path to improved U.S.-Burma relations and improvement in the situation in
Burma lies through "the immediate and unconditional release of Ms. Suu Kyi and all political prisoners, an end
to conflicts with ethnic minorities and gross human-rights violations, and initiation of a credible internal political
dialogue with the democratic opposition and ethnic minority leaders on elements of reconciliation and reform."

It's time for the Obama administration to follow up on those words. The White House needs to make clear that it
is not interested in cutting a deal with the Burmese regime to end nuclear cooperation with Pyongyang in
exchange for accepting the perversely labeled "roadmap to discipline-flourishing democracy." They can start by
strongly endorsing U.N. Human Rights Rapporteur Tomas Ojea Quintana's proposal to convene a Commission
of Inquiry to investigate war crimes and crimes against humanity in Burma, and by putting meaningful Security
Council consideration of Burma back on the agenda.

The Obama administration must stay focused on working with other democracies, particularly Asean members,
to establish benchmarks for the systemic, irreversible domestic political changes Burma needs. This must be
backed up by sanctions that are broadly supported and narrowly targeted. As decades of "constructive
engagement" have proven, abandoning principle and attempting to cut out the democracy movement to negotiate
directly with the junta has never worked with Burma's generals. Instead, it just plays into their hands.

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'Bless you Mr Obama' on Myanmar
By Stanley A Weiss
Mar 10, 2010 [Accessed 2010-03-09T16:30Z]

[EXCERPT]

...increasingly the feeling here is that the days must end for the United States treating Myanmar as a "boutique" issue (as one Barack Obama surrogate memorably said during the 2008 US presidential campaign) focused solely on human rights and the fate of Nobel laureate Aung San Suu Kyi. Three recent developments have shined a spotlight on US security interests in Myanmar, which sits significantly at the crossroads between China and India.

Strategic concerns

First, there is a pipeline. In November, China announced it was constructing a 675-kilometer (480-mile) oil pipeline from China through Myanmar to the Indian Ocean. As the world's second-largest oil user, China has long faced the "Malacca Strait dilemma" - that 80% of its oil flows through the narrow strait between Malaysia and Indonesia which a hostile power could choke off in a conflict.

The new pipeline will help China avoid the Malacca Strait and give it access to the Indian Ocean. Its a move that US ally India clearly fears. New Delhi announced days after China revealed the plan that it would add 40 warships and new fighter jets to its Indian Ocean arsenal. It is a potential flashpoint the US does not need.

Second, there are Myanmar's nuclear ambitions. In 2002, the junta confirmed plans to build a nuclear research reactor with Russian support. Army officers have since undergone training in Moscow. Recent reports about a stealth deal between Myanmar and North Korea to develop underground nuclear facilities have led some to dub Myanmar "the next North Korea". "The nuclear issue," Myanmar scholar Morten Pedersen says, "must be weighing heavy on minds in Washington - and must be addressed."

Third, there is the spread of radical Islam in neighboring Bangladesh, where the "astronomical growth of Islamists in the military", as scholar Sajeeb Wajed Joy has written, has leapt from 5% in 2001 to 35% today. As crackdowns against journalists and political opponents in Dhaka increase, the last thing the world needs is for Myanmar to become a Pakistan on the Irrawaddy that allows terrorist groups sanctuary in its remote northern regions.

The Obama administration has sought to begin a new conversation with Myanmar, conducting the highest-level talks with the generals in more than a decade. But aside from Senator James Webb - who visited Myanmar in 2009 - the US Congress is not listening. "It's the usual congress full of ignorants, arrogants and self-righteous fools," says Ma Thanegi, who spent three years in prison after working as Suu Kyi's assistant. "Their tactics are helping to starve our people. Bless you, Mr Obama."

Myanmar's parliamentary election scheduled for this year - the first since 1990 - is an opportunity, as Pedersen says, "to change the overall thrust of US policy, to broaden its agenda in [Myanmar] to include peace-building and economic reform." It is, adds Myanmar expert Robert Taylor, "a chance for the US to counter-balance the growing power of China in Asia and the world."

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This Week at War: The Long Death of the Powell Doctrine
What the four-stars are reading -- a weekly column from Small Wars Journal.
BY ROBERT HADDICK | MARCH 5, 2010

What is Burma learning from the nuclear "rogues"?

Is North Korea helping Burma build a plutonium-producing reactor? On March 2, the Washington Post discussed this possibility, along with the broader military relationship between the two countries. The article noted that the budding military partnership between Burma and North Korea has the attention of the Obama administration. But as is the pattern with all such isolated and "rogue" regimes, the U.S. government is struggling to achieve diplomatic leverage over the situation.

Could Burma have a clandestine nuclear program? In September 2007, the Israeli Air Force bombed a nearly complete plutonium reactor it found in the Syrian desert. A subsequent investigation revealed that the site was a near duplicate of North Korea's Yongbyon reactor and built with North Korea's assistance. With the discovery of the joint North Korean-Syrian project, many wondered where else in the world North Korea may have secret nuclear partnerships.

David Albright, a nuclear proliferation expert at the Institute for Science and International Security, has concluded that information that Burma is constructing major nuclear facilities is inconclusive and that the regime is not close to establishing any significant nuclear capability. He also notes that trade in nuclear materials with North Korea is banned by the U.N. Security Council.

Albright is hopeful that the early detection of a possible Burmese nuclear effort will enable the international community to stop such a program, in contrast to its failure to do so with the Syrian reactor, with Iran's program, and with Pakistan in the 1970s.

U.S. Sen. James Webb's visit to Burma in 2009 reopened direct talks between the two governments. Such contact is helpful and could be part of a solution, but is not worth much unless the United States and its partners develop some significant leverage to counter the numerous incentives in favor of nuclear proliferation.

"Rogue" states contemplating whether to begin a clandestine nuclear program find numerous cases of positive reinforcement for doing so, and few if any cases of effective punishment. For example, China is a strong defender of state sovereignty and has stood up for this principle by defending nuclear rogues such as North Korea and Iran that most in the international community would like to rein in. Sharing strategic interests in the Indian Ocean, Burma could expect similar protection from China.

Burma has no doubt observed how North Korea has converted its nuclear and ballistic missile programs into lucrative cash businesses. In addition, North Korea has repeatedly extracted food and energy assistance in exchange for promises of good behavior. And Pakistan has exemplified how rewarding a nuclear arsenal can be. Concern over the security of Pakistan's nuclear arsenal is a significant factor in the U.S. strategies for Afghanistan and South Asia and is a reason why Pakistan is one of the largest recipients of U.S. foreign aid.

On the other side of the ledger, there are few examples of the international community effectively punishing a nuclear proliferator. Iran's case remains open and is an opportunity for the U.N. Security Council to change that pattern. Until that happens, Burma and others considering their options will watch and learn.
Burmese Officials Celebrate Kim Jong Il's Birthday
By LAWI WENG
Monday, February 15, 2010

High-ranking Burmese military officials joined a ceremony to mark the 68th birthday of North Korean leader Kim Jong Il, according to Burma's state-run media.

Lt-Gen Tin Aye, ranked No 5 in the Tatmadaw (Burmese armed forces) hierarchy, attended a ceremony at the Chartrium Hotel in Rangoon on Sunday to mark the birthday of the North Korean leader.

The state-run The New Light of Myanmar on Monday ran a front-page story with a photograph of Lt-Gen Tin Aye and North Korean Ambassador H.E. Kim Sok Chol holding hands together at a welcome reception. Kim Jong Il's birthday will be on Tuesday.

Senior ministers including Nyan Win, the minister of foreign affairs; Maj-Gen Htay Oo, the minister of agriculture and irrigation and Maj Brig-Gen Aung Thein Lin, the chairman of the Yangon City Development Committee also attended the ceremony.

Analysts said the presence of Tin Aye signified a warmer relationship between the two countries.

A graduate of Defense Services Academy-9, 64-year-old Tin Aye has made official visits to various countries, including China, North Korea, Russia and Ukraine to procure arms and military equipment. He chairs the Union of Myanmar Economic Holdings Ltd (UMEHL), often regarded as the armed forces’ business arm in handling trade.

Analysts say Burma's military leaders see a kindred spirit in Kim Jong Il as a politician who dares to confront the United States and the West.

A full-page birthday tribute to the North Korean leader was approved by Burma's censorship board, and the Burmese language Popular Journal published a full-page story this week.

The article is expected to be carried by other journals when they appear on Wednesday.

In the privately run journal, the author, Maung Wint Htun, described Kim as a “wise” and “patriotic” leader who has created nuclear and guided missile programs, and other industries. The article praised Kim for sacrificing his life for the future of North Korea.

Burma and North Korea have developed a military relationship since the two countries restored diplomatic ties in 2007. Analysts believe that clandestine military ties between the two countries may have been reestablished as early as 1999, when junta officials paid a low-profile visit to North Korea.

Gen Shwe Mann, the regime's No 3 man, made a secret visit to Pyongyang in November 2008, according to a secret report leaked by Burmese officials in 2009.

During the visit, Shwe Mann signed a memorandum of understanding (MOU) with North Korea for military cooperation between the two countries.

In the MOU, North Korea would build or supervise the construction of special Burmese military facilities, including tunnels and caves in which missiles, aircraft and even naval ships could be hidden. Burma would also
receive expert training for its special forces, air defense training, plus a language training program between personnel in the two armed forces.

In July 2009, US Secretary of State Hillary Clinton expressed concern over military links between North Korea and Burma, after evidence emerged that the Burmese junta may be trying to acquire nuclear technology from Pyongyang.

“We know that there are also growing concerns about military co-operation between North Korea and Burma, which we take very seriously,” Clinton told journalists in Bangkok during a visit to Southeast Asia. “It would be destabilizing for the region. It would pose a direct threat to Burma’s neighbors.”

Military analysts say the North Korean regime has provided Burma with weapons, military technology transfers and expertise in underground tunneling used for concealing secret military installations and since 2002, dozens of North Korean technicians have assisted the Burmese armed forces.
Rally at ‘Nuclear Security’ seminar to protest Burma’s presence
Thursday, 21 January 2010 22:04

New Delhi (Mizzima) – With Burma nurturing nuclear ambitions, the country’s pro-democracy activists in Japan are gearing up to hold a protest rally on Friday, as representatives from Asian countries including Burma assemble in Tokyo to attend a seminar on ‘Nuclear Security’ with officials of the IAEA.

A Burmese woman activist in Tokyo told Mizzima on Thursday that the protest is aimed at highlighting the Burmese peoples’ plight under the military dispensation and to draw attention to the junta’s planned nuclear project.

“It is our duty to protest and highlight what is happening in Burma to the world. Besides, we want the international community to pay attention to the junta’s nuclear ambitions,” she said.

According to a Japanese Foreign Ministry release, the International Atomic Energy Agency (IAEA) and the Japanese Foreign Ministry are jointly holding the seminar titled ‘Seminar on Strengthening Nuclear Security in Asia’.

Representatives of 17 Asian countries – the 10 Association of Southeast Asian Nations members, plus China, Japan, the ROK, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan – will attend the seminar to be chaired by Mr. Kaoru Naito, President of the Nuclear Material Control Center (NMCC).

The event is a follow-up of the previous seminar held in 2006. During the seminar participating countries will conduct a review of measures to strengthen nuclear security, which were implemented after the 2006 seminar, the Japanese Foreign Ministry said.

Military-ruled Burma came under media spotlight, when a United States naval vessel in June 2009 detected a North Korean vessel, suspected of carrying illegal weapons, believed to be heading towards Burma.

While some speculate that Burma might be nurturing a nuclear weapons ambition, evidence till date has failed to reveal any sign of the Burmese junta going in for a nuclear programme.

Russia, one of the few countries having a good rapport with the Burmese regime, announced in 2007 that it is helping Burma in developing a nuclear research reactor. The centre will have a 10 megawatt light water nuclear reactor with low enriched uranium consisting of less than 20 per cent uranium-235.
Burma: If not nukes, what about missiles?
by Andrew Selth
11 January 2010 10:53AM

Andrew Selth is a Research Fellow at the Griffith Asia Institute and author of 'Burma and North Korea: Conventional Allies or Nuclear Partners?'

Fears that Burma's military government is secretly building a nuclear weapon, with North Korean help, seem to have subsided — at least for the time being.

There is wide agreement that the issue needs to be monitored closely, but at this stage most informed observers feel that there is insufficient reliable information on which to base any firm judgements. After consulting the International Atomic Energy Agency — which apparently said there was nothing new in the 2009 media stories — the Australian Government has joined the US and UK in referring only to 'unconfirmed' reports of a Burmese nuclear weapons program.

Curiously, given all the publicity surrounding Burma's possible nuclear ambitions, much less attention has been paid to the regime's interest in acquiring some Scud-type short range ballistic missiles (SRBM) from North Korea. Yet the evidence for Naypyidaw's interest in SRBMs is at least as strong as that for nuclear weapons, if not stronger.

Any SRBM sales to Burma would have implications for regional security. Despite an operational range of only about 700 kilometres, such missiles could give Burma a power projection capability for the first time. More to the point, perhaps, they would constitute a potent psychological weapon and have a significant political impact, not only on Burma's regional neighbours but also in the US and Europe, where Burma remains a sensitive issue.

Activists have long claimed that Burma's generals want to get their hands on some SRBMs. Few reports on this subject have been based on hard evidence, however, and news stories have often failed to distinguish clearly between SRBMs and other kinds of missiles. For example, the regime's reported efforts to buy or manufacture anti-ship, tactical surface-to-surface, surface-to-air and air-to-air missiles have frequently been confused with its interest in acquiring ballistic weapon systems.

The picture has been further clouded by unsubstantiated claims that Burma already possesses SRBMs, and possibly even medium-range ballistic missiles. An anonymous Wikipedia entry states that Naypyidaw took delivery of 11 North Korean Hwasong-6 (Scud C-type) SRBMs in 2009. The regime has been accused of paying for such missiles with heroin. One activist website has referred to four 'bases' along the Burma-Thai border where SRBMs have supposedly been deployed. Such reports have been dismissed by serious Burma watchers.

Similarly, when the North Korean cargo ship Kang Nam I was heading to Rangoon last June, it was widely speculated that the vessel was carrying 'missile parts', as well as nuclear components. If this was so, it would probably have been boarded under UN Security Council Resolution 1874, which prohibits North Korean arms exports. After the ship turned back, the Commander of US Pacific forces admitted that no-one knew what cargo it was carrying.

There is no evidence that Burma has acquired any ballistic missiles. Yet the regime does seem interested in doing so, and at one stage may have even begun negotiations with the North Koreans. In 2004, the US State Department revealed that it had made robust representations to the military government to forestall the possible purchase of 'surface-to-surface' missiles from Pyongyang. This was later acknowledged to be a reference to SRBMs. The US undertook to respond 'vigorously and rapidly' to any such sales.
North Korea military expert Joseph Bermudez believes the issue of ballistic missile sales has arisen in all major meetings between the North Koreans and Burmese since bilateral relations warmed in the early 2000s. However, he thinks Naypyidaw is not ready for such weapons yet. It needs to train personnel, form units and build specialised support facilities (including some underground). Bermudez has also suggested that premature acquisition of SRBMs might complicate the purchase of other foreign arms and equipment sought by the regime.

Another possibility is that Naypyidaw plans to build its own SRBMs, with Pyongyang's help. Senior Burmese officials visiting North Korea have inspected ballistic missile production plants. Some of the sophisticated machine tools and dual-use equipment imported from Europe and Japan in recent years may not be for a secret nuclear weapons program, as often claimed, but for an indigenous SRBM factory. While not very economical, such a scheme would be in keeping with the regime's wish for defence self-sufficiency.

If this is the regime's aim, such a development is likely to be some years away. Still, the question needs to be asked: what could Burma do with such weapons? Given their relatively short range, questionable accuracy and small conventional warhead, SRBMs are of limited military utility. Inevitably, this has prompted speculation that Naypyidaw plans to arm them with chemical or nuclear warheads, either made in Burma or acquired from North Korea.

Even so, SRBMs would be ineffective against a sea-borne threat and they are unlikely to be aimed at China or India, both of which currently support Burma's military regime.

One theory is that Naypyidaw wants a weapon that can pose a threat to Bangkok, to help deter Thailand from allowing the US to launch an invasion of Burma from Thai territory. The US has never contemplated such an invasion and is unlikely ever to do so, but the prospect of military intervention has worried Burma's generals ever since they crushed the 1988 pro-democracy uprising. Even the Thai king has expressed his concerns about Thailand being used by the US in this way.

Other reasons for Naypyidaw's interest in SRBMs probably include the regime's desire for status and prestige, its perceptions of what 'modern' armed forces should have in their weapons inventories, and its wish for Burma to be taken seriously as an international actor.

As with so many aspects of Burma's security, there is very little hard evidence on which to base assessments. And analysis of this problem is complicated, as always, by rumours, unsubstantiated claims, speculative news reports and propaganda. Even so, the chances of Burma one day acquiring or manufacturing SRBMs seem to be greater than those of Naypyidaw producing a nuclear weapon.

That makes another reason to monitor security developments in Burma closely.
Indian Article: China Helping Burma To Become Nuclear Hub of 'Pariah States'

Indian Defence Review
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There has been an unmistakable spurt in the development and acquisition of nuclear weapon capabilities by the Military Junta regime in Burma. Given the level of progress in this regard, it is reckoned by various agencies that this would be realized by the year 2014. The media in the Southeast Asian region is rife with insinuations that this project is in progress, in active collaboration with North Korea under the aegis of China.

The Association of South East Asian Nations (ASEAN) is seized of the matter. Recently at the ASEAN Regional Forum Meet at Phuket in Thailand in July 2009, the US Secretary of State, Ms Hillary Clinton voiced her concern over reports about military cooperation between Burma and nuclear armed North Korea. This statement should be viewed in the backdrop of the incident wherein a North Korean 2000-tonne freighter 'Kang Nam-I,' allegedly carrying illegal cargo, and headed for Burma, was tracked in June 2009 by a US Navy destroyer USS John S McCain and was forced to reverse course, reportedly at the behest of China. UN Resolution 1874 permits North Korean ships suspected of carrying illegal cargo to be searched. North Korea conveyed that any such move would be considered as an 'act of war.'

Since the year 2000, there have been reports about North Korean ships offloading construction and other material at Thilawa port in Burma. It is intriguing that these activities were taking place during the period when North Korea and Burma did not have diplomatic relationship since 1983, which was restored only in 2007. The relations between the two countries were snapped, following the bombing of Martyr's mausoleum in Yangon by North Korean agents in an attempt to assassinate the visiting South Korean president, Chun Doohwan.

Since the restoration of diplomatic relations in 2007, there has been a flurry of secret visits by Burma officials to North Korea, which could not have been possible without a reasonable level of engagement and cooperation between the two countries during the so-called 'diplomatic freeze.' No sooner had the diplomatic relations been restored, a Burma delegation led by Lt Gen Myint Hlaing, the Chief of Air Defence, followed by another delegation headed by Lt Gen Tin Aye, Chief of the Office of Chief Defense Industries, visited North Korea. The composition of these delegations suggests that besides cooperation for procurement and development of conventional weapons, there are aspirations on Burma's part to seek assistance in nuclear weapons and missile technology. If it was only conventional weapons, China is well placed to meet its requirements. As it is Burma and China have thriving defence cooperation and more than 70 percent of Burma's military arsenal is of Chinese origin. Moreover, North Korea lags far behind China in conventional weapon technologies. But as far as transfer of nuclear and missile technologies is concerned, it has been the wont of China to supply them through their proxies like North Korea so as to deflect international opprobrium. Pakistan is one such glaring example.

Sources have revealed that the Burma-North Korea rapprochement was painstakingly brought about by China. It is believed that when the Burma authorities approached China for supply of 'howitzer guns', the Chinese authorities expressed their inability on the plea of shortages, but said that the same could be obtained from North Korea in exchange for rice. During that period, North Korea was facing severe food shortages due to drought. At
the behest of China, ambassadors of Burma and North Korea to Thailand met each other. The desperation on China's part to facilitate the rapprochement process between the two internationally pariah nations, extremely close and beholden to China, is a pointer towards the evolution of a new Chinese strategy in the region.

It is believed that these secret delegations from Burma to North Korea had gone to seek further cooperation as part of the tunneling project already underway in a mountain complex (Setkhaya Mountains) in Naung Laing village in south east of Pyin Oo Lwin in Mandalay Division. The off-loading of a special construction material by North Korean ships on several occasions partially vindicates the belief. There are images available to suggest extremely large network of tunnels (some 800 in numbers) being excavated, apparently with the help of North Korea. The North Korean assistance is corroborated by the fact that Burma does not have tunneling capability. Meanwhile, Uranium is also being activated in at least ten locations. It may be pertinent to mention that the Kachin state of Burma is rich in Uranium, which reportedly in the past was being clandestinely excavated by Japan with the tacit indulgence of regional leaders during the period when the state was virtually out of control of the central authority.

The design of the reactor at Naung Laing, as sources reveal, uses water to provide carbon dioxide used in the cooling loop, and bears resemblance with the reactor at Yongbyon and the reactor in Syria, being constructed allegedly by North Korean assistance, which was eventually bombed by the Israelis in September 2007.

There are other indications with regard to Burma's quest for nuclear weapons technology. Soon after Pakistan carried out its nuclear tests in May 1998, Burma's Head of State, Senior General Than Shwe signed the Atomic Energy Law on 08 June 1998. The timing of this event clearly reveals a strategic pursuit with regard to nuclear technology rather than any benign designs of quest for nuclear energy for peaceful purposes. Importantly, post 9/11, two Pakistani nuclear scientists, Suleiman Asad and Mohammad Ali Mukhtar took refuge in Burma in November 2001 when the US intelligence began to investigate the nexus between Pakistani nuclear scientists and the Al-Qaeda. This could not have been possible without intimate nuclear cooperation between the two countries, certainly with the tacit approval of China. The whereabouts of these two scientists is still unknown. It was alleged earlier that they were sheltered in the Muslim dominated area of Mandalay by the Burma authorities. There is not a word about them from the Pakistan authorities and even the US has become flaccid in its hunt for them.

The military government established a Department of Atomic Energy in 2001 under U Thaung, a known proponent of nuclear technology who currently heads the Ministry of Science and Technology. He made a secret visit to Pakistan, the chief agenda being nuclear cooperation. During the same period, in 2001, three Pakistani Naval vessels, i.e. a submarine, a tanker and a destroyer visited Yangon port. This was an unprecedented development, since till then, Burma had steadfastly maintained that it would not permit foreign naval vessels to visit the country's ports. The goodwill visit by the Pakistan Naval ships was immediately followed by the visit of General Parvez Musharraf, the then Chief Executive of Pakistan. The Burma authorities, which met General Musharraf also included U Thaung.

There has been a fresh impetus in defence cooperation between Pakistan and Burma since the year 2000. Burma has been soliciting Pakistan's assistance in some very key areas like setting up of an air-defence network, upgradation of airfields, and establishment of the University of Aeronautical and Space Education (Meiktila). Burma has also sought Pakistan's assistance in cartographic survey and mapping. Given Chinese strategic sensitivities with regard to Burma, such growing bonhomie between Pakistan and Burma cannot be possible without Chinese prodding and support.

It was also during this period that Russia, at Burma's request, announced its intention to build a research reactor in Burma. In 2002, Burma's deputy foreign minister, Khin Maung Win, announced that Burma had decided to build a nuclear research reactor for producing radioisotopes for medical purposes. It may be reiterated that the health-care facilities in Burma are of abysmal standards and there are very few hospitals equipped and trained to handle radio-isotopes. The agreement with Russia for setting up a 10 megawatt reactor near Magwe in Burma
was signed only in May 2007 due to financial difficulties. Nevertheless, hundreds of military personnel had been sent to Russia between the year 2001 and 2007 for training in nuclear science and technology. In some instances, their training duration was extended as the Russian instructors found a significant number of personnel without the requisite basic knowledge and being slow on the uptake. Thus, Burma in the last decade or so has been able to create a pool of personnel trained in harnessing nuclear technology for civil application. On the flip side, and by conscious design, they were also grounded in the basic knowledge of nuclear technology, which is being honed and utilized for nuclear weapons development programmes. Sources, however, maintain that Burma's technological manpower resources despite all the efforts are still not competent enough to handle nuclear facilities or programmes.

Therefore, Burma has adopted a two pronged strategy for development of its nuclear weapons programme. The setting up of the 10 megawatt reactor by Russia is a parallel venture to act as a ruse for nuclear weapons development activities with the active collaboration of North Korea. Although Burma is signatory to the Nuclear Proliferation Treaty (NPT), it is yet to agree to the Additional Protocol, which allows the International Atomic Energy Agency (IAEA) to conduct more intrusive monitoring of nuclear facilities and operations. In May 2007, the US State Department spokesman, Mr Tom Casey, said that the US had a "general sense" that Burma had "neither the regulatory or legal frame nor safeguard provisions" for a country to be able to handle such a programme. He expressed the apprehension that there were "no accounting mechanisms or other kinds of security procedures" to prevent nuclear fuel from being stolen. He added: "We would be concerned about the possibility for accidents, for environmental damage, or for proliferation simply by the possibility of fuel being diverted, stolen or otherwise removed."

Following the resumption of diplomatic relations between Burma and North Korea, Burma's Military Junta permitted North Korean transport planes going to Pakistan and Iran to refuel in the Yangon airport. The clandestine cooperation between North Korea and Iran in the field of nuclear weapons and missile technology is well known. Defectors from Burma allege that the Junta has sent uranium deposits from its mines to Iran, as also Russia, for evaluation.

The nuclear weapons programme that Burma embarked on a decade ago characterizes the coalescing of its strategic imperatives with an indulgent China. The involvement of North Korea, Pakistan and to an extent Iran, for furtherance of China's regional and global agenda is in keeping with their status as proxy powers of the latter.

Burma's determined bid to acquire nuclear capability is 'not India-centric.' It does not perceive any threat from India, which is apparent from the deployment pattern of its military. Further, it has no fixed defences along the 1463 km long Indo- Burma border, which is largely undisputed. In fact, Burma clearly desisted from denouncing the Indian nuclear tests in May 1998. Burma is pursuing the nuclear course for the very survivability of the military regime. In that it is probably guided by the North Korean example. The military regime in Burma has also been circumspect about turning into a vassal state of China. However, the regime's survival compulsions have outweighed other considerations, which China has been ruthlessly exploiting.

Internationally, the isolation of Burma has rendered it into a desperate political and economic situation. Therefore, the nuclear capability in the plausible reckoning of the Military Junta will invest it with the much needed diplomatic maneuver space in the international arena, in the absence of which Burma has no one to turn to, except China. Indeed, it is the international isolation of Burma in the 90s that compelled it to become beholden of China. Nevertheless, China's patronage and even its admission into the ASEAN as a full member have not mitigated its political and economic problems. The western world continues to view the Burma regime as totalitarian, repressive and regressive.

The military dispensation in Burma, very much like the regime in North Korea is paranoid about being dislodged by intervention, military or otherwise, by the US and its allies. The nuclear weapons capability, the Burma regime contends will strategically insulate it against any such design.
For China, a nuclear armed Burma will further bolster its strategic encirclement of India, the major challenge to its regional supremacy. In the global context, proxy nuclear states serve as robust strategic pawns in the prevailing uni-polar international order.

Burma's nuclear power status will have serious ramifications for the ASEAN. Besides driving the wedge in the grouping, it will act as a counterpoise to the ASEAN countries considered close to the US. It may be mentioned that all members of the ASEAN signed the South East Asian Nuclear Weapons Free Zone Treaty, which came into force in 1997.

The most disturbing part of Burma's nuclear programme is the China-North Korea-Burma-Pakistan-Iran axis. Some analysts reckon that it is the part that Burma's nuclear programme is not entirely of its own volition, but is a strategic maneuver by China and its proxies. They maintain that the large number of tunnels being done in Burma is to store nuclear material of these countries under the international scanner. Burma being an isolated and closed country is ideal for the purpose. In other words, Burma may be becoming a nuclear hub of all nuclear pariah states under the leadership of China.

(Description of Source: New Delhi Indian Defence Review in English -- Quarterly magazine on defense issues. Most writers are retired senior military generals.)
Recent FOIA Requests

FOIA/PA Requests Received During the Period of November 20 – November 25, 2009

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Rewarding Burma's Generals

The Obama Administration is starting to worry about Burma's nuclear ambitions. That's the good news. The bad news is that the White House is taking the same failed tack it used with Tehran and Pyongyang and trying to cajole the generals out of their biggest potential bargaining chip.

Assistant Secretary of State Kurt Campbell calls this policy "pragmatic engagement." In testimony to Congress last week, he confirmed the U.S. would soon send a "fact-finding" mission to Naypyidaw, possibly as early as next week. The delegation will discuss "alleged concerns associated with U.N. Resolution 1874," referring to this year's Security Council measure that forbids U.N. members from trading arms with North Korea.

The U.S. is right to pay attention to Burma's burgeoning relationship with Pyongyang. A U.S. destroyer trailed a North Korean military ship, the Kang Nam, for weeks earlier this year as it sailed toward Burma, presumably to deliver weapons. The regime has also built a series of tunnels near the capital which analysts say could be used for military operations or missile storage.

Mr. Campbell claims the dialogue, which comes after the U.S. hosted a high-level Burmese diplomat in September—will "test the intentions of the Burmese leadership and the sincerity of their expressed interest in a more positive relationship with the United States."

But by even showing up, the U.S. team would hand the generals a diplomatic victory. A visit by Mr. Campbell would be the highest-level U.S. delegation to visit Burma since Madeleine Albright's trip in 1995, when she was ambassador to the United Nations.

Meanwhile, the generals have shown no indication to change their behavior. Over the past few months, the regime has intensified its ethnic-cleansing campaign against minorities, placed Aung San Suu Kyi under house arrest (again), and detained and tortured a U.S. citizen, Kyaw Zaw Lin, who has ties to the dissident community.

That makes Mr. Campbell's talk of increasing humanitarian aid premature and potentially very damaging. Burma has a highly restrictive environment where many aid groups are beholden to the state. USAID will already funnel some $28 million into Burma-related programs this year, about 40% of which will go directly inside the country.

To his credit, Mr. Campbell has said he would meet with imprisoned opposition leader Aung San Suu Kyi, ask the generals to release her and all political prisoners, and talk to the political opposition in preparation for elections next year.

But his very presence in Naypyidaw would send a message that the generals' embrace of North Korea is paying off handsomely. Other countries will take note of this lesson, too.
The Future Nuclear Powers You Should Be Worried About

Iran's and North Korea's nuclear programs -- not to mention the risk of loose nukes in Russia or Pakistan -- are worrying enough. But a number of other countries are looking to join the nuclear club, with terrifying potential consequences.

BY MORDCHAI SHUALY
OCTOBER 20, 2009

[EXCERPT]

BURMA

Status: Substantial evidence points toward Burmese collaboration with North Korea in the development of a secret nuclear reactor and plutonium extraction facility. The reactor could be operational as early as 2014.

Why you should worry: Suspicions of a nascent Burmese nuclear weapons program are widespread. In July, U.S. Secretary of State Hillary Clinton publicly worried about military cooperation between North Korea and Burma, saying, "It would be destabilizing for the region. It would pose a direct threat to Burma's neighbors." Clinton's worries are validated by the reports of two recent Burmese defectors, one a former business executive involved in Burma's nuclear contracts, and the other an officer in a secret nuclear battalion in the Burmese Army, whose roles in Burma's clandestine nuclear program were described in the Sydney Morning Herald.

Tensions have been rising between Burma and Bangladesh since 2008, with a border dispute and a buildup of military forces along the disputed area. The tension has risen palpably; in the past two weeks, in addition to heavy tanks and artillery, at least five Burmese and four Bangladeshi warships have faced off across the Bay of Bengal. With both countries looking to go nuclear, the prospect of this conflict exploding is only more worrying.

Plus, the Burmese junta has substantial internal instability to contend with. There are reports of a recent "clearance sale" of heroin by ethnic militias, who are rushing to sell off the drugs to finance enormous weapons purchases. The drugs are being sold at bargain-basement prices in preparation for a possible resumption of civil war. These ethnic groups have been fighting the government on and off for more than 60 years. The fighting has largely occurred in Burma's border areas, but a resumption of wide-scale violence also carries the threat of discouraging foreign investments in Burma's energy sector, further weakening and isolating an already dangerous regime.
The pariah's nuclear blackmail
M. Abdul Hafiz
Monday, October 12, 2009

NONE would dispute the generally held belief that North Korea and Burma have the two most oppressive regimes in Asia. They rule over two of the continent's backwater, and that's no coincidence whatever. Notwithstanding the many common features they, however, have stark differences between them. No foreign leader of distinction cares to pay court to the ruling generals of Burma in their weirdly grandiose new capital of Naypyidaw. In sharp contrast, even Bill Clinton, one of the world's most recognisable celebrity statesmen, makes pilgrimage to Pyonyang.

Clinton had gone there, of course, to secure the release of two American journalists who were apprehended on the China-North Korea border a few months ago and held hostage since then. It is presumed that the North Koreans did so with the explicit purpose of forcing a high level American visit and hitting the news headlines. The US did pay the Devil but with a private US citizen rather than his wife, the US secretary of state, making the visit to Kim Jong-il.

However, here's the big difference. The Burmese regime is looked upon by most foreign governments as ugly but basically harmless except to its own people, but the North Korean regime is seen both as ugly and as extremely dangerous. And the dangerous thing about North Korea is its nuclear weapons. If the Burmese generals also want to have emissaries from great powers genuflecting at their doorstep they need some nuclear pieces in their arsenal, although a nuclear-armed Burma is indeed a ridiculous idea. Burma has no external enemy that it needs to deter, let alone wants to attack.

But respect also matters for a regime like the one at Burma, otherwise it feels neglected and the regime's legitimacy is always put to the question. According to the regime's estimate, a few Burmese nukes on a launching pad would elicit a whole lot of foreign attention as well as respect. The articles published recently by Prof. Desmond Ball of ANU (an authority on strategic matters) in the Sydney Morning Herald and Bangkok Post pointed for the first time to the Burmese nuclear ambition, Ball's revelations suggest that the Burmese military regime has already sought North Korean help to build its own nuclear weapon. It specifically wants the North Koreans to create a plutonium reprocessing plant in the caves near Laung Laing in Northern Burma -- not far from the site of a civilian nuclear reactor that is being built with Russian help.

So far, the story surrounding Burma's nuclear activity sounds like a fantasy. But the usually reliable website "Dictator Watch" has been publishing warnings about Burmese nuclear weapon projects for several years now. Most of the information emanating from the website come from the defectors. For example, a former army officer who was sent to Moscow for two years training in nuclear engineering never returned, and joined the ranks of informers on Burma's nuclear secrets.

The speculations, however, are about why North Korea would be in complicity with Burma to further proliferate nuclear technology. One guess is that North Korea is being paid in "yellow cake" -- partially refined uranium which Burma is endowed with. And North Korean help is also needed because of the fact that the country is willing to sell technology to anybody equally willing to pay.
These make her more dangerous. And being so dangerous is what forces people like Clinton and Hillary to visit this otherwise pariah state. In this process of appeasement, a stage may be reached when even Barack Obama may be willing to talk to it.

There are several other pointers that North Korea is really helping Burma to develop its nuclear weapon -- Prof. Ball suggested that Burma could be processing 8 kg of plutonium per year by 2014, after which it could produce one atomic bomb per year. But it is also know that apparently competent intelligence agencies like CIA and Mossad have been predicting that Iran would have nuclear weapons within five years -- practically every year since 1990. They were wrong about Iran every year. And Iran is a much more advanced country in scientific, technological and industrial terms, than Burma.

Supposing the prediction as regards Burma comes true, why would Burma be doing it? Not to nuke Thailand, Malaysia or Bangladesh for it has no serious quarrel with these neighbours. But one can imagine that Senior General Than Shwe and his colleagues would be a great deal relieved. Because then the US and other great powers, instead of condemning and boycotting the Burmese dictatorship, would be begging it to be responsible and give up its nuclear weapons. North Korea also developed nuclear weapon precisely for the same purpose.

Brig (retd) Hafiz is former DG of BIISS [Bangladesh Institute of International and Strategic Studies].
Most of the military power states in the world aspire to become a nuclear power especially in this highly competitive world. The most recent participant in the race to become a nuclear state is Myanmar. After getting independence in 1948, Myanmar has claimed that it has only acquired weapons for internal security and defense against external enemies. Myanmar was among the first countries to become a State Party to the 1963 Partial Test Ban Treaty [PTBT]. It has also signed the 1967 Outer Space Treaty and is a State Party to the 1968 Nuclear Non-Proliferation Treaty [NPT]. Myanmar has signed, but not yet ratified the 1972 Seabed Test Ban Treaty.

Since 1988, adherence to these international agreements have been confirmed by the State Law and Order Restoration Council [SLORC] and State Peace and Development Council [SPDC] governments. US Secretary of State Hillary Clinton recently voiced concern that Pyongyang was transferring weapons and nuclear technology to Myanmar. According to Sydney Morning Herald, two defectors from Myanmar named Moe Jo and Tin Min made ‘confessional statement’ saying, North Korea is helping Myanmar, formerly Burma, build a secret nuclear reactor and plutonium extraction plant to build an atomic bomb within five years. The nuclear complex is hidden inside a mountain at Naung Laing, in Myanmar’s north, and runs parallel to a civil reactor being built at another site by Russia. Moe Jo, a former Myanmar army officer, allegedly told he was trained for a 1,000-man “nuclear battalion” and that Myanmar had provided yellowcake uranium to North Korea and Iran. “He said that the army planned a plutonium reprocessing system and that Russian experts were on site to show how it was done.” Moe Jo said part of the army’s nuclear battalion was stationed in a local village to work on a weapon, and a secret operations centre was hidden in the Sethkaya Mountains.

“[It was] a set up including engineers, artillery and communications to act as a command and control centre for the nuclear weapons program.”

Tin Min was said to have been a book keeper for Tay Za, a close associate of the junta’s head General Than Shwe, and told in 2004 he had paid a construction company to build a tunnel in the Naung Laing mountain “wide enough for two trucks to pass each other”.

Tin Min said book keeper Tay Za negotiated nuclear contracts with Russia and North Korea and arranged the collection and transport, at night and by river, of containers of equipment from North Korean boats in Yangon’s port.

Tin Min reportedly said Tay Za told him the junta knew it couldn’t compete with neighbouring Thailand on conventional weapons, but wanted to “play power like North Korea”.

“They hope to combine nuclear and air defense missiles,” Tay Za said, according to Tin Min. Heretofor Russia has been a willing supplier with anyone who can pay their price.

While Sydney Morning Herald alleged Pyongyang for supplying nuclear weapons to Myanmar, in several reports published in international media, such allegation goes against Russia.

Michael Sullivan, an eminent analyst said, There is no doubt Myanmar has a nuclear program. It sent scientists, technicians and army officers to Russia for training in recent years. And Moscow has agreed to supply Myanmar with a small nuclear reactor for civilian use. None of this is disputed. The question is do the Burmese generals want a nuclear weapon too.
Another eminent writer Bertil Lintner, who has extensive knowledge on South Asian affairs said, It is quite clear, I think, that although the Burmese may not have a bomb or even a nuclear capability - no, not yet - they're certainly interested in acquiring one.

Mr. Lintner has written extensively about Myanmar from his base in Thailand.

On 18 May 2007, Asia News Agency reported, Russia will provide Myanmar with it’s first nuclear reactor.

Quoting Russia's Federal Atomic Energy Agency [Rosatom], Asia News Agency said it had reached a deal with the military junta to build a nuclear research centre. The plant will have a light-water reactor with a capacity of 10MW. It will use 20 per cent-enriched nuclear fuel.

Russia's Federal Atomic Energy Agency insisted Myanmar had a right to peaceful nuclear technology - and said that there was "no way" it could use the reactor to develop nuclear missiles. It was further learnt that, the Nuclear Reactors would be set at Pwint Phyu, a small city in the centre of the country, in the region of Magwe.

Moscow claimed that construction of the Burmese nuclear power plant would take place under the strict supervision of the International Atomic Energy Agency [IAEA].

On August 3, 2009, Phil Thornton, an Australian journalist based on the Thai-Myanmar border said, Yangoon is building a secret nuclear reactor and plutonium extraction facility with the assistance of Pyongyang and Yangoon is also joining hands with Moscow for further growth of this project.

Meanwhile, Myanmar’s Deputy Minister for Foreign Affair, U. Khin-Marng said the reactor would be used to train to produce radio isotope, which have a range of uses, including in medicine and agriculture science. He also pointed that the rector would be for peaceful purpose in the interest of the people of Myanmar’.

The present Junta in Yangoon strongly believes that Myanmar’s interest in nuclear power is not a wrong purpose. David Albright, the head of the Washington based Institute for Science and International Security, which monitors nuclear proliferation, said, there’s no hard evidence, just suspicions right now. Although, Albright pointed out that visit to Myanmar by executive from the North Korean firm, Namchongang Trading Corporation, which is under the sanctions for its role in trading nuclear technology can be a pointer to the growing suspicion. On 30th June ,2009, According to Burmanet News, Japanese police arrested three top businessmen on suspicion of attempting to export to Burma a measuring instrument that could be used to develop long-range ballistic missile systems. Japan is also believed that North Korea was attempting to promote the transfer of missile technologies, such as its Taepodong system, to Myanmar. According to the police, the three conspired to export the magnetic measuring device to Burma via Malaysia around January 2009 at a price of about 7 million Japanese Yen [US $73,000].

Interestingly, Myanmar has become buffer state between four nuclear power states in Asia: China, India, Pakistan and North Korea. The military Junta has good tie with North Korea. On the other hand China and Pakistan who shares nuclear knowhow have also good relation with Myanmar. In a peculiar set up, New Delhi which abandoned support for Pro-democracy forces in 1993 and has embarked upon multifaceted relationship with the eastern neighbor. On the wake of Myanmar’s nuclear ambition seems to be both direct or indirect threat to the security of India.

The revelation of Myanmar’s link with Pakistan nuclear establishment also assumes significance in the recent purchase of nuclear reactor for research purposes. Pakistan also has been providing small conventional weapon and training to the myanmarises armed force, and has joined China in concluding an intelligence sharing agreement with Myanmar regarding India’s force deployments in the northeast and Bay-of-Bengal.
It is also learnt that considering Myanmar’s anti-US stand, terror patron nation Iran is also extending secret support to Yangon in building its nuclear strength. Tehran is also using all our efforts as well its propaganda machinery as well as its own terrorist group named Hezbollah in spreading rumors in the world that Israel and India are extending military and nuclear assistance to Myanmar.

In response to my recent article titled ‘Crisis in South Asia and rise of Islamist-leftist militancy’, a leader of Iranian Hezbollah based in Bangladesh in an email message said, “According to our sources, Burma is trying to build Nuclear Reactor with the help of North Korea.

“According to many source they [Myanmar] are serious to produce nuclear bomb.

“Myanmar is enjoying very good relation with India.

“Myanmar and Israel have very good relation. Isreal sold arms to Myanmar and giving training on Intelligence and agriculture sector."

This particular email sent by the Iranian Hezbollah clearly proves that, Tehran is trying to mislead the world by spreading false information on Myanmar’s ongoing efforts in building Nuclear Bomb. Tehran is trying to put blame on both New Delhi and Jerusalem.

Such propaganda centering India and Israel was purposefully made by the members of Iranian terror outfit with the ulterior motive of instigating anti-Indian and anti-Israel sentiment in all Muslim nations, including Bangladesh.

Iran has been funding anti-Israel activities for decades. It even patronizes Islamist militancy under the umbrella of ‘Al-Quds Society’ in many Muslim nations. For years, Iranian terror outfit Hezbollah is continuing to spread wings in a number of Muslim nations while recruiting and training Jihadists with anti-West brain-wash.
Policy Advice for Addressing the Myanmar Nuclear Issue
by Mark Fitzpatrick

Mark Fitzpatrick (Fitzpatrick@iiss.org) is director of the Non-Proliferation and Disarmament Program at the International Institute for Strategic Studies, and editor of Preventing Nuclear Dangers in Southeast Asia (London: IISS, Sept. 28, 2009), from which this article is taken.

[Sourcebook comment: This article was reprinted in the Japan Times of 2009-10-11.]

As the nuclear renaissance comes to Southeast Asia, the countries of the region face an important turning point. Decisions taken today will help determine whether nuclear energy will play a positive role in their economic development or whether a shadow of nuclear danger will accompany the benefits of this energy source. There are worries about nuclear safety, the opacity about Myanmar’s nuclear plans and its growing connections with North Korea, and the extent to which vulnerabilities in national trade controls have been exploited by outside states and non-state actors.

ASEAN states have an opportunity to reinforce global standards aimed at minimizing the safety, security, and proliferation risks of nuclear energy. With ASEAN’s tradition of cooperation, the region’s relatively benign strategic environment and the nonproliferation norm epitomized in the Southeast Asian Nuclear-Weapon-Free Zone Treaty (Bangkok Treaty), the region can develop strengthened arrangements for safe and secure nuclear energy that can be a model for others. For Myanmar, three recommendations should be considered.

Keep close watch

The Bangkok Treaty requirement for members to share information about nuclear-development plans is nowhere more important than with Myanmar. Elsewhere in Southeast Asia, concerns about nuclear projects are focused on safety and security issues. Those concerns are relevant to Myanmar as well. However, the prospect of that country having an interest in nuclear weapons causes the most concern. Although reports of a North Korea nuclear link are unconfirmed, Myanmar’s relationship with Pyongyang, the leadership’s secretive nature, paranoid perspective, and disregard for international norms along with the North’s record of onward proliferation are ample reason for others to be closely attentive.

Insist on openness

Myanmar can help address these concerns by adopting international standards of nuclear transparency. This means accepting and fully implementing the IAEA Additional Protocol and amending the Small Quantities Protocol (SQP) to Myanmar’s safeguards agreement. Myanmar currently adheres to an old version of the SQP, which holds in abeyance most of operative provisions of the IAEA’s verification tools. The country’s neighbors should encourage this transparency, and those that also have the outdated SQP (Brunei, Cambodia, and Laos) should follow the lead of Singapore and adopt the September 2005 version of this protocol promulgated by the IAEA to close the loophole.
Although the Myanmar government has not shown itself to be susceptible to external pressure in its treatment of domestic opposition, it does care about its international reputation and may be more amenable to persuasion in selective cases, as demonstrated by its apparent agreement to adhere to UN Security Council resolution 1874 banning arms exports from North Korea. Fellow ASEAN members may wish to consider invoking the Bangkok Treaty Article 13 provision to request a fact-finding mission to Myanmar to clarify some of the questions that have been raised. Myanmar should also allow the IAEA to investigate credible reports of clandestine nuclear cooperation with other countries. Other states should be willing to share with the IAEA any intelligence information about such reports, so that the agency has good grounds for conducting an investigation.

Myanmar’s nuclear cooperation with Russia is not itself of proliferation concern, given the plutonium-production limitations of the planned 10MWt reactor. The possibility cannot be dismissed, however, of Myanmar having a hidden nuclear agenda. National pride is the most logical explanation for why such an impoverished country would seek such a high-tech facility, but it is conceivable that secondary motivations might include providing a cover for a parallel military nuclear effort or as a step in a program to build up a cadre of technical expertise that might be used for weapons-related work. Myanmar is aware of what North Korea accomplished in the nuclear field after starting in the early 1960s with a small research reactor. It would behoove Russia to insist on full transparency – as well as strict adherence to international safety conventions – before a final contract is agreed. Russia and Myanmar should also share with the IAEA details of discussions on site selection and provide design information before any construction begins on the reactor.

**Begin contingency planning**

If concerns are borne out and it is discovered that Myanmar is, in fact, engaged in secretive nuclear cooperation with North Korea or any other country or non-state actor, ASEAN and the SEANWFZ will be put to the test. If Myanmar were to pursue nuclear weapons, the Association as it stands today and its dispute-resolution mechanisms alone would not be able to dissuade Myanmar from that path. Prudent planning for such a contingency could lead ASEAN members to take steps now to improve these mechanisms, starting with enforcing the information-sharing requirements of the Bangkok Treaty. Meanwhile, India and Myanmar’s other closest neighbors along with outside powers with regional interests may wish to consider sharing analysis of Myanmar’s nuclear intentions.
RECENTLY, as rumors of Myanmar’s “nuclear plan” began to swirl in the Western media, even U.S. Secretary of State Hillary Clinton voiced concern over the country’s alleged nuclear ambition. But it is questionable that an impoverished country like Myanmar could produce the atomic bomb in the short term in the first place. So what’s behind the spread of the rumors?

Media fabrications

Over the years, the international press corps has already played up Myanmar’s “nuclear plan,” reporting that Myanmar, also known as Burma in the West, has acquired nuclear technology and nuclear weapons from North Korea. But more recently, nuclear proliferation concerns regarding North Korea and Iran have become bigger hot-button issues.

Now once again, however, it’s Myanmar’s turn.

The Sydney Morning Herald, for example, broke the news on August 1 which said, with assistance from North Korea, Myanmar had embarked on a clandestine nuclear project aiming to acquire its first atomic bomb within five years. It further alleged that Myanmar has been providing Pyongyang with enriched uranium in exchange for nuclear technology.

Then, on August 3, a Russian newspaper, quoting exiled Myanmar scholars, said the number of Myanmar’s nuclear experts would reach 1,000 by the year 2012. Thanks to these media reports, the Myanmar nuclear issue has become the focus of international media attention.

The U.S. Government has since exploited these rumors, trying to disingenuously “arrange” a Myanmar nuclear project. Last month, in a notable instance, Hillary Clinton raised the specter of closer North Korea-Myanmar collaboration in developing nuclear weapons as a dangerous precedent during her visit to Thailand for the Regional Forum of the Association of Southeast Asian Nations (ASEAN).

Moreover, she voiced concern that the collaboration would endanger not just neighboring countries but also regional stability. Kurt Campbell, U.S. Assistant Secretary of State for East Asia and Pacific Affairs, has also speculated that Myanmar reinforced its cooperation with North Korea for the express purpose of obtaining a nuclear weapon.

Underfinanced, unrealistic

Myanmar pursued a nuclear plan for the first time in 1956, but the plan was abandoned with the ascent of the U Ne Win military government six years later.

More recent efforts by Myanmar to build a nuclear reactor, this time with Russia’s help, foundered as well. Initially, Moscow agreed to help Myanmar establish a nuclear studies center, including a nuclear reactor, in 2002. But the program was shelved the following year because of severe financial problems.
It was not until 2007 that Myanmar and Russia signed an agreement to restart the program with the participation of Russia’s State Atomic Energy Corporation.

Andrew Selth, an Australian academic and military expert, said the construction of the nuclear reactor had made little progress, owing to lack of funds. Indeed, Myanmar’s nuclear program remains in its infancy due to financial and technical difficulties. Thus, it is highly unlikely that Myanmar will fulfill its nuclear ambitions any time soon.

In fact, due to its backward economy, Myanmar can hardly get enough funds for a nuclear project at all. Being one of world’s poorest nations, Myanmar has suffered from decades of economic stagnation and political isolation. Last year, its gross domestic product was only $27.18 billion.

With a massive external debt of $6.7 billion and limited foreign exchange reserves of $3.6 billion, there is no way such an undeveloped country could afford the high costs of a nuclear project.

In addition, as the nuclear reactor program with Russia has not made any progress so far, it has provided scarce technical and material support for producing nuclear weapons. Besides, with the orientation of academic research, the Moscow Institute of Physics and Technology cannot turn Myanmar’s technicians into nuclear experts.

Furthermore, Myanmar signed a comprehensive safeguards agreement with the International Atomic Energy Agency (IAEA) in 1995. Thus, under the tight regulations of the IAEA, it will be no secret should Myanmar decide to enrich plutonium with a nuclear reactor to produce nuclear weapons.

In fact, U.S. intelligence agencies have no evidence linking Myanmar to nuclear weapons, nor have IAEA officials made any comments to date on the fresh allegations. But Selth has said that Myanmar would probably take a risk in acquiring nuclear weapons in order to enhance its international status as well as to increase its bargaining chips with the international community.

A defector from Myanmar has also said that a secret nuclear reactor is being constructed with North Korea’s aid in a mountain near Naung Laing in Myanmar’s north. The country, the defector added, is also exploiting two new uranium mines. However, with no serious evidence, it is difficult to tell if this is credible or not.

**True intentions**

There are several issues at play here. First, one agenda clearly exists to sever North Korea’s economic and trade contact with Southeast Asia, as well as to pressure China. Because of Western media allegations, neither Myanmar, nor any other Southeast Asian nations, would dare allow Kang Nam 1, the North Korean cargo ship reported to be sailing to Myanmar for trade in weapons, to land ashore.

In the future, it would be extremely difficult for North Korean ships—even those with ordinary goods aboard—to conduct normal transactions with Southeast Asian countries. Besides, Washington could use the opportunity to ratchet up the North Korean nuclear issue as a means to manipulate China and Chinese interests in the region.
Second, the West may intend to further pressure Myanmar with the renewed cause of a “nuclear threat.” The United States and other Western countries have long been applying sanctions and pressure on Myanmar based on democracy and human right issues. But these have achieved little effect—and no support from ASEAN countries.

By igniting a Myanmar nuclear issue, which might have a chance of being exaggerated as nuclear proliferation in the future, Western countries could “create” a nuclear-armed Myanmar. Through this, they could dramatize its threat to the region, thus creating an atmosphere of fear and pressure from the international community, including ASEAN. This would leave Myanmar more alone and isolated than it already is.

Furthermore, the United States could achieve its goal of weakening ASEAN and thus take the opportunity to strengthen its control over the organization. By upgrading the Myanmar nuclear issue, the United States will inevitably cause internal conflict among ASEAN countries, notably between Myanmar and Thailand, Indonesia and Malaysia—countries that have a history of criticizing Myanmar. This criticism is bound to cause regional tensions.

Third, the West may create a new regional flashpoint in areas southwest of China, thus tying down Beijing’s diplomatic resources while erecting barriers to Sino-ASEAN relations.

With the North Korean nuclear issue looming large in Northeast Asia, the heating up of the Myanmar nuclear issue may yet be another big burden in China’s international diplomacy. The West clearly intends to create disturbances to drain China’s diplomatic energy, leaving it bogged down handling peripheral matters—which, as a result, will leave Beijing with less energy to address global affairs and limit its role in the international arena.

Besides, as the relations between China and Southeast Asian countries have been upgraded, the United States has recently displayed an obvious intention to weaken Beijing’s influence with its neighbors to the southeast.

The great clamor over Myanmar’s nuclear issue will bring heavy new challenges to Sino-Myanmar and Sino-ASEAN relations. China will therefore face more difficulties in balancing its relations with its neighboring countries and with the West.

Will Myanmar obtain its own nuclear weapons? That’s quite a question.

Nonetheless, the cloud surrounding Myanmar’s nuclear ambitions will continue to expand, so long as the West keeps playing up its rumors and reveals more shocking news. U.S. nuclear non-proliferation experts have called on the IAEA to launch an investigation on Myanmar. The U.S. Government may also exert further pressure on the IAEA, and even bring the issue before the UN Security Council. So when it comes to Myanmar’s nuclear issue, as with the mushroom clouds of weapons of mass destruction in Iraq, any slightest misunderstanding could easily end up in another U.S. invasion.
Ship seizure
Last Updated: August 29, 2009 7:51PM UAE / August 29, 2009 3:51PM GMT

North Korea has long been a pivotal figure in the illicit arms trade, its reclusive leadership persistently flaunting international sanctions to buy and sell sensitive technologies. As we report today in The National, the UAE has seized a cargo ship carrying North Korean weapons destined for Iran. Preliminary reports indicate the contraband was rocket-propelled grenades hidden as “machine parts”, but the incident sheds light on the greater issue of proliferation and regional security.

Pyongyang’s second atomic test earlier this year demonstrated a nuclear weapons programme that is steadily gaining ground. With substantial evidence linking the country in the past to the Pakistani scientist AQ Khan, the Syrian reactor that was destroyed by Israel in 2007 and the suspected programme in Myanmar, there is little doubt that North Korea is a key supporter of illicit nuclear programmes.

In one way, the seizure of the ship holding North Korean contraband is a reminder of the vigilance needed to keep the Gulf free of illicitly trafficked arms. Unfortunately in the globalised world, the problems of East Asia now concern us all.
Burma's nuclear ambitions: smoke or fire?

Updated August 26, 2009 11:50:12

Over the past few months there's been increased speculation about whether Burma is developing a nuclear weapon, but how much truth is there to the claims?

In July, at an ASEAN meeting in Thailand, US Secretary of State Hillary Clinton told reporters of concerns about the transfer of "nuclear technology" from North Korea to Burma. The Australian Strategic Policy Institute discusses the issue in a new report, 'Burma and North Korea: Smoke or Fire?'

Presenter: Liam Cochrane
Speakers: Dr Carl Ungerer, director of the National Security Project at the Australian Strategic Policy Institute

UNGERER: Well it's been a chequered one in the past, [it] goes back to the fact that they both achieved independence in 1948 and didn't have much of a relationship. But it was in the early 1980s when North Korean agents were sent down to kill ministers of the South Korean government in Rangoon, they achieved the death of a few of them and several Burmese at the time. Relations soured horrendously after that as you can imagine but then picked up again after 1988 and the crushing of the pro-democracy movement in Burma. And since then, since about 2000 there seems to be a growing pattern of military cooperation and certainly it's the case that Burma has been procuring military equipment and hardware from North Korea for some time now.

COCHRANE: And I understand there's also been, it's fairly widely assumed, that they've been helping with these tunnels or underground facilities. Can you tell me about those, what do they look like and what do you think they are?

UNGERER: Well the reports are unclear but clearly Burma has been engaged in building a number of tunnels, we've seen that in satellite photos and other imagery that's available on the web. Now we can speculate about what the purpose of those is, but clearly governments post the Iraq war have decided in rogue regimes that digging underground is the best defence against any sort of potential air attack. Now they could be for a range of reasons and this is where the speculation begins, anything from the storage of military hardware right through to the construction of a facility that might house a uranium enrichment facility. So what the actual purpose of some of these tunnels is unclear, but nonetheless both North Korea and Burma have decided that digging underground is one of the best defences.

COCHRANE: Now Hillary Clinton spoke of the concern, as I mentioned, about the transfer of nuclear technology. Were her comments misinterpreted?

UNGERER: No I don't think so because I think she was very careful in what she said, she didn't actually talk about a potential nuclear weapons cooperation program between the two countries. She said that the US and other countries took seriously the growing signs of military cooperation between Pyongyang and Napyidaw. She said that they included the transfer of nuclear technology and other dangerous weapons, but that is not in and of itself an argument to say that there's been a transfer of a weapons program as yet.

COCHRANE: Hillary Clinton did also say though at that same press conference that in her words, "It would be destabilising for the region, it would pose a direct threat to Burma's neighbours". I mean that doesn't sound like nuclear energy production, does it?

UNGERER: No but it's also the fact that that took place in the immediate aftermath of the ship that was travelling, the Kang Nam 1, potentially with short-range ballistic missiles on it. Now that would be an extremely destabilising development if Burma were to acquire short-range ballistic missiles.
COCHRANE: Another piece of evidence that has come forward or claims that have come forward were the two defectors that spoke to Professor Desmond Ball and another journalist on the border. What are your views on the value of the defectors' testimony?

UNGERER: Well Andrew Selth, the author of this report, has looked at these claims very carefully and in fact they go back to 2002 when these defectors first raised their concerns about what was going on inside Burma. They've been known for some time even though it was only August this year that the Fairfax papers had published this material. And Andrew's report I think sets out quite clearly that we have to be very cautious and careful about some of the claims made by these two individuals, and whether or not either of them would have had a really clear view of what was going on if Burma was actually engaged in a nuclear weapons program. One of them was an older accountant, whether or not an accountant would have much visibility of a nuclear weapons program is unclear, and some of the claims really have been untested and appear somewhat dubious.

COCHRANE: Dr Carl Ungerer just in the 20 seconds we've got remaining I want to ask you about the impact of Iraq and not finding weapons of mass destruction as expected there. Has that led to the world being reluctant to draw conclusions on Burma?

UNGERER: I don't think it's necessarily affecting sort of the strategic analysis judgements on Burma. I think people are more careful, they're more cautious and there's going to have to be much harder evidence than is currently available on Burma before anyone jumps out and declares a nuclear weapons program.
At a time when there has been an increasing concern in the international community over the clandestine nuclear programme in North Korea and Iran, reports regarding the possible involvement of Myanmar’s military junta in developing a nuclear arsenal are disturbing. Factors like the recent aborted voyage of a North Korean ship – the Kang Nam I- allegedly carrying a cargo of Scud-type missiles and heading towards Myanmar, the arrest of two Japanese nationals and a North Korean in June, 2009, this year for allegedly trying to export a magnetic measuring device to Myanmar that could be used to develop missiles, recent photographs of massive tunnels in Myanmar, and the alleged reports of a secret military pact between Myanmar and North Korea, have raised alarm bells that there have been a nuclear relationship between North Korea and Myanmar. The possibility that Myanmar too might be aspiring to go nuclear, possibly with the help of North Korea, is sending shivers down through the spine of its neighbouring countries, including India.

Reports on this issue started hitting the international media during US Secretary of State Hillary Clinton’s visit to Thailand in July to attend the ASEAN Regional Forum (ARF) meeting. During her visit, Clinton voiced concern over the issue of close North Korean-Myanmar collaboration in the pursuit of offensive weapons, including nuclear armament. At that time, not many were ready to accept her view on the issue, though. However, a recent report published in the Bangkok Post’s Spectrum magazine as well as the Sydney Morning Herald, clearly suggested that Myanmar has enlisted Pyongyang help in building its own nuclear bomb within the next five years. It definitely substantiated Clinton’s suspicion.

The report was the result of a two-year investigation into Myanmar’s nuclear ambitions by Desmond Ball, a regional security expert at the Australian National University and Phil Thornton, a Thai-based Australian journalist. The report, primarily based on the testimony of two Myanmar defectors, including one army officer and a book keeper for a trading company with close links to the military, claimed that Myanmar is excavating uranium in ten locations and has two uranium plants in operation to refine uranium into ‘yellowcake,’ the fissile material for nuclear weapons. The report further reveals that for the production of nuclear weapons, Myanmar has already planned a plutonium reprocessing plant in Naung Laing, in the country’s north. The plant reportedly runs parallel to a civil nuclear reactor being built at another site by Russia.

While explaining Myanmar’s possible motive behind its nuclear ambition, the report reveals that it was basically the inability of the junta to compete with neighbouring Thailand on conventional weapons which ultimately compelled Myanmar to acquire nuclear capability to ‘play power like North Korea’. However, many analysts are of the view that the junta aspires to become nuclear for the dual purpose of international prestige and strategic deterrence. It has also been pointed out that the junta, under growing pressure to democratize, may seek a nuclear deterrent to any foreign moves to force regime change. It remains undoubtedly true that just like Pyongyang, Rangoon too would like to have a nuclear bomb so that they can challenge the Americans and the rest of the world.

Reports regarding Myanmar’s nuclear ambition started circulating since 1998 when just after the back to back nuclear tests carried out by India and Pakistan, the junta introduced an Atomic Energy Law (June 8, 1998). However, Myanmar’s interest in developing civil nuclear expertise came to be known in February 2001 when its decades long conventional military relationship with Russia was expanded to cover the civil nuclear field. In September 2001, the Myanmar government reportedly informed the IAEA about its plan to acquire a nuclear research reactor. But the IAEA inspectors, after their visit to the state, concluded that Myanmar did not have the
required safety standards. Still, Myanmar went ahead with its exploratory talks with Russia on the subject, on which Moscow responded positively.

Myanmar popped up on the N-radar once again after 9/11 when the US troops reportedly found evidence of contacts between some retired and serving nuclear scientists of Pakistan and Al-Qaeda chief Osama Bin Laden. Two of the scientists, reportedly associates of Pakistani atomic renegade, A Q Khan, later on escaped to Myanmar and the junta allegedly offered them refuge there. Although there was no further reliable news about them, it was believed by many that Myanmar was embarking on a nuclear-research project with the help of those two Pakistani scientists, along with the scientists from Russia. A few years later, the junta had reportedly launched a nuclear-related ‘Ayelar Project’ headed by the two Pakistani scientists.

The steady airborne trade between Pakistan and North Korea in missiles and nuclear parts remains an undeniable fact. However, in 2007, it was reported that a transport aircraft that flew from North Korea to Myanmar flew a flight path across India to Pakistan. This was a sign that the missile trade between Pakistan and North Korea, at times, might have been a triangular trade, including Myanmar.

In January 2002, Myanmar government entered into talks with Russia to build a nuclear research reactor which would be used ‘for peaceful purposes’. However, due to the economic hurdles faced by the junta and the Russian reluctance to finalize the deal with Myanmar until it signs the safeguards agreement with the IAEA, no progress could be made on the nuclear project in the next five years. Ultimately in May 2007, Myanmar signed a MoU with Russian atomic energy agency to establish a nuclear studies center in Myanmar, build a 10-megawatt nuclear research reactor for peaceful purposes and train several hundred technicians in its operation.

Myanmar’s links with Iran too have come to light, as the Myanmar’s defectors alleged that the junta has sent uranium deposits from the mines to Iran (along with Russia) for evaluation.

Just a few months ago, videos and photographs of a mysterious ‘Operation Tortoise Shell’ made its way into Thailand. The evidence provided by these sources implicated that North Korea was helping Myanmar constructing around 800 tunnels during 2003-2006.

Myanmar broke off its diplomatic relations with North Korea in 1983 after Pyongyang’s alleged involvement in the bombing of the Martyr’s mausoleum in Yangon in an attempt to assassinate visiting South Korean President, Chun Doo-hwan. However, common interests brought the two secretive nations back together. A number of army delegations travelled to Pyongyang just after the two sides’ resumption of formal diplomatic relations in 2007. Soon, the personalities involved in the visits indicated that Myanmar is probably seeking cooperation from the North not only in procuring weapons, but also in establishing air defense weaponry, missiles, rockets or artillery production facilities. At present there has been a speculation that in return of its military cooperation, North Korea might have been provided with uranium by resource-rich Myanmar.

According to the two defectors’ report, although diplomatic relations between Myanmar and North Korea resumed only recently, cooperation between them began in earnest in September 2000 when a MoU was signed by Burma’s Lieutenant General Thein Hla and North Korean major General Kim Chan Su. During 2001-2002, four more contracts were signed. The ‘official’ agreements between the two countries covered nuclear related activities at two sites and involved North Korea’s assistance in installing, maintaining, training, and supplying equipment at the uranium refining and enrichment plant at Thabike Kyin. At the second reactor site at Naung Laing, the North Koreans agreed to help with the construction of an underground facility and a nuclear reactor. The report further reveals that in recent times, Pyongyang has forged closer ties with the junta by selling arms and missile technology to the latter. Recently, intelligence had found that junta had begun dealing with the Namchongang Trading Company of North Korea for missile and nuclear parts.
Is the allegation credible?

Despite the concern over Myanmar’s possible nuclear ambition, regional intelligence sources seem to be sceptical about the state’s capability to do so. It is so, primarily because verification of stories coming out of Myanmar is quite difficult, as the junta has banned international media. The shocking revelations of the recent report is based on the statements made by the two defectors who may be trying to boost their own importance in the hope of getting themselves resettled to a third country. After all, in various earlier occasions, the junta tried to put out misinformation to cover what it is really doing. Above all, Myanmar is a party to the NPT, and under a safeguards agreement with the IAEA, it is obligated to let the UN watchdog know at least six months ahead of operating a nuclear facility. At the recent ARF meet, Myanmar Foreign Minister Nyan Win assured the ASEAN members that his government would abide by the UN Security Council’s recent resolution on North Korea that prohibits any cooperation with Pyongyang in the nuclear sector. Still, the sceptics are willing to concede that the Myanmar regime is not trustworthy.

Reactions

Reactions on Myanmar’s possible nuclear ambition are somewhat mixed. While during her visit to Thailand, Hillary Clinton stated that the possibility of Pyongyang transferring nuclear technology to Myanmar will be a threat to the U.S. allies in the region, and a ‘complete and irreversible denuclearization is the only viable path for North Korea’, on 3 August, Assistant Secretary of State for Public Affairs, Philip Crowley, stated that over time, the U.S. would like to clarify with Myanmar more precisely the nature of its military cooperation with North Korea.

While reacting to the U.S. view on the issue, Russia states that there is little cause of concern over a possible nuclear link between the two rogue states in Asia. Russian officials further states that the nuclear cooperation between Russia and Myanmar is not in conflict with the NPT or IAEA requirements, and Russia will definitely move ahead with its nuclear project in Myanmar.

Myanmar going nuclear will impact on India’s foreign policy in relation to this region. Although initially both the states had difference on Myanmar’s democratization and Aung San Suu Kyi issue since 2000, under its new ‘Look East’ policy, India has decided to develop cordial relations with the junta and ‘not to interfere in its internal affairs’. In the last few years, both the states have been actively collaborating on weeding out insurgents along the Indo-Myanmar border and developing trade links between the two states.

A nuclear weapon free Myanmar is important for India’s own security as well as for keeping the credibility of the NPT regime intact. A nuclear Myanmar might trigger a nuclear arms race in the region. India has a chance to play an important leadership role in avoiding the occurrence of such a scenario by dealing prudently with the junta.
BURMA is a bugger of a problem. And it's getting worse.

Last weekend, Fairfax papers reported testimony from two Burmese defectors which suggested Rangoon had progressed some distance towards building clandestine nuclear facilities with North Korean assistance.

Burma is a rogue state. Rogue states, like failed states (such as Somalia), are beyond international norms and almost by definition do not care about international opinion, with the exception generally of their one or two sponsors.

Burma is a particularly difficult case. If ever there was an example of the need for some new thinking, it's Burma. Just establishing the facts is extremely challenging. The defector testimony said Burma was constructing tunnels in which it had also begun constructing nuclear reactors, with North Korean help.

This was a valuable story, not because what the defectors say is necessarily true, but because it is useful to know what defectors are saying. After Iraq, everyone is very careful about defector testimony regarding nuclear matters.

Defectors don't always tell you the truth. Sometimes they say what they believe their interrogators want to hear. Sometimes they say what will maximise their value. Sometimes they don't know the truth.

On the other hand, defectors have on occasions given critically important and accurate testimony. It was dissident testimony that revealed Iran's secret nuclear programs.

I have been following this Burmese story a long time. In 2006, I reported that US intelligence harboured deep concerns about Burma's ambitions to acquire nuclear material and expertise from North Korea.

At that time, the best US analysis was that no nuclear material had yet passed from North Korea to Burma.

Having talked to some extremely well-informed Asian analysts, I'm inclined to think the Burmese defector testimony was exaggerated.

No one knows for sure. The stakes are so enormous that we need to make a serious effort, though, to find out all we can. Much of the defector testimony seems to hinge on North Korean assistance in building tunnels. It is true that tunnels can be used to hide reactors. However, there is also significant evidence that North Korea has been helping the paranoid Burmese regime build tunnels as elaborate air raid shelters for the ruling junta in the event of US attack.

A US air attack on Burma is almost inconceivable but Than Shwe's military junta is intensely paranoid. It moved its capital from Rangoon to an inland city apparently because it feared Rangoon was susceptible to military attack.

There is no doubt there is a deep relationship between the Burmese and North Korean militaries. The two countries have a strange history.
Burma broke diplomatic relations with Pyongyang in 1983 after North Korean agents attempted to kill Chun Doo-hwan, the South Korean president then visiting Burma. They missed Chun but killed 20 other people. The two dictatorships re-established relations in April 2007.

Since then, the militaries of both countries have had an intense and deepening relationship. Burma is thought to have imported a great deal of standard infantry equipment from North Korea. Burma maintains the biggest standing army in Southeast Asia, with more than half a million troops and a paramilitary force of more than 100,000. Western governments have been a bit cagey about revealing how much they know of what military materiel has passed between North Korea and Burma. They normally don't go beyond calling on Burma to fully implement UN resolutions that ban member states from trading with North Korea in military equipment and arms.

North Korea also has a record of selling nuclear material to anyone who will buy it. In 2007 the Israelis destroyed a nuclear reactor the North Koreans had helped the Syrians build.

Further, Burma certainly has an indisputable interest in acquiring nuclear technology. A few years ago it signed a deal with Russia to build a small nuclear reactor for research purposes and for the production of nuclear medical materials.

This is a truly bizarre project. Burma has one of the most primitive, impoverished and ineffective health systems in the world. International analysts do not believe Burma could safely run such a reactor. The Russians insist that what they provide Burma will comply completely with International Atomic Energy Agency safeguards. Most analysts think the Russians are on the level about this and have no desire to proliferate any weapons-usable technology to the Burmese. However, the US State Department has criticised the Russian project, saying in effect that it has no reasonable rationale and presents serious dangers.

It seems that the project has gone extremely slowly, primarily because of Burmese financing difficulties.

An important insight comes from India. Indian sources reveal that two Pakistani nuclear scientists, Suleiman Assad and Muhammad Mukhtar, who were part of A.Q. Khan's nuclear proliferation network, went to live in Burma several years ago. After 9/11 the American FBI had wanted to talk to them about their nuclear proliferation activities. There is some disagreement among Indian sources as to whether the men defected to Burma or were encouraged by the Pakistan government to go there.

It seems strange, as China and India, not Pakistan, are the two main external competitors for influence within Burma.

Nonetheless, the Indian sources reporting this are entirely credible, with intelligence and high government service backgrounds.

The Pakistanis surely didn't pick Burma for the lifestyle.

Perhaps the most intriguing evidence of all was US Secretary of State Hillary Clinton remarking at the recent ASEAN meeting in Thailand: "We worry about the transfer of nuclear technology from North Korea to Myanmar (Burma)."

Does that statement confirm that such a transfer has taken place?

Probably not. If the Americans had hard evidence of this they would almost certainly be taking stronger international action. But it would be important for Clinton to send a strong public message, not least to the Burmese, if, as seems likely, the Americans were aware even that the Burmese were talking it over with the North Koreans, or in the very early stages of a nuclear effort.
Finally, the Burmese operate at a pretty primitive level technologically. It's unlikely they could produce nuclear reactors or weapons. But in these matters intent is everything. The Burmese might be the only people in the world who see the North Koreans as at least partly a positive model, having secured themselves from external interference through possession of nuclear weapons.

This is a difficult story but one of immense importance. This column has long believed that by isolating Burma the West only serves to increase the rogue-state mentality that animates its rulers. It is an extremely unpleasant regime, for which there is no ethical defence at all. But if we continue to isolate it, we drive it into the welcoming arms of China and make it more likely to turn towards rogue-state solutions, of which nuclear weapons are the apex. It's a tough and ugly call, but the West needs a new policy of engagement with Burma.
China edgy over Burma’s nuclear ambitions

by Brian McCartan

Wednesday, 05 August 2009 14:12

Bangkok (Mizzima) - Another round of revelations concerning Burma’s nuclear ambitions and its nexus with North Korea has thrown up renewed international interest. Combined with comments by the United States of its concern over the growing cooperation between its pariah neighbours, China must be growing increasingly uneasy.

The revelations came about in a report in The Sydney Morning Herald on Saturday and are based on two years of research by Desmond Ball, a strategic studies expert and Burma watcher at the Australian National University and freelance journalist Phil Thornton. Much of their information comes from the testimony of two defectors, who claim to have been connected to the nuclear programme, and from radio intercepts. While reports on Burma’s nuclear programme have been circulating for some time among the opposition media and Burmese activists, Ball and Thornton claim their research indicates with some certainty that two reactors are under development and that the regime is developing a nuclear weapons capability.

According to their research a 10 megawatt reactor is being developed with Russian assistance at Myaing in Magwe Division and another “secret” 10 megawatt reactor is being developed with North Korean help at Naung Laing in Mandalay Division. In addition, North Korea facilitated the construction of a uranium refining and enrichment facility at Thabike Kyin. Although both reactors are small, security analysts have noted that North Korea developed its runaway nuclear programme from a similar reactor at Yangbyon.

Of a more sinister nature, Ball and Thornton also claim that testimony from the defectors indicates that a programme is already underway to develop a viable nuclear weapon. Should the defectors testimony prove true, they say, then the “secret” reactor could be capable of “producing one bomb a year, every year, after 2014.”

Although a weapons programme would require more external support than is currently being provided, Pyongyang has shown a willingness to export technology and know-how to other reclusive and anti-Western regimes. In Burma’s case, that know-how and technology could be traded for fissionable nuclear material to continue the development of North Korea’s own weapons.

The voyage of a North Korean cargo ship, the Kang Nam 1, last month believed to be heading to Burma, aroused suspicions of cooperation between Pyongyang and Naypyidaw on the development of ballistic missiles. Opposition sources claim the junta may have already acquired Scud-type missiles or is testing its own designs with the help of North Korean advisors. These claims have not been independently verified, but a visit by General Thura Shwe Mann, SPDC Number 3, to North Korea seemed to partially confirm the claims when he and his entourage inspected a Scud production facility.

In early July, reports emerged that Tokyo police had arrested three Japanese executives for allegedly trying to sell equipment to Burma which could be used in ballistic missile construction. The Hong Kong-based New East International Trading Ltd. which had ordered the parts has been linked to the North Korean Pyongyang Worker’s Party.

Burma’s acquisition of a nuclear weapon and the development of ballistic missiles to deliver such a device will surely raise the regional security temperature and has the potential to spark a new Southeast Asian arms race. Following Saturday’s report, Thai National Security Council head Thawil Pliensri ordered officials to look into the reports.
Such a situation would almost certainly not be favoured by Burma's main international patron. Considerable effort has been spent by China in developing Burma as a source of cheap natural resources to supply its growing industrial base, as a trade gateway to its remote and landlocked southwestern region and as a strategic conduit for oil and gas shipments from the Middle East.

Work is scheduled to begin next month on an oil and gas pipeline that will carry 20 million tons of crude oil and 12 billion cubic meters of gas every year across Burma to the southwestern city of Kunming. The proposed pipeline will allow Chinese oil rigs to bypass the narrow Malacca Straits, where over 80 per cent of its current fuel imports pass and viewed as a potential strategic chokepoint in any conflict with the US.

The last thing China wants, say analysts, is to see its new commercial arteries put at risk by US concerns over a nuclear Burma. China has to varying degrees been propping up Burma's military regime since it withdrew support for the Burmese Communist Party in the late 1980's. Beijing's support through massive arms shipments has been key to the generals' ability to rapidly expand their military to an estimated 500,000 soldiers.

China's influence has also been key to deflecting criticism of Burma in international fora, including at the United Nation's Security Council. Since the 1980s Beijing has spent considerable effort and money making economic inroads and securing lucrative concessions over Burma's rich natural resources for Chinese companies.

Subtle signs have already surfaced of China's growing annoyance with Burma's brinksmanship with the international community. That assumed concern would no doubt grow if Burma were to acquire ballistic missiles or a nuclear-grade weapon. Australian Burma expert Andrew Selth wrote in a 2007 paper, "Beijing is unlikely to be happy about the prospect of the SPDC acquiring a nuclear weapon, given [Burma's] proximity to China, its internal instability and the unpredictable behaviour of its leaders."

While China has so far tolerated North Korean conventional weapons shipments and links to supplying ballistic missile and nuclear technology to other regimes considered unsavoury internationally such as Syria and Iran, that goodwill may be stretched by having that same technology shared with its nearby neighbours. This would be particularly the case if it sours ties with greater Southeast Asia, where it has recently dedicated considerable diplomatic and commercial energies in a so-called "soft power" campaign.

Maintaining regional stability is a paramount Chinese concern. Burma's possession of ballistic missiles or a nuclear capability would risk the spread of weapons of mass destruction technologies in a region where no state has acquired nuclear weapons. A regional arms race would likely ensue as Burma's neighbours sought deterrence options.

As Selth wrote, "In this atmosphere of fear and suspicion, the security stakes in the region would go up, raising the prospect of other countries feeling obliged to expand their own inventories of strategic weapons. Beijing would also worry about the possible response of the US to closer [Burma]-North Korea ties." If Burma were to acquire ballistic missiles and substantive evidence was found of a nuclear programme, Washington would likely be forced to re-evaluate its Burma policy towards more direct engagement.

During a regular press briefing on Monday, US Assistant Secretary of State for Public Affairs, Philip J Crowley, said America was concerned by “the nature of cooperation between North Korea and Burma.” Although he did not elaborate on what type of cooperation and refused to comment on questions related to any underground nuclear complex, many observers believe the US is taking a renewed interest in Burma's nuclear designs.

According to Andrew Selth in an article on August 3 in ‘The Interpreter’, the weblog of the Lowy Institute for International Policy, the Obama administration has conducted a thorough investigation of Burma’s nuclear programme as part of its ongoing review of its Burma policy. The US has, however, so far been cautious in its statements on the matter and seems to be waiting for more solid evidence before making a formal statement.
Continued leaks of information and the resultant media attention on military links and possible nuclear cooperation between Naypyidaw and Pyongyang will only serve to maintain and even heighten US interest in Burma. The Obama administration has already shown a renewed interest in Southeast Asia, making it in China’s best interest to reign in the ambitions of its southern neighbour.
A friend I've known and trusted for years in the national security world sent me this report from the Bangkok Post yesterday. Obviously that means it's not "secret" material, and the report itself the result of reasoning and guess work rather than anything more definite. But the authors include Desmond Ball of the Australian National University, who is a well-established authority in nuclear weapons and strategic studies. (Nothing against the other author; I just don't know of him.) They begin their findings this way:

"Our own starting position was one of deep skepticism, but the testimonies from two defectors forced us to consider the uncomfortable possibilities of a Burma with nuclear capability."

The reason this would matter is that Burma has arguably the worst government in the world -- and if not the very worst, then right up there with North Korea in having its own concept of "rationality." (This was the government that would not allow outsiders to help the victims of the devastating typhoon/cyclone last year.) And the gist of this report is that North Korea has been working with the Burmese regime on nukes. To this point, the Burmese regime's destructiveness has been visited exclusively on its own country's people rather than against its neighbors. Of course, nuclear weapons can change things.

We have seen in recent world history the danger of leaping to conclusions about which dangerous regimes have what new weaponry. But to me this was news worth putting on the worry-scope.


From my friend, who has worked in various public and private roles in defense-related efforts. After he sent the report I wrote back saying, is there any reason to think this is true? His reply is below. He says Myanmar; I say Burma, as explained here: [http://jamesfallows.theatlantic.com/archives/2008/05/evil_in_burma.php]

"Unfortunately, I do believe that the story should not be dismissed. What is most concerning to me is the fact that it follows by just 10 days or so, Secretary Clinton's 21 July statements in which she expressed concern over the possibility that North Korea is sharing nuclear weapons-related technology with Myanmar. NYT story here: http://www.nytimes.com/2009/07/22/world/asia/22diplo.html

"At the time of that story, I thought how bizarre, how out of nowhere the Clinton accusation seemed to come. Now, given the Ball story, I can't help but think that the Obama Administration has some intelligence indicating that the North is engaging in such activity and that they were aware that it was about to leak via the Ball story or perhaps other avenues, and that they wanted to get a jump on it, so as not to be accused of having been caught unaware. Further underscoring my tendency to believe that there is in fact a there there is that I cannot believe that Secretary Clinton would have made such an accusation -- now echoed in the Ball account -- unless the Administration had something substantial. They are painfully aware -- certainly the intel community -- is painfully aware of the fact that the U.S. cannot afford to be revealed as peddling false accusations.
"As far as the content of the Ball story goes, the first and main question that I would bring to any such story in which a state is accused of laying the groundwork for a nuclear weapons materials program would be: what have they done to escape notice (the notice of eyes in the sky; the notice of foreign travelers through the country) and, unfortunately, the contention that Myanmar now has a reactor constructed in 8 different locations and an underground secret facility buried deep within a mountain -- the Naung Laing facility -- supplies a credible response to my question. The second question would be how can a country so desperately poor, so bereft of well, just about everything. . . but then I stop and think: North Korea, Pakistan...

"It's way too early for anyone to be talking in terms of "slam dunk" evidence; certainly Clinton's remarks didn't go that far and neither does Ball's. But the bottom line is that Ball's story is technically credible in its own right and it supplies a follow-up piece to Clinton's earlier remarks that fits a little too neatly (too uncomfortably neatly) with those remarks."
Burma's unanswered nuclear question
by Andrew Selth
3 August 2009 11:40AM

Andrew Selth is a Research Fellow at the Griffith Asia Institute and author of Burma and Nuclear Proliferation: Policies and Perceptions.

Burma’s suspected WMD program is in the news again. This time, the focus is on a couple of Burmese nationals who 'defected' about two years ago, claiming first-hand knowledge of Naypyidaw’s secret nuclear plans. As I noted in The Interpreter in February, however, the picture is still far from clear.

Saturday's Sydney Morning Herald led with the dramatic headline, 'Revealed: Burma’s nuclear bombshell', followed by 'Atomic weapons in five years' and 'North Korea helping build secret reactor'. The Age carried a version of the story headed 'Burma “building secret N-plant”’. Both papers balanced these reports with a thoughtful op-ed by The Age’s diplomatic editor, reminding readers that, despite the defectors’ startling claims, the issue was still the subject of considerable debate among scholars and officials.

This is not the first time local newspapers have made such claims. In 2006, for example, The Australian published a story under the headline 'Burma seeks nuclear weapons alliance with N. Korea'. No evidence was provided to justify this statement, but it was followed in 2007 by a report in the same paper entitled 'Unconventional wisdom on Burma'. The report claimed that 'US intelligence believes that Burma is seeking to develop nuclear weapons from technology provided by North Korea'.

There are many unanswered questions about Burma’s nuclear aspirations and its ties with North Korea. As might be expected, given the isolated and secretive nature of both military regimes, details of their relationship are very hard to discover. The most pressing question for many analysts, however, is why no government or international organisation has made any official statement on this issue, despite all the articles and blogs published on it since 2002, when Burma was first accused of wanting a nuclear weapon.

For eight years, the Bush Administration took every opportunity to criticise Burma’s military regime, loudly and publicly. The US also made numerous statements condemning those countries — like Iraq, Iran, Syria and North Korea — that it believed were pursuing clandestine nuclear weapons programs, or proliferating sensitive nuclear technologies. At no time, however, did the US government ever accuse the Naypyidaw regime of trying to build a secret reactor or develop nuclear weapons, with or without North Korean assistance.

Throughout this period, Washington was watching developments in Burma closely. It beggars belief that the US government did not know about the two Burmese 'defectors', on whose testimony the Sydney Morning Herald and The Age have based their latest stories. Indeed, both papers have suggested that a third Burmese defector was 'picked up' by US intelligence agencies last year, presumably to be interviewed on this issue. Yet, even when armed with the apparent revelations of all these defectors, the Bush Administration remained conspicuously silent about Burma’s nuclear status.

This is not to say that there were no suspicions of a possible nuclear weapons program. In 2007, for example, The Australian based its story on a statement by a former White House staffer to the effect that 'Western intelligence officials have suspected for several years that the regime has had an interest in following the model of North Korea and achieving military autarky by developing ballistic missiles and nuclear weapons'. Yet suspicions of an interest in following a model is a far cry from hard evidence of a secret nuclear weapons program.
As rumours of a secret WMD program grew in frequency and scope, the Bush Administration came under increasing pressure from activists, exile groups and certain members of Congress openly to accuse Burma’s military regime of developing nuclear weapons, with North Korea’s help. Yet it steadfastly refused to do so, even in 2006 when the US conducted a concerted campaign in the UN Security Council to have Burma branded a threat to regional security.

It is difficult to escape the conclusion that the Bush Administration felt obliged to remain silent on this issue largely because there was insufficient reliable evidence on which to make a public case against Naypyidaw and Pyongyang.

Since taking office, the Obama Administration has conducted a thorough investigation of this matter, as part of its comprehensive review of US Burma policy. Yet, it too has been very cautious in its comments about Burma’s nuclear ambitions. For example, Naypyidaw’s suspected WMD program was not raised during Senate hearings to confirm the appointments of Secretary of State Clinton, or UN Representative Rice. Nor has it been raised by the US in other public forums (including the IAEA) where nuclear weapons proliferation has been discussed.

In her comments at the ASEAN Summit last month, Hillary Clinton finally broke the official US silence on the subject. Yet it is instructive to examine what was actually said. She expressed concern over military links between Burma and North Korea, including 'the transfer of nuclear technology and other dangerous weapons'. She later modified her position, referring only to 'dealings' between Pyongyang and Naypyidaw that were 'perhaps' taking place.

Despite having the perfect opportunity to do so, the Secretary of State did not say that Burma was secretly building a nuclear reactor, or trying to develop a nuclear weapon. She did not even specify that North Korea was passing Burma nuclear weapons technology. This continuing official reticence strongly suggests that, while the US is clearly concerned about Naypyidaw’s growing relationship with Pyongyang, it still does not have clear evidence of a secret Burmese WMD program.

As noted in The Interpreter in February, the Burma JADE Act passed by Congress in July 2008 stipulates that, within 180 days, the Secretary of State must issue a statement describing the provision of WMD and related technologies to Burma. Reports filtering out of Washington suggest that there have been a number of confidential briefings to senior officials on this subject. However, the world is still waiting for an authoritative public statement from the US which will put all the rumours and newspaper stories into perspective.
To: Desmond Ball and Phil Thornton

Your articles this past weekend in the Sydney Morning Herald and Bangkok Post about Burma’s nuclear program contained some new information and one new source ("Tin Min"). However, they also included more than ten pieces of information that Dictator Watch first reported. (www.dictatorwatch.org)

Contact: Roland Watson, roland@dictatorwatch.org

PLAGIARISM IN THE BURMA NUCLEAR “SCOOP”
August 3, 2009

Please forward widely.

To: Desmond Ball and Phil Thornton

Is it too much to ask to be given a little credit, when credit is due? Your articles this past weekend in the Sydney Morning Herald and Bangkok Post about Burma’s nuclear program contained some new information and one new source ("Tin Min"). However, they also included more than ten pieces of information that Dictator Watch first reported.

In the primary SMH article, Burma’s Nuclear Secrets:

For the defector “Moe Jo,” we had first access to his interrogation debriefing, by border-based groups upon his arrival in Thailand; we asked him follow-up questions; and we published his claims (among other intel) that the SPDC wanted a nuclear bomb by 2020 (published in August 2008), and that there was a large State Scholar program with Russia in support of this (which info we first published in November 2006, from other sources). In our Moe Jo-sourced articles, we did not reveal that he was a defector – we were trying to protect his family.

In the SMH article on your work by Hamish McDonald, Revealed: Burma’s nuclear bombshell:

You say: “Another Moscow-trained Burmese Army defector was picked up by U.S. intelligence agencies last year.” We had access to, and published intelligence from, this defector’s border debriefing as well.

This article further states that “Burma protested to Thailand about overflights by unmanned surveillance drones that were apparently launched across the Thai territory by U.S. agencies.” Dictator Watch was the first to reveal the use of the drones (in November 2008).

In the BP article, Burma’s nuclear bomb alive and ticking:

You mention that the SPDC has a uranium milling and enrichment facility at Tha Beik Kyin. We first disclosed this information (November 2006), although we view the enrichment claim at this point as unconfirmed (evidence for it, though, is building). We also first disclosed that there were at least two uranium mills (January 2007). We further believe that there may be a reactor at Tha Beik Kyin. In any case, there are three suspected reactor sites: Myaing in Magwe; Tha Beik Kyin; and the Setkhya Mountains (which many people have been speculating about for years, including Dictator Watch starting in January 2007, and which you identify as Naung Laing, which location we previously identified in November 2008).
You mention the SPDC’s five uranium deposits listed on its Ministry of Energy website. After extensive Internet research, I was the one who found this website, and publicized its existence (in January 2007).

You talk about the Google Earth photos of the suspected Myit Nge uranium operation. An associate of Dictator Watch scanned all the non-cost satellite imagery available for Burma, and identified this site (among others), which photos we published (in March 2007).

You mention plutonium reprocessing at Naung Laing. We first disclosed that the SPDC’s nuclear program might extend to plutonium (in August 2008).

You also talk about weaponization research at Naung Laing, which we also disclosed earlier (in November 2006). More generally, Dictator Watch and many Burmese media groups have published extensive intel about the connections between the SPDC and North Korea. For example, we revealed the involvement of the businessman Tayza (in August 2007), which your source Tin Min has now confirmed.

In consideration of all of this, don’t journalistic ethics demand the acknowledgment of other journalists, or sources such as advocacy groups, who first break a story – who get the scoop?

Snippets of information about the SPDC’s nuclear program (other than the 2001 announcement of the Russian reactor deal), first began to appear about five years ago, notably by the Democratic Voice of Burma and the Shan Herald Agency for News. Then, in 2006, we at Dictator Watch were entrusted with information that had not yet been made public. We asked for permission to disclose the intel, and received it.

In the process, we also learned of other sources of intel and conceived a broader program to collect information from different parties in the Burma Pro-Democracy Movement. Since November 2006, we have published sixteen articles with intelligence and/or intelligence analysis of Burma’s nuclear and missile programs, including its connections with North Korea, Russia, China and Iran.

This is much more than what you describe in your articles: “There have been hints Burma aspires to a nuclear program.” This statement is a self-serving mischaracterization, if not a complete lie. (It is inconceivable that you are not aware of Dictator Watch’s intelligence initiative.)

It is extremely gratifying that the Burma nuclear story is finally receiving widespread coverage. This has only occurred, though, because of the Kang Nam 1: the fact that U.S. intel about the North Korean freighter was leaked, and that the U.S. was forced to recognize the issue.

Dictator Watch should be identified as a source in any analysis of the SPDC’s program, if our disclosures are used. This would further give credit to the many different people who have assisted us, some of whom have been killed or imprisoned (but in either case, not because of their involvement with us).

If such credit isn’t given, isn’t this known as plagiarism?

Or, do you only feel obliged to credit other journalists and academics?

To the Bangkok Post: Thank you for printing my letter yesterday stating that we should have been given credit. To the Sydney Morning Herald, which did not print the letter: You owe Dictator Watch an apology, for not properly vetting Ball and Thornton’s representation that their sources and information were in fact original.
Time for a close look at Burma's nuclear programme
Published: 2/08/2009 at 12:00 AM

There is good reason why regional intelligence sources are skeptical of the Burmese military regime's nuclear capacity. Verifying stories coming out of Burma is hard. The regime has banned the international media. Defectors may inflate their own importance in the hope of getting themselves resettled to a third country and exiled Burmese political activists need to keep the international spotlight on the regime's negative activities.

It is not unknown for the regime to also put out misinformation to cover what it is really doing. Burma is a poor country, infrastructure in rural areas is virtually non-existent and sanctions against the regime have restricted their earning potential.

In recent years the US government has voiced concerns over North Korean, Syrian and Iranian plans to build weapons of mass destruction, but so far has kept silent about Burma. Australian defence analyst Andrew Selth, a research fellow at Griffith Asia Institute, is reported as saying there is always a lot of smoke surrounding Burma's nuclear ambitions.

"Over the past year or so, the amount of smoke has increased, but still no one seems to know whether or not it hides a real fire. With this in mind, strategic analysts in many countries are looking to the Obama administration for an authoritative statement on Burma's nuclear status."

In May 2007, in a press release announcing the deal to build a nuclear-research reactor in Burma, Russia's atomic energy agency, Rosatom, said it would be under the control of the International Atomic Energy Agency (IAEA). Burma is already a signatory to the Non-Proliferation Treaty, established under the responsibility of the International Atomic Energy Agency, and it is required to allow inspections of its nuclear facilities, but so far has failed to do so.

Skeptical regional security agents and embassy insiders are willing to concede that the Burmese regime cannot be trusted. And for good reason. Burma lies near the top of the world's worst lists; child soldiers, landmines, forced labor, forced displacement, suppression of political opponents, disease control, illicit narcotics, trafficking people and corruption.

A recent number of high profile interventions by the international community involving both Burma and North Korea have added to the distrust. Early last month the North Korean freighter the Nam Kam 1 was shadowed by US warships (sanctioned by the UN) as it headed to Burma with an unknown cargo, believed to be arms.

On July 1, the global edition of the New York Times reported that Japanese police arrested a North Korean and two Japanese nationals for allegedly trying to export illegally to Burma a magnetic measuring device that could be used to develop missiles.

Burma does have a nuclear programme, but what is uncertain is the extent of it, and until it can be convincingly denied that there is no possibility the regime is developing nuclear weapons, regional security authorities are maintaining their silence, but privately say Burma's nuclear plans need closer scrutiny - and the sooner the better.
SECRETARY CLINTON: Good afternoon. Let me start by saying we’ve had a series of very productive sessions here in Phuket, and I’ve had the opportunity for the first time to engage with the nations of ASEAN and our regional partners on issues of common concern, to sign the Treaty of Amity and Cooperation, and to lay the groundwork for even stronger partnerships as we move forward.

I’ve also had the opportunity to meet one on one with a number of my counterparts. Earlier, I met with Foreign Minister Qureshi of Pakistan, and we talked about the encouraging signs in Pakistan’s fight against violent extremists, including the return of significant numbers of refugees to Buner and Swat. There are still great challenges ahead facing Pakistan, including the ongoing threat of violent extremism and continuing economic difficulty. But I assured the foreign minister that the United States stands ready to help the Pakistani Government and people. And I also advised him that I support the steps Pakistan and India have taken to find a more productive way forward.

I want to take this opportunity to discuss the situation in North Korea and our efforts here in the ASEAN Regional Forum to promote security in Northeast Asia. Yesterday, I held consultations with our allies and partners in the Six-Party process, and this morning, there was a very good discussion with the ASEAN nations and regional partners. I was gratified by how many countries from throughout the region spoke up and expressed directly to the North Korean delegation their concerns over the provocative behavior we have seen these past few months.

Unfortunately, the North Korean delegation offered only an insistent refusal to recognize that North Korea has been on the wrong course. In their presentation today, they evinced no willingness to pursue the path of denuclearization. And that was troubling not only to the United States, but to the region and the international community. So the question is, where do we go from here?
I think it’s important to stress that the international community’s response to North Korea’s actions has been unequivocal and nearly unanimous, leading to a new consensus around a common set of principles. The United States and its allies and partners cannot accept a North Korea that tries to maintain nuclear weapons to launch ballistic missiles or to proliferate nuclear materials. And we are committed to the verifiable denuclearization of the Korean Peninsula in a peaceful manner. Now this convergence of views reflected, as you will see later today in statements by ASEAN, and as you saw just a few weeks ago with the G-8 statement and others, produced two important Security Council actions – a presidential statement and a unanimous binding resolution.

Now these are more than expressions of condemnation. Resolution 1874, combined with the designations authorized by the UN Sanctions Committee, provides a powerful tool to curb North Korea’s unacceptable activities, and to put pressure on individuals and entities connected to the regime’s nuclear, ballistic missile, and other WMD-related programs. We believe that this resolution can be effective because it is unprecedented in scope, substance, and approach.

First, it differs from past efforts in that it is based on a global consensus, bringing to bear the combined weight of the international community, not just one nation or a small handful of nations. Second, it targets a spectrum of individuals, organizations, and institutions, not just one or two. Third, it fits into the broader framework of our approach to North Korea. It is accompanied by a message, as I reiterated this morning, that we are prepared to work with the North Koreans if they are willing to act on their previous commitments.

In short, our approach isolates North Korea, imposes meaningful pressure to force changes in its behavior, and provides an alternative path that would serve everyone’s interests. Our joint efforts to take Resolution 1874 from paper to practice are now underway. I asked Ambassador Philip Goldberg to lead an interagency team charged with implementing the sanctions, and he’s already traveled to the region to consolidate and coordinate our efforts. Russian and Chinese representatives have visited Washington to work together on these issues.

And in addition to this week’s meetings, I’ve spoken repeatedly with my counterparts in China, Russia, Japan, and South Korea about our common way forward. I intend to send Ambassador Goldberg back to the region in the near future to continue our common efforts to enforce the sanctions. And next Monday and Tuesday, as part of our strategic and economic dialogue with China, I will be holding intensive discussions with State Councilor Dai Bingguo on North Korea and the broader questions of peace and security in Asia.

In implementing 1874, we are asking our partners to help dissuade all nations from facilitating, directly or indirectly, North Korea’s attempts to enhance and proliferate its nuclear and missile technologies. We were gratified by Burma’s statement and those of many other countries announcing an intention to implement the resolution. Burma’s statement is significant because in the past, North Korea has provided Burma with materials now barred by Resolution 1874.

The bottom line is this: If North Korea intends to engage in international commerce, its vessels must conform to the terms of 1874 or find no port. Our goal in enforcing these sanctions and others imposed earlier is not to create suffering or to destabilize North Korea. Our quarrel is not with the North Korean people. In fact, it was the North Korean leadership that rejected humanitarian aid from the United States and forced us to suspend our food aid program.

So let me be clear: As we work to end the regime’s nuclear program, we remain committed to the well-being, dignity, and human rights of the people of North Korea. We will continue to work closely with other governments, international organizations, and NGOs to address human rights violations and abuses perpetuated by the regime. We will maintain our support of NGOs working to improve human rights in North Korea. And we will keep funding Korean language radio broadcasting for the same purposes, and we will soon announce a special envoy for North Korean human rights.
As we enforce sanctions, we are open to talks with North Korea, but we are not interested in half measures. We do not intend to reward the North just for returning to the table. We will not give them anything new for actions they have already agreed to take. And we have no appetite for pursuing protracted negotiations that will only lead us right back to where we have already been.

We and our partners have a more ambitious agenda for any future talks. Such talks must lead to irreversible steps by North Korea to denuclearize. This, in turn, would lead us and our partners to reciprocate in a comprehensive and coordinated manner. Full normalization of relationships, a permanent peace regime, and significant energy and economic assistance are all possible in the context of full and verifiable denuclearization.

In the meantime, we will undertake the necessary defensive measures to protect our interests and our allies. North Korea’s ongoing threatening behavior does not inspire trust, nor does it permit us to sit idly by. Our partners in the region understand that a nuclear North Korea has far-reaching consequences for the security future of Northeast Asia. North Korea’s continued pursuit of its nuclear ambitions is sure to elevate tensions on the Korean Peninsula and could provoke an arms race in the region. This would serve no nation’s interests – not ours, not Japan’s, South Korea’s, China, nor Russia’s and nor, might I add, North Korea’s.

Our success in putting this resolution into action will also have implications beyond North Korea. It will demonstrate to other countries with nuclear ambitions, such as Iran’s, that we can and will impose costly penalties for those who violate international agreements and undermine global security. And it will give us a blueprint for how to manage any similar challenges that might arise in the future.

So our policy is clear. North Korea knows what it has to do: return to denuclearization talks and fulfill its commitments under the 2005 joint statement to abandon all nuclear weapons and existing nuclear programs and return at an early date to the nonproliferation treaty and to IAEA safeguards. The path is open, and it is up to North Korea to take it.

Thank you very much.

QUESTION: Thanks. Madame Secretary, the North Korean representatives today spoke just behind us over there and said that the Six-Party Talks were dead; there is no way they’re coming back, and that whatever we have to offer them in terms of incentives is nothing new to them, and they won’t accept it.

The foreign ministry at the same time issued a statement with actual attacks and insults personally aimed at you. I wonder whether you think that perhaps the time has come to replace the Six-Party framework with perhaps a broader framework. You just suggested that there’s a broad consensus today here about what to do with North Korea. And since China has been reluctant to put it – amend the resolution so far, what would you want them to do when you meet with them on Monday and Tuesday in Washington?

Oh, and one more: Aren’t you exhausted?

SECRETARY CLINTON: (Laughter.) Aren’t you?

QUESTION: I am. That’s why I’m asking.

SECRETARY CLINTON: Well, first, let me say that China has been very vigorous in working with us in support of full implementation of 1874. Just as we have, they created an interagency task force which is working with our own people. There has already been a meeting in Beijing, and I said, there will be a follow-on meeting in Washington.
The Chinese have been very supportive in our efforts to deliver a strong message to North Korea and to other nations that they expect, as we do, that the international community will enforce 1874. They played a very helpful role in the matter of the North Korean ship that was on its way to Burma.

In addition, today, the Six-Party members who were present, with the exception of North Korea, reiterated their commitment to this process and made it very clear that there is no place to go for North Korea. They have no friends left that will protect them from the international community’s efforts to move toward denuclearization. So I think it’s fair to say that not only were Russia, China, Japan, and South Korea very strong in making the points which they did this morning, but those points were echoed by so many of the ASEAN members and other regional partners.

So the message is coming out loudly and clearly to North Korea. And I don’t think we’ve seen at all the way this will eventually develop. I think we’re just still at the beginning of determining how they’re going to respond.

QUESTION: What framework (inaudible)?

SECRETARY CLINTON: The framework is the Six-Party Talks.

MR. KELLY: Next question (inaudible).

QUESTION: Madame Secretary, what evidence do you have of Burma’s cooperation in enforcing the UN Security Council resolution? How did your talks with Burmese officials go last night? And most importantly, how do you reconcile your appreciation and gratitude that they are promising to enforce that with your two days of public, strong comments about concerns of military and even nuclear cooperation between Burma and North Korea?

SECRETARY CLINTON: Well, we’ve expressed that very clearly and forcefully, but I do think there is a positive direction that we’ve seen with Burma, both in the already existing cooperation they showed with respect to the North Korean ship, in their statements to us and others that they intend to do their part to enforce 1874. Now, obviously, we have to see that unfold, but that’s never happened before, and we’re very encouraged by that. At the same time, we know that there has been cooperation between North Korea and Burma in the past, and we are going to be vigilant to make sure that it doesn’t occur in the future.

I was not part of any talks. Others in our Administration were, and we made it very clear, both privately and publicly, that there are expectations on our part that Aung Sun Suu Kyi be released unconditionally, that there begin a process of release of political prisoners, that the election scheduled for next year be open and fair and transparent and credible. And that view was echoed by many people in the room. It was not just a U.S. view. It was very widely and, I must say, heart – it was really expressed from the heart by so many people.

So we hope that there is going to be recognition on the part of the Burmese leadership that they have more to gain by joining the international community and by effectively taking care of their people and putting Burma on the path to democracy. We don’t expect to see a change overnight, but we’re – it’s better to have those positive statements than the negative ones. So we think that gives us at least something to work with.

QUESTION: (Inaudible.)

SECRETARY CLINTON: Right. And I spoke to foreign ministers in the area, asking their help in speaking to their Burmese counterpart. And they did so, and whether or not it was a proximate cause, shortly after, the ship turned around.
QUESTION: (Inaudible) from (inaudible) in Asia. I just wanted to clarify, when you said U.S. will take any defensive measurements, what exactly that mean? Is it going to be like U.S. ready to start a war with North Korea at any time? And how ASEAN, especially in Myanmar, is going to pick on that?

SECRETARY CLINTON: No. But I wanted to make very clear that the United States does not seek any kind of offensive action against North Korea. We have said that over and over again. The North Koreans said in a meeting today that they’ve been subjected to nuclear weapons on the Korean Peninsula aimed at them. That hasn’t happened for decades. So I think they are living in a historical time period that doesn’t reflect today’s realities.

We are very open to a positive relation with North Korea on the condition that they denuclearize. But if they refuse to do so, as they have in the last months, and refuse to follow the obligations they themselves signed up to in 2005 and -06, then our allies in South Korea and Japan and other countries in the region begin to worry about what North Korea’s intentions are. And we want to make clear that the United States will continue to work for the defense of allies like Japan and South Korea. And that’s unfortunately our obligation, one that we will be serious in fulfilling. But it’s not directed in any offensive manner against North Korea.

We also wish to avoid an arms race in Northeast Asia. If the North Koreans are going to continue to test nuclear weapons and their missiles, then other countries are going to start saying, well, we don’t know what they’re going to do, we’d better start taking care of ourselves and doing that and to have that capacity.

We think that would be a terrible mistake. So we’re trying to make clear that we will protect and defend our allies, but we still hope that there is an opportunity to work with North Korea toward denuclearization.

MR. KELLY: Okay, thank you.

SECRETARY CLINTON: Thank you.

# # #
MR. KELLY: Senior State Department Official it is.

SENIOR STATE DEPARTMENT OFFICIAL: How do you like that? We’re very cooperative here.

The delegation returned yesterday from an interagency trip to Beijing and Kuala Lumpur. The delegation included representatives from the Defense Department, Treasury, and the National Security Council.

I think it’s noteworthy that as North Korea was once again breaking its commitments over last weekend on the UN resolutions, we were busy discussing with the Chinese and Malaysian governments how to implement them. We met with a Chinese interagency delegation led by the Foreign Ministry. It included their central bank, their customs officials, other agencies. This is noteworthy because it was formed very quickly on their side. It included the range of agencies and departments in the Chinese Government responsible for implementing Resolution 1874 and the earlier resolution. It followed contact from President Obama and Secretary Clinton on the importance of this issue. And so that in and of itself, the speed with which we went out and the interagency delegation we found there, were significant.

We shared information. We went through the new designations that the United States has made of Namchongang and Hong Kong Electronics, the general advisory from the Treasury Department on the way banks should deal with and be warned about activities related to North Korea, general information about the new UN resolution. The Under Secretary of the Treasury Stuart Levey is doing some follow-up on that. We had a representative, Deputy Assistant Secretary Glaser, who traveled with the delegation. And we have gone through this a couple of times now in Beijing. We went from Beijing to Malaysia. We met with the central bank, with the prime minister’s office. We found a willing – a great willingness to cooperate on implementing the resolution. Some people have asked: Why Malaysia? Malaysia is an important – in the first instance, an important ASEAN country. We wanted to touch base with ASEAN – an ASEAN country while we were on this trip. They also have a fairly advanced financial intelligence unit. In fact, the financial intelligence unit in Malaysia consults, offers technical advice within the region in Southeast Asia. They have extensive bank oversight capabilities. We met with the central bank there.

And as they’re going through the process of doing what we’ve done with our – within our banking system, it was helpful to share notes with them and to go through some of the information that we were able to discuss. In both Beijing and in Kuala Lumpur, we did do, and we were able to share some additional information on North Korean activities.
Our overall objective in all of this remains the same, which is to return to serious meaningful discussions within the Six-Party process on denuclearization and nonproliferation. We don’t see the UN resolutions or sanctions as a means to punish North – the North Korean people. We see them—the resolutions—as a means to get back to our original intention of convincing North Korea that there really is only one way forward. We hope to create through all of this a process, a sense of transparency, a sense of shining a light on North Korea’s activities, those related to their nuclear and missile proliferation.

We think that 1874 provides some new tools to do so and can be used as a way to shine that light to bring greater transparency to North Korean activities in inspections, which the new resolution talks to, as well as in the financial area.

Some of you may have questions about Kang Nam 1, the ship that has turned back and returned to port, its original port of departure. We see that as a good sign that sharing information, diplomatic activity, can have an impact.

[deletia]

QUESTION: I’m Lachlan Carmichael with AFP. I just wanted to follow up. Since you were dealing with financial transactions, did the ship Kang Nam turn around because the North Koreans had payments blocked for the shipment? Or was it because the U.S. Navy was shadowing it?

SENIOR STATE DEPARTMENT OFFICIAL: We can’t be – you can never be absolutely sure. What I can tell you is that there was constant diplomatic activity on the ship, and about the ship’s past activities and inspections and all of that. And what we found was that the ship went back. That was a good outcome in the sense that there seemed to be no place for it to go, or there – wherever it was originally going was no longer an option for some reason.

There are other possible explanations, and I wouldn’t deny that. But there is a good reason to think that they went back because of – for the reasons that I mentioned, the sort of diplomatic outreach that was done. I don’t – the fact that they knew they were being watched as well, and that was a good outcome.

QUESTION: Did Kuala Lumpur, the people there, shed any light on relations between Burma and North Korea about what kind of business dealings they have and what institutions are used?

SENIOR STATE DEPARTMENT OFFICIAL: We made the point throughout the trip that Burma was a destination in the past for North Korea, and that this was a particularly difficult issue given Burma’s own isolation and own problems with the international community, but that this was a focus for ASEAN, for the United States, for China, for India, for other countries with some sort of influence to persuade Burma not to participate in any way in North Korea’s illegal activities.

QUESTION: So they gave you some commitments about how to select these transactions --

SENIOR STATE DEPARTMENT OFFICIAL: I think ASEAN --

QUESTION: -- through ASEAN or --

SENIOR STATE DEPARTMENT OFFICIAL: ASEAN, as a whole, and the individual countries have all pledged their commitment to the resolutions, and therefore, by extension, to preventing the use of Burma or any other country as a conduit for North Korea’s illegal activities.

[deletia]
QUESTION: Yes. Do you see the emergence of a nexus between North Korea, Burma, and Iran on nuclear nonproliferation issues? In the past, there has been increased cooperation between North Korea and Burma on nuclear issues.

SENIOR STATE DEPARTMENT OFFICIAL: I think we’re concerned about trade and cooperation between countries that have undertaken nuclear programs, but I don’t want to go much further than that.

QUESTION: Yes, Glenn Kessler with The Washington Post. Just to follow up on a couple of things, reading between the lines of what you were saying before, is it correct to say that this ship was essentially headed towards Burma, but because of diplomatic pressure placed on Rangoon, or whatever its new capital is called, that that ship was turned back, that they – the Burmese realized that it would not be an appropriate moment to accept that ship? Is that a correct way to --

SENIOR STATE DEPARTMENT OFFICIAL: I don’t think – I think that’s taking it one step beyond where I want to go with it. What I do want to say is that a combination of sharing information with many of the countries in the region about their obligations and our collective obligations to inspect, to warn ships, to what maritimers call hail and query, that all of those things combined convinced or played a role perhaps in convincing the North Koreans to turn the ship around.

In the specific instance with Burma, that too could have played a role. But I don’t know that it was – that that was the definitive reason. That’s why I don’t want to – I want to warn you off from any one particular --

[deletia]

QUESTION: Hi, Janine Zacharia with Bloomberg. Two questions – I apologize if one is a little naïve, I just came back from leave. But could you remind me what the U.S. suspected was on the ship that they were tracking headed towards Burma? And secondly, I just want to be clear on --

SENIOR STATE DEPARTMENT OFFICIAL: I’m sorry, what the -- what was?

QUESTION: The ship, what was – what did the U.S. think was on the ship.

Secondly, you said that you were concerned that the North Koreans would use Malaysia or other countries to continue those activities. Does that mean that you suspect that Malaysian banks are processing accounts of people who are on the designated list at the UN and they shouldn’t be doing it? Could you just spell out specifically what that meant? Thank you.

SENIOR STATE DEPARTMENT OFFICIAL: The ship involved had been engaged previously in these kinds of activities. So there was a heightened suspicion that it could be used again for such activities.

QUESTION: Meaning arms shipments, specifically?

SENIOR STATE DEPARTMENT OFFICIAL: Activities that were prohibited by previous resolutions, and which includes arms or nuclear-related activities, missile technology, missile activities. I guess weapons would fit within that.

QUESTION: So there was no real-time intelligence? It was just based on the past?

SENIOR STATE DEPARTMENT OFFICIAL: No. I can’t get into intelligence matters and information we had. But again, it was – it was to us a commonsensical conclusion, in addition to whatever information that we had.

[deletia]
Opening Statement for Hearing on North Korea

U.S. Senate Foreign Relations Committee Republican leader Dick Lugar made the following statement at today’s hearing:

Mr. Chairman, thank you for holding this hearing to review the present situation in North Korea.

I support a full review of U.S. policy toward North Korea. Secretary Clinton has said that the Administration is considering all options in responding to North Korea’s latest actions. I look forward to hearing additional details about this review from Ambassador Bosworth.

A number of points should be considered by the Administration as it develops a North Korea strategy. Did the lack of a strong, unified, and persistent response by China, Russia, Japan, South Korea, and the United States to past provocative actions by North Korea factor into Pyongyang’s decision to proceed with the latest nuclear test?

Do North Korean officials believe their country’s relationships with Iran or Syria will be permitted to develop without consequence if those relationships include cooperation on weapons of mass destruction?

What is the nature of the cargo in North Korean planes and ships arriving in Burma, which is sometimes a transit point for further global destinations? Russia has been transparent in its cooperation with Burma in the development of a nuclear reactor, reportedly for medical research purposes. Is North Korea contributing to the development of Burma’s nuclear program, and if so, in what way?
The United States took steps last Tuesday to curtail what it sees as North Korea's ability to trade in missiles and nuclear materials, with the Treasury and State Department announcing actions against two North Korean companies, one of which is allegedly connected to the Burmese arms industry.

The US imposed sanctions and froze the US assets of Namchongang Trading Corp and Iran-based Hong Kong Electronics in an attempt to choke off the firm's funds.

The two companies are charged with being at the center of Pyongyang's attempts to export its nuclear and long-range missile technologies, according to US officials.

The US sanctions bar any US firms from conducting business with Namchongang and Hong Kong Electronics. Accordingly to the Wall Street Journal last Thursday, US officials said Namchongang Trading Corp has aided the Burmese arms industry and was importing centrifuge equipment that North Korea is using to develop a uranium enrichment capability. Uranium, when enriched to a weapons grade, can be used to build nuclear weapons.

Namchongang is headed by Yun Ho Jin, a former senior North Korean diplomat who served at Pyongyang's mission to the International Atomic Energy Agency, the UN's atomic watchdog. He is also believed to be closely aligned with senior members of North Korean leader Kim Jong Il's government.

US officials alleged Hong Kong Electronics was playing a key role in facilitating the weapons trade between North Korea and Iran.

The Wall Street Journal last Thursday reported US Treasury Undersecretary for Terrorism and Financial Intelligence Stuart Levey as saying North Korea uses front companies like Hong Kong Electronics and a range of other deceptive practices to obscure the true nature of its financial dealings.

Meanwhile, the Japanese daily Yomiuri Shimbun reported last Thursday that the Toko Boeki trading company was linked by Japanese police with attempts to export high-tech equipment with arms applications to Burma, and is suspected of shipping several other devices with potential for making weapons of mass destruction to the junta as well.

Kanagawa prefectural police said North Korean Lee Kyoung Ho, the president of the Toko Boeki firm, was arrested last Monday on suspicion of attempting to ship a magnetic measuring instrument from Yokohama port to Burma via Malaysia on January 23, a device that could potentially be used to produce weapons of mass destruction, said the Yomiuri Shimbun.

The Japanese newspaper said Tokyo-based Toko Boeki has allegedly been exporting instruments that can be used to produce missiles to Burma without government permission since 2006.
CLANDESTINE NUCLEAR PROJECTS OF BURMESE JUNTA ALMOST COMPLETED.

2009 April 15
by peacerunning

(With full force of support by North Korean Technology and hundreds of Technicians) While the whole world focus their attention on North Korean provocation of hostile Ballistic Missiles program with Medias reveal them in bold line letters, another involvements of North Korean Nuclear Technology are almost completed their projects in military rule Burma with full force of support by hundreds of North Korean Technicians and Technology but no one ever notice their rapid progress.

First project among other is located in the area of Maymyo (Pyinoolwin) and groups of villages were removed by force since year 2001. Construction of Nuclear Reactor in that area locally known as Kone-Baw [Konbaw] village is almost completed. The most important raw material Uranium, require for Nuclear Project was founded in Lashio area of North-Eastern Shan State thus transportation is very convenience because the project site and Lashio are on the same road famously known in the old day called Burma-China road. It is also has easy access from port City of Rangoon to carry the old second-hand machinery and parts from North Korea. Training of technicians to run that reactor was commenced since year 2001. Groups of Army Engineering graduates were sent to Russia for further study. Sad news for Burmese people are that the Pwe-Kauk [Pwekawk] water-fall originally known as BE fall in Maymyo, which remained as recreation centre for people almost a century long was now blocked to build Dam to provide require irrigation system for Nuclear Project.

Construction of Dam was undertaken by Irrigation Department and works was done for more than 50% of the project. Relocating of villages, cultivated area and even including Buddhist Temples and Monasteries were done by force of military authority and painful to the inhabitants because they all are staying in the area by generations. Impact to environments with demolition of local flora and fauna are not substitutable but permanent. Persecuting of local communities by authority is not just stopped yet. The beautiful landscaping, watershed and catchments area important for local farmers and inhabitants were damaged by explosion of mines for irrigation project. Explosion of mine destroyed not only the natural heritage but also the life-blood of local people. Big poultry farm of international standard with higher technology own by native of the country’s business group was suffering the lost of many fowls dead by explosion every day. Instead of compensating or finding the alternative way to avoid the lost of properties, military authority issue the order to close the poultry farm. That will be a big waste of millions and millions of investment. That poultry farm is intending to educate the latest technology to local farmer for higher yield of poultry but now all are down to the drain. Furthermore, poor local workers employed by farm will face the hardship of unemployment problem in near future.

Second project was started in Magwe Division, Min-Bu district, near Nga Phae [probably Ngape] village adjacent to the famous Scared Foot Print of Lord Buddha Which is call in Burmese “Mann-Shwe-Set-Taw Pagoda”. That project was built and supported by Russian Government with agreement of completion in 5 years term. Project included the building of Dam on the scared and famous Mann creek. Mann creek is famous for crystal clear water that pilgrims of Scared Foot Print Pagoda can lodge on the bank of the creek and enjoy the scene of surrounding mountain ridges with flowing water of which can see through to the bad of the creek decorated with stone pebble naturally. All of those beautiful natural gifts will became fairy tale in next 5 years time.

Third project will be building in east of Ya-Mae-Thinn [perhaps Yamethin] Township. Military authority starts giving the marching order to local inhabitants that those refuse to move or try to delay were encountered with shooting incident by soldiers. Military authority issuing the Civil Act Section (144) in that area means authorizing the soldiers with license to kill. For the local farmers, they are staying in that area by generations and
their forefathers converted the raw land into the fertile and cultivated land so for them move away mean commencing of poverty and famine. List of dead and injury by shooting are mounting in the area.

All of above three projects shown clearly that requirement for energy and electricity are not eminent in the region of where the Nuclear Reactors were located. Almost all of the Industrial Zone are around in Rangoon area and which are the most needed places for electricity supply but all three Nuclear Reactors are not built nearby so intention of Nuclear projects are very clear that they are not for peaceful purpose. Wasting of people’s money in Junta’s paranoia of protection and safety only for them is something selfish and ridiculous. Junta’s paranoia is obvious that they built the tunnel from their resident to airport in Nay-Pyi-Daw using the so much amount of people’s money only for their escape from people’s justice. Furthermore, how we can trust the secondhand materials and technology of North Korea with their technicians. Nobody can assure the reliability and ability of North Korean as no proof of reputation about them. If we are thinking deeper about the safety of nuclear accident, we are terrified with fears and scare. Russians are not much better as we still can’t forget the Chernobyl accident in 1985 at old Soviet Union.

Constructions of the Dams in all around the Burma by Irrigation Department were very irresponsible and non-considerate matters as that caused so many negative effects. Impact on ecological balance was so great and that cause irregularity in weather and environmental damages. Relocating of people and villages because of constructions and flooding of water catchments cause unemployment and lost of fertile land. An extinction of local flora and fauna are not replaceable. But those Irrigation Department engineers involved in constructions projects were rich and became millionaires. They make their fortune by misusing people’s money, stealing and accepting bribes from sub-contractors for keeping the blind eyes on unqualified works etc. They own one after another of big houses in posh area of Rangoon and in every big cities including abroad. They can send their children to get further education in USA and UK. They are the one kind of class in Burma as can only compete with generals in corruption. The person in-charge for all those senseless projects was recently honored by Junta and was promoted to the post of full general. He can be proud of misusing people’s properties and obeying the order of uneducated brainless paranoid Than Shwe so he became three stars general. His name is Thaha Thura Tin Aung Myint Oo.

Reported by Thu Ye Kaung.

[See Appendix C of this Sourcebook for a discussion of the sites mentioned in the above article.]
Is there a Burma-North Korea-Iran nuclear conspiracy?
by Guest Blogger - 25 February 2009 7:26AM

Andrew Selth is a Research Fellow at the Griffith Asia Institute. He has recently returned from Burma and Thailand.

If the Obama Administration was looking for another foreign policy challenge, all it would have to do is take seriously the rumours circulating in Thailand that Burma is pursuing a secret nuclear weapons program, with help from North Korea and Iran.

These stories have all the ingredients of a real security nightmare. The question is, are any of them true?

In 2000, when Burma’s military government announced it was going to purchase a 10MW light water reactor from Russia, activist groups immediately warned that the generals were not to be trusted. They accused the regime of secretly planning to develop a nuclear weapon, to threaten the international community and resist pressures to reform.

The activists cited the regime’s long record of duplicity, its abiding fear of external intervention (particularly from the US) and its customary disregard for international norms of behaviour. They dismissed assurances that the reactor was for peaceful research, and would be placed under IAEA safeguards.

Also, well before Naypyidaw and Pyongyang restored diplomatic relations in 2007, some observers (including a few high profile figures in Washington) expressed concern about Burma’s growing ties with North Korea, a known proliferator of nuclear weapons technology.

At the time, these suspicions were greeted with scepticism. Burma had a long record of opposition to nuclear weapons proliferation. Also, Burma’s financial reserves and its level of technological development were so low that many doubted its ability to build and manage a nuclear reactor, even with Russian assistance.

But Burma’s military leadership was highly unpredictable, and prone to bizarre behaviour. And some generals clearly envied North Korea’s ability to use its nuclear weapons status to resist international pressure and wring concessions out of the US. Still, no reliable evidence could be produced of a clandestine Burmese WMD program.

As years passed, the Burma rumour mill ground on, prompting further accusations of the generals’ perfidy. There were reports in the news media and on the internet that thousands of Burmese were attending technical training courses in Russia, and that Burma was secretly receiving shipments of equipment from North Korea. There were sightings of foreigners at defence establishments all around Burma.

At the same time, there were increasingly strident claims by some activist groups, to the effect that Burma had constructed a reactor, developed uranium enrichment plants, and was exporting yellowcake to North Korea and Iran. A few even said that Burma already possessed nuclear weapons.

Yet the official view of Burma’s status remained unchanged. Throughout this period, the US issued numerous warnings about clandestine North Korean, Iranian and Syrian WMD programs but, as far as Burma was concerned, the Bush Administration remained conspicuously silent.

In 2005 and 2006, for example, during its efforts to have Burma cited by the UN Security Council as ‘a threat to international peace and security’, the US pointedly made no reference to a Burmese nuclear weapons program.
In 2007, the State Department reminded Burma of its obligations under the nuclear Non Proliferation Treaty, but only referred to the proposed Russian reactor.

For its part, the UK Government stated in 2006 that it was ‘not able to corroborate’ reports about the alleged transfer of nuclear technology from North Korea to Burma. The UK also put on record its view that no uranium was being processed in Burma, and that Burma did not have any operational enrichment facilities. Nor was the UK aware of any Burmese uranium exports.

In 2007, Singapore’s Foreign Minister said Burma was ‘unlikely’ to develop a nuclear program, given its many other problems. A new MoU signed by Burma and Russia that year revealed that construction of the research reactor had not even begun. The most likely cause was a lack of funds.

Over the past year or so, however, a number of governments have given this issue a higher priority. The increased level of interest seems to have been prompted by the appearance in Thailand of several Burmese officials (both civilian and military) who claimed to have direct knowledge, or even first-hand experience, of a secret nuclear weapons program.

According to these ‘defectors’, in 2002 Burma’s military government began building a reactor near Maymyo, with the aim of developing a nuclear device by 2020. The reactor and some related nuclear fuel processing plants were said to be hidden underground. The expertise for this project reportedly came from North Korea, with help from Iran and possibly Pakistan.

These claims are still to be verified. Some may in fact relate not to a secret WMD program, but to the regime’s efforts over the past 20 years to upgrade its military infrastructure. Particularly since the Iraq wars, Burma has felt vulnerable to attack from the air. It has reportedly constructed underground command and control bunkers, hardened its communications nodes and built protective shelters for a range of new conventional weapon systems. The North Koreans have considerable expertise in making such facilities.

Even so, both Western and regional governments now seem keen to find out whether the defectors’ claims are accurate. Any suggestions of a secret WMD program, let alone one conducted by a pariah state like Burma, must be of concern. Some of the information provided by the defectors appears credible, and there are numerous defence facilities in Burma which have not been identified. Also, no-one underestimates the lengths to which the generals will go to stay in power, and to protect Burma from perceived external threats.

Understandably, however, foreign officials looking at these matters are being very cautious. No-one wants a repetition of the mistakes which preceded the last Iraq war, either in underestimating a country’s capabilities, or by giving too much credibility to a few untested intelligence sources. Particularly in the highly charged political environment that surrounds consideration of Burma’s many complex problems, no government is going to accept claims of a secret nuclear weapons program without investigating them thoroughly first.

There has always been a lot of smoke surrounding Burma’s nuclear ambitions. Over the past year or so, the amount of smoke has increased, but still no-one seems to know whether or not it hides a real fire. With this in mind, strategic analysts in many countries are looking to the Obama Administration for an authoritative statement on Burma’s nuclear status.

This may come sooner rather than later. The Burma JADE Act enacted by Congress last July stipulates that, within 180 days, the Secretary of State must issue a statement describing ‘the provision of weapons of mass destruction and related materials, capabilities, and technology, including nuclear, chemical, and dual use capabilities’. That deadline has already passed.
RUSSIA-BURMA NUCLEAR INTELLIGENCE REPORT #2

By Roland Watson

August 7, 2008

[EXCERPT]

We have received additional intelligence that expands our last report, and which also provides confirmation for earlier reports. This intelligence comes from new sources. In summary, as we continue to receive information, the details of the SPDC’s nuclear program are becoming more and more concrete.

Nuclear program objective

In May 2001, at the National Defence College (Rangoon), SPDC Science and Technology Minister U Thaung said that Burma would make an effort to possess nuclear weapons by 2020. Once achieved, this would make the regime the strongest military power in Southeast Asia; the country would be transformed into the “Fourth Burman Empire”; and, it would be able to threaten Thailand militarily.

This statement reveals the SPDC to be a grave threat to international security and peace. The regime's announcement that its new 10 MW reactor is intended for peaceful research purposes is a lie.

Program background

The SPDC’s program to acquire nuclear weapons began in 1990. (At this time the junta was known as SLORC.) Rangoon University Physics Professor U Po Saw was consulted about developing the technology, and also the selection of candidates to become state scholars. The process of honing cadet officers for training in nuclear technology was begun in 1997 with Defense Services Academy Class 42.

Prior to 2000, Russian nuclear experts were invited and discussions on building a reactor, its location, and the training of state scholars, were held.

Our sources also tell us that the junta first contacted India to obtain nuclear technology. The country agreed to accept state scholars. However, since India also stipulated that it had to supervise and control the operation of the reactor, this approach was halted.

With the help of China, the SPDC succeeded in reaching its agreement with Russia. In addition, the Chinese government has advised the junta that it should try, by various means, to make nuclear weapons and, if it cannot produce them by its target date of 2020, that it should buy them.

In 2003, the regime sent thirty military officers to North Korea to study reactor technology. In 2006, it started buying from the North the machinery necessary for reactor construction. The SPDC established its connection with North Korea so it would not have to stop the program if its relations with Russia turned sour.

The SPDC sells natural resources to obtain nuclear technology, including for the costs of educating the state scholars (a new source confirms that there are over 4,600 in Russia alone). We have also learned that the resource sales included 20,000 tons of iron ore mined in Ka-thaing Taung, a range in the Hpakan area in Kachin State (near the famous jade mines). But, and as has been reported by others, the junta did experience financial problems in 2005 and its program with Russia was suspended. These difficulties were overcome, the program was restarted, and the SPDC is now financially secure. (The reason for this change of fortune is obvious. According to the new U.S. Burma law: “The Congressional Research Service estimates that the Yadana pipeline provides at least $500,000,000 in annual revenue for the Burmese Government.”)
Our new sources further tell us that the SPDC has secretly tried to gain assistance from Iran. This confirms a relationship that we have previously heard about from other sources.

Further, in 2000, Japan started taking scholars for doctoral level studies, to operate a reactor. With the help of Japan, new departments of nuclear science have been set up at Rangoon University, Mandalay University, and the Defense Services Academy.

Training in Russia

In 2001, the first batch of scholars, 150 military officers, was sent to Russia from Tada U Airport on chartered Aeroflot flights.

In Russia, the scholars attend a variety of institutes in Moscow and also St.Petersburg, depending on their subjects of study. The schools include:

- MEPHI – Moscow Engineering Physics Institute
- MIET – Moscow Institute of Electronic Technology
- MATI – Moscow Institute of Aviation Technology
- MAI – Moscow Aviation Institute
- BMSTU – Bauman Moscow State Technical University
- MITT – Moscow Institute of Thermal Technology
- MISE – Moscow Civil Engineering Institute
- MSMU – Moscow State Mining University

MEPHI teaches nuclear science, MIET rocket guidance, MAI aircraft and space subjects, and MATI the technology for building rockets to carry satellites. There are also course programs in tunneling, uranium mining, and uranium ore refining.

Our new sources confirm that many of the scholars are unhappy. They were forced to go to Russia; their pay is too low; the harsh weather has caused them problems; and the medical care they receive is inadequate. They complained to the Burma Embassy in Moscow, and asked to be sent home. In response, the Directorate of Intelligence sent weekly instructions urging them to complete their work and to fulfill the national aim (to produce nuclear weapons). At one point former Foreign Minister U Win Aung came in person and told the students to finish their studies. He relayed a message from Vice Chief of Staff Maung Aye that anyone who married a Russian woman scientist and then returned to Burma would be rewarded.

Also, in 2002, Quartermaster General Win Myint as well as the Navy Chief, Air Chief and Transport Minister went to Russia and arranged for the training of twenty Air Force pilots, who would then take ten purchased MIG 29s back to Burma. They additionally discussed whether Burma should acquire aircraft carriers and submarines. In July 2002, Science and Technology Minister U Thaung went to Russia and signed the agreement for the acquisition and construction of the nuclear reactor.

Reactor Location

In our previous report we stated that the site of the reactor is Kyauk Pa Toe (aka Kyauk Pha Htoe), near Tha Beik Kyin. While we do not yet have a confirmation of this, we have received additional information about the SPDC’s efforts to keep its location secret.

Even the technicians who were trained to build the reactor were not allowed to know its site. In June 2006, there was an information leak, and the officers for the program were called to Naypyidaw and interrogated. This is apparently a reference to the information that was published by Bertil Lintner in a July 2006 Asia Times article, which said that North Korean technicians had been seen at Natmauk, a town to the east of Magwe.
We have now learned that a 10-megawatt reactor was being built (or was intended to be built) in Myaing Township, Magwe Division, and further that it was to use heavy water and, for that reason, that it would be able to produce plutonium.

This leaves us with two plausible reactor sites, Myaing Township and Kyauk Pa Toe. One scenario that could explain this discrepancy is that the SPDC’s original plan was to locate the reactor in Magwe, but that this subsequently changed, perhaps because, as The Irrawaddy reported, it is an earthquake zone. In any case, while Magwe remains a possibility, there is also a strong source identification for Tha Beik Kyin.

Uranium activities

We have received additional information about Burma’s uranium deposits, which helps confirm our prior reports. Uranium ore that is commercially exploitable exists in the Kyauk Pyon, Paungpyin and Kyauk Sin areas. In addition, uranium prospecting has occurred or is underway in southern Tenasserim, Karenni State (the Loikaw area), Moehnyin in Kachin State, and in areas west of Taunggyi.

Uranium milling is in progress at Tha Beik Kyin. Further, and as we speculated in our last report, we have received information that a program to enrich milled uranium (yellowcake) to U-235 has also begun at Tha Beik Kyin. The entire operation at this location is now referred to as Nuclear Battalion-1.

We have also had confirmed that in early 2006, yellowcake was sold to North Korea. In July 2006, the regime purchased from North Korea nuclear activation equipment for use in uranium enrichment and also for the production of plutonium. While we do not know the precise nature of this equipment, there is a good probability, given the other information, that it includes centrifuges. At least one North Korean nuclear expert is now working in Tha Beik Kyin.

We further have confirmation that a related Military Research Center was built in the Setkhyra range (aka Sa Kyin) near Lun Kyaw, which area is also reportedly a Nuclear Battalion, and that there is a Civilian Research Center in Kyaukse Township. There are also Russian nuclear experts in Pyin U Lwin, who give refresher courses to the state scholars after they return home.
RUSSIA-BURMA NUCLEAR INTELLIGENCE REPORT

By Roland Watson

June 26, 2008

[EXCERPT]

We have new, disturbing, and detailed intelligence about the assistance Russia is providing Burma’s dictatorship, the State Peace and Development Council (SPDC), on its nuclear program and more generally its military modernization. This new information both confirms earlier intelligence that we have published, and expands what is known about the overall program.

Nuclear reactor and uranium mining

It has been widely reported that Russia is going to provide Burma a nuclear reactor, for so-called “research” purposes. We have received information that the SPDC has now purchased the 10 MW reactor. It is not new, but is reportedly in good condition. It is being dismantled, transported to Burma, and rebuilt. While we cannot confirm that it has arrived, our sources say that installation is due to be completed by December this year. (We have previously reported that North Korean technicians will assist with the construction.)

The reactor will be built at a site some ten kilometers from Kyauk Pa Toe (aka Kyauk Pha Htoe), in Tha Beik Kyin township, approximately one hundred kilometers north of Mandalay near the Irrawaddy River.

In return for the reactor and other services, a Russian government mining company has received concessions to mine gold, titanium and uranium. There are two gold mining sites: in Kyauk Pa Toe; and in the mountains to the right of the Thazi-Shwe Nyaung railway line from Mandalay Division to Southern Shan State in the Pyin Nyaung area.

Titanium is also being mined, or derived from the same ore, at Kyauk Pa Toe.

Uranium is being mined at three locations: in the Pegu-Yoma mountain range in Pauk Kaung Township of Prome District (aka Pyi); in the Paing Ngort area in Mo Meik Township in Shan State; and at Kyauk Pa Toe.

The reactor site has been chosen because of its proximity to the Tha Beik Kyin and Mo Meik uranium mines. It is likely that the gold mining operation at the former will be used as cover, to conceal the nuclear facilities.

We have previously reported, from different sources, that the SPDC has a yellowcake mill somewhere in the Tha Beik Kyin area. Now we know the exact location (or at least enough information to find it with satellite imagery).

The reactor has been publicized as being for research purposes, meaning research on nuclear power generation. We believe that the SPDC has no real interest in generating electricity, or at best that this is a secondary consideration, and that the primary purpose is atomic weapons development. Our sources say that the SPDC expects to have full nuclear capability within ten years.

Russia is presumably supplying the reactor fuel as well. While Burma has uranium ore, and mills to convert it to yellowcake, this must be enriched to create the fuel, typically using cascades of gas centrifuges. We have received one report that the SPDC has begun a centrifuge program, at the South Nawin Dam, but this is unconfirmed. Barring this operation, the source of the fuel therefore must be Russia.

Note: Locating the reactor at Kyauk Pa Toe really only makes sense if there are plans to build an enrichment facility there. This way you would have the full industrial cycle in close proximity: mine, mill, enrichment, and reactor.

What is perhaps most disturbing about Russia’s program with the SPDC is that it is identical to the Soviet Union’s assistance that propelled North Korea to become a nuclear power. Why, with the end of the Soviet Union and the Cold
War, is Russia still helping rogue regimes proliferate? The surface answer of course is money, in this case in the form of natural resources, but the deeper question remains. Russia is considered to be a democracy. What would the people of the country think of their leaders giving such help to the likes of the SPDC and Than Shwe?

In 1965, the Soviet Union gave North Korea a 2 MW reactor, which was upgraded in 1973 to 8 MW. It also supplied fuel through at least this period. North Korea then went on to construct a much larger reactor, and in the 1980s began weapons development. This included building separation facilities to obtain plutonium, and high explosives detonation tests. (We have received reports that the SPDC has already conducted such tests, in the Setkhya Mountains, aka Sa Kyin Mountains, southeast of Mandalay.) At some point North Korea also began its own uranium enrichment program, to produce weapons grade material, and the U.S. confronted the country about this in 2002. This means that the North has two different sources of fissile material for weapons, reactor plutonium and enriched uranium.

The North detonated a small atomic weapon, with a yield of less than one kiloton, in October 2006, using some of its plutonium. It is now reportedly about to disclose its nuclear assets, and also destroy its plutonium producing reactor, but the sticking point has been the enriched uranium. The North appears unwilling to discuss this (and at this point to disclose its weapons cache), which means that even with the destruction of the reactor and the plutonium stockpile (for the latter the size of which is subject to serious dispute), the North would retain the ability to produce weapons with the uranium. At the moment the U.S. appears willing to accept partial disclosure, i.e., of only the plutonium.

In addition to Russia, North Korean technicians have been helping Burma with its nuclear ambitions (and other weapons programs), and we have received information that the SPDC has given the North refined uranium in return, which may be destined for the enrichment program.

This is all very disturbing, all the more so because of the apparent weakness of the Bush Administration, which has been unwilling to press the North, and which refuses even to mention Burma (its nuclear program). It took North Korea forty years before it detonated a weapon. It will likely take the SPDC only a fraction of this period. Once the Burmese junta has atomic weapons, its rule will be entrenched, and its neighbors, foremost Thailand, will be seriously endangered.
The 4th Burmese Empire with Nuclear Weapon
Asian Tribune
By Prof. Kanbawza Win:
October 20, 2008

Google Alert Burma duly reported of how Burma is near completion of nuclear weapon on the 18th instant and of how its Defense Minister boasts that by 2020 Burma would be one of the greatest nations in Southeast Asia. Given the economic reality of Burma compounded with its gross mismanagement and human rights violations is it but an empty dream or a reality?

Every body knew that Russia has agreed to build a nuclear research centre in Burma. The centre will comprise a 10MW light-water reactor working on 20%-enriched uranium-235, an activation analysis laboratory, a medical isotope production laboratory, silicon doping system; nuclear waste treatment and burial facilities will be monitored by IAEA as according to Rosatom head, Sergey Kiriyenko and Burma’s Science and Technology Minister. Russia has trained Burmese military specialists.

The Background
The story started way back in 1990 when the current Junta christened itself as SLORC (State law and Order Restoration Council); Rangoon University Physics Professor U Po Saw was consulted about developing the technology, and also the selection of candidates to become state scholars. The process of honing cadet officers for training in nuclear technology was begun in 1997, with Defense Services Academy Class 42.

The Junta at first contacted India to obtain nuclear technology. Karla (Indians) agreed to accept state scholars, but India also stipulated that it had to supervise and control the operation of the reactor. The deal did not go through. With the help of China, the Junta succeeded in reaching its agreement with Russia. In addition, the Chinese government has advised the Junta that it should try, by various means, to make nuclear weapons and, if it cannot produce them by its target date of 2020, it should buy them.

The other side of the story is that Burma and North Korea, two of the world’s most isolated nations, have agreed to restore diplomatic relations after a break of more than 20 years. At that time having being kicked out of Prime Minister’s Office and interrogated in Insein, I was working with the Korean embassy under ambassador Kae Chu Lee, who was killed instantly when the Pyongyang sent agents to kill President Chun Doo Wan. Self-interest has brought the two countries back together North Korea benefited from Burma’s natural resources, such as oil, gas and timber while Burma’s rulers need access to military equipment, which has been blocked by US and European sanctions.

In 2003, the regime sent thirty military officers to North Korea to study reactor technology. In 2006, it started buying from the North the machinery necessary for reactor construction. The Junta established its connection with North Korea, so it would not have to stop the program if its relations with Russia turned sour and also want some of Pyongyang’s sophisticated tunneling techniques to help further fortify their military complex in the new capital Naypyidaw. The Junta sells natural resources to obtain nuclear technology, including for the costs of educating the state scholars and currently there are over 4,600 in Russia alone.

20,000 tons of iron ore are mined in Ka-thaing Taung, a range in the Hpakan area in Kachin State near the famous jade mines. Even though the program was temporarily suspended in 2005, due to financial reasons the Yadana pipeline provides at least $500,000,000 in annual revenue for the Burmese regime and is now a going process. The Junta also secretly tried to gain assistance from Iran and that is why the two countries relations are
so rosy with full diplomatic relations. Further, in 2000, Japan started taking scholars for doctoral level studies, to operate a reactor. With the help of Japan, new departments of nuclear science have been set up at Rangoon University, Mandalay University, and the Defense Services Academy.

**Russian Connection**

In 2001, the first batch of scholars, 150 military officers, was sent to Russia from Tada U Airport on chartered Aeroflot flights. In Russia, the scholars attend a variety of institutes in Moscow and also St.Petersburg, depending on their subjects of study. The schools includes (MEPHI) Moscow Engineering Physics Institute, (MIET ) Moscow Institute of Electronic Technology, (MATI) Moscow Institute of Aviation Technology, (MAI) Moscow Aviation Institute, (BMSTU) Bauman Moscow State Technical University, (MITT) Moscow Institute of Thermal Technology, (MISI) Moscow Civil Engineering Institute, and (MSMU) Moscow State Mining University

MEPHI teaches nuclear science, MIET rocket guidance, MAI aircraft and space subjects, and MATI the technology for building rockets to carry satellites. There are also course programs in tunneling, uranium mining, and uranium ore refining. Of course many of the scholars are unhappy as their pay is too low and the harsh weather caused them problems with the medical care they receive is inadequate (As an example, in January this year one scholar fled to the border of Finland, but was arrested by Russian intelligence agents when he used his cell phone to call his contact on the other side). In response, the Directorate of Intelligence sent weekly instructions urging them to complete their work and to fulfill the national aim of producing nuclear weapons. At one point former Foreign Minister U Win Aung came in person and told the students to finish their studies. He relayed a message from Vice Chief of Staff Maung Aye that anyone who married a Russian woman scientist and then return home bringing their wives would be rewarded.

Also, in 2002, Quartermaster General Win Myint as well as the Navy Chief, Air Chief and Transport Minister went to Russia and arranged for the training of twenty Air Force pilots, who would then take ten purchased MIG 29s back to Burma. They additionally discussed whether Burma should acquire aircraft carriers and submarines. In July 2002, Science and Technology Minister U Thaung went to Russia and signed the agreement for the acquisition and construction of the nuclear reactor. Now a 10-megawatt reactor was being built in Myaing Township, Magwe Division, and further that it was to use heavy water and, for that reason, that it would be able to produce plutonium (read Bertil Lintner’s Asia Times article of July 2006.)

Uranium ore that is commercially exploitable exists in the Kyauk Pyon, Paungpyin and Kyauk Sin areas. In addition, uranium prospecting has occurred or is underway in southern Tenasserim, Karenni State (the Loikaw area), Moehnyin in Kachin State, and in areas west of Taunggyi. Uranium milling is in progress at Tha Beik Kyin, an enrich milled uranium (yellowcake) to U-235. This yellowcake was sold to North Korea and in return the regime purchased nuclear activation equipment for use in uranium enrichment in July 2006, and also for the production of plutonium and now North Korean nuclear experts are now working in Tha Beik Kyin. The related Military Research Center was built in the Setkhya range (aka Sa Kyin) near Lun Kyaw, which area is a Nuclear Battalion, and that there is a Civilian Research Center in Kyaukse Township. There are also Russian nuclear experts in Pyin U Lwin, who give refresher courses to the state scholars after they return home.

In return for the reactor and other services, a Russian government mining company has received concessions to mine gold, titanium and uranium. There are two gold mining sites: in Kyauk Pa Toe; and in the mountains to the right of the Thazi-Shwe Nyaung railway line. Titanium is also being mined, or derived from the same ore, at Kyauk Pa Toe. Uranium is being mined at three locations: in the Pegu-Yoma Mountain range in Pauk Kaung Township of Prome District (aka Pyi); in the Paing Ngort area in Mo Meik Township in Shan State; and at Kyauk Pa Toe.
Disturbing Factor

What is perhaps most disturbing about Russia’s program with the Burmese Junta is that it is identical to the Soviet Union’s assistance that propelled North Korea to become a nuclear power. Why, with the end of the Soviet Union and the Cold War, is Russia still helping rogue regimes proliferate? The surface answer of course is money, in this case in the form of natural resources, but the deeper question remains. Russia is against democracy.

In 1965, the Soviet Union gave North Korea a 2 MW reactor, which was upgraded in 1973 to 8 MW. It also supplied fuel through at least this period. North Korea then went on to construct a much larger reactor, and in the 1980s began weapons development. This included building separation facilities to obtain plutonium, and high explosives detonation tests. The Junta has already conducted such tests, in the Setkhya Mountains, aka Sa Kyin Mountains, southeast of Mandalay.

At some point North Korea also began its own uranium enrichment program, to produce weapons grade material, and the U.S. confronted the country about this in 2002. This means that the North has two different sources of fissile material for weapons, reactor plutonium and enriched uranium. North Korea detonated a small atomic weapon, with a yield of less than one kiloton, in October 2006, using some of its plutonium. It is now reportedly about to disclose its nuclear assets, and also destroy its plutonium producing reactor with the US bowing to the demand that DPRK be taken off from the black list of rogue states. But the sticking point has been the enriched uranium. The North appears unwilling to discuss this because it will disclose its weapons cache, which means that even with the destruction of the reactor and the plutonium stockpile (for the latter the size of which is subject to serious dispute), the North would retain the ability to produce weapons with the uranium. At the moment the U.S. appears willing to accept partial disclosure, i.e., of only the plutonium.

Both Russia, North Korean technicians have been helping Burma with its nuclear ambitions (and other weapons programs), This is all very disturbing, all the more so because of the apparent weakness of the Bush Administration, which has been unwilling to press the North, and which refuses even to mention Burma and its nuclear program. It took North Korea forty years before it detonated a weapon. It will likely take the Burmese dictatorship only a fraction of this period. Once the Burmese Junta has atomic weapons, its rule will be entrenched.

Precision Weapons

Burma now possessed a wide variety of missile installations, including large quantities of land-based SAMs; ship-launched missiles, both surface to air and surface to surface; weapons for its MIG 29s; and even short range ballistic missiles. While the Junta bought anti-aircraft weapons from the Ukraine, in 2007 it has now purchased four shiploads of such weapons from Russia and multi-tube mechanized rocket launchers from North Korea can be used with the ballistic missiles. Moreover, Burma is researching the production of guided missiles, and with Russian assistance intends to build a rocket factory in Thazi Township. This will mark the latest step in a well-recognized proliferation of Russian precision-guided munitions in the Asia Pacific region. The only thing that PGMs factory produce will be medium range guided rockets and that production is scheduled to begin within five years. It is clear that the Generals are intent on developing a strong defense against an international intervention, including foreign jets, helicopters and ships. Perhaps this is the main reason of why the U.S. and the French balked at dropping relief supplies following Cyclone Nargis was the risk of missile attack on their helicopters and ships.

The fact that the Burmese Junta is aggressively seeking nuclear weapons (not to mention all of its other programs) should make the leaders of Thailand, and the world, extremely concerned. The appeasement policy of the successive Thai administrations (including ASEAN) and the International Community towards the Junta should have second thought. The Burmese Military Junta is a threat of the greatest severity. It should be stopped.
Since the Security Council, with Russian and Chinese vetoes, is unable to act, there must be an alternative solution. The only real options are for the U.S., either alone or with other concerned nations (including Thailand), to assist the people of the country to free themselves, using whatever means are required. This should be the crux of the Thai policy instead of bullying the refugees and the migrant workers. At the moment, though, there is a conspiracy of silence even to acknowledge this threat. Thailand, the U.S. and other nations are preoccupied with their internal and other problems that there is no desire to recognize publicly another new crisis.

We also understand that there is such a thing as investigative journalism or media outlet as far as Burma’s nuclear program is concerned. This lack of coverage means that political leaders, in Thailand, the U.S., at the U.N., etc., will continue to act as if there is not a problem.

International Community

What is the U.S. doing? Under geopolitical realism, the only concerns are national interests. On a superficial level, for the U.S. and Burma, these are limited to Chevron’s investment in Burma’s natural gas production and pipelines. A secondary interest is the concern of U.S. citizens of Burmese origin as most of the Myanmar tribe will side with the Junta once the 4th Burmese empire is established but not the ethnic tribe, but since this group is small it can effectively be ignored. It would seem, therefore, that all the Administration bluster notwithstanding, its only real policy objective for Burma is to protect Chevron, which corporation to bolster its case also makes large campaign donations.

The real direct national interest of the United States is to deny Burma nuclear weapons. It is not only North Korea, Iran and Syria that America (and the world) must contain. Having a nuclear-armed Burmese Military Junta is an unacceptable risk. This trumps the need to assist a domestic corporation. Further, since Chevron is also a major cash source for the Junta, which uses money as well as the direct transfer of natural resources to pay its weapons suppliers, it demands that the company be forced to divest.

US intelligence believes Burma is seeking to develop nuclear weapons from technology provided by North Korea, according to two former senior US government officials. An article in one of the latest issue of Foreign Affairs, Michael Green, formerly with the National Security Council, and Derek Mitchell, formerly with the Pentagon, write: “Western intelligence officials have suspected for several years that the regime has had an interest in following the model of North Korea and achieving military autarky by developing ballistic missiles and nuclear weapons.” The article confirms the thrust of a story in The Australian last year that Burma was seeking to acquire missile and nuclear weapons technology from North Korea.

Green and Mitchell argue that Burma is a much more urgent problem for the international community than is commonly realized. This is because of the humanitarian catastrophe that Burma has become as well as the human and strategic fallout of its activities. Its many illegal immigrants are spreading the HIV-AIDS virus, in part because of the primitive quality of the Burmese health system. It produces the vast majority of Asian heroin and is intimately involved in drug and other smuggling across most of its borders. And its regime is increasingly erratic.

Green and Mitchell evaluate the approaches taken to Burma is that Burma’s neighbors especially in the Association of South-East Asian Nations, of which it is a member, have tried to engage it economically and politically while urging it to embrace political reform. Its closest trade partner and political patron is China which, along with Russia, makes sure the UN takes no effective action. India has also become an important player in Burma and has tried to match China with technology, weapons sales, diplomatic engagement and trade. While the US and the European Union have taken the opposite tack, resolutely condemning Burma’s internal oppression and imposing severe trade and investment sanctions but Japan and Australia have taken a middle path.
Summary:

Over the past decade, Burma has gone from being an antidemocratic embarrassment and humanitarian disaster to being a serious threat to its neighbors' security. The international community must change its approach to the country's junta.

Michael Green is Associate Professor of International Relations at the Edmund A. Walsh School of Foreign Service at Georgetown University and a Senior Adviser and Japan Chair at the Center for Strategic and International Studies. Derek Mitchell is a Senior Fellow and Director for Asia Strategy at CSIS.

U.S. policy toward Burma is stuck. Since September 1988, the country has been run by a corrupt and repressive military junta (which renamed the country Myanmar). Soon after taking power, the State Law and Order Restoration Council (SLORC), as the junta was then called, placed Aung San Suu Kyi, the leader of the opposition party the National League for Democracy, under house arrest. In 1990, it allowed national elections but then ignored the National League for Democracy's landslide victory and clung to power. Then, in the mid-1990s, amid a cresting wave of post-Cold War democratization and in response to international pressure, the SLORC released Suu Kyi. At the time, there was a sense within the country and abroad that change in Burma might be possible.

But this proved to be a false promise, and the international community could not agree on what to do next. Many Western governments, legislatures, and human rights organizations advocated applying pressure through diplomatic isolation and punitive economic sanctions. Burma's neighbors, on the other hand, adopted a form of constructive engagement in the hope of enticing the SLORC to reform. The result was an uncoordinated array of often contradictory approaches. The United States limited its diplomatic contact with the SLORC and eventually imposed mandatory trade and investment restrictions on the regime. Europe became a vocal advocate for political reform. But most Asian states moved to expand trade, aid, and diplomatic engagement with the junta, most notably by granting Burma full membership in the Association of Southeast Asian Nations (ASEAN) in 1997.

A decade later, the verdict is in: neither sanctions nor constructive engagement has worked. If anything, Burma has evolved from being an antidemocratic embarrassment and humanitarian disaster to being a serious threat to the security of its neighbors. But despite the mounting danger, many in the United States and the international community are still mired in the old sanctions-versus-engagement battle. At the United Nations, Secretary-General Ban Ki-moon has appointed the former Nigerian diplomat and UN official Ibrahim Gambari to continue the organization's heretofore fruitless dialogue with the junta about reform. The U.S. State Department and the U.S. Congress have fought over control of U.S. Burma policy, leading to bitterness and polarization on both sides. Although the UN Security Council now does talk openly about Burma as a threat to international peace and security, China and Russia have vetoed attempts to impose international sanctions. And while key members of the international community continue to undermine one another, the junta, which renamed itself the State Peace and Development Council (SPDC) in 1997, continues its brutal and dangerous rule.

Regimes like the SPDC do not improve with age; therefore, the Burma problem must be addressed urgently. All parties with a stake in its resolution need to adjust their positions and start coordinating their approach to the problem. Although this may seem like an unlikely proposition, it has more potential today than ever before. Burma's neighbors are beginning to recognize that unconditional engagement has failed. All that is needed now is for the United States to acknowledge that merely reinforcing its strategy of isolation and the existing sanctions regime will not achieve the desired results either. Such a reappraisal would then allow all concerned parties to build an international consensus.
with the dual aim of creating new incentives for the SPDC to reform and increasing the price it will pay if it fails to change its ways.

BURMESE WAYS

After General Than Shwe became chair of the junta in 1992, repression grew more brazen. Thousands of democracy activists and ordinary citizens have been sent to prison, and Suu Kyi has been repeatedly confined to house arrest, where she remains today. Since 1996, when the Burmese army launched its "four cuts" strategy against armed rebels -- an effort to cut off their access to food, funds, intelligence, and recruits among the population -- 2,500 villages have been destroyed and over one million people, mostly Karen and Shan minorities, have been displaced. Hundreds of thousands live in hiding or in open exile in Bangladesh, India, China, Thailand, and Malaysia. In 2004, the reformist prime minister Khin Nyunt was arrested. Two years ago, Than Shwe even moved the seat of government from Rangoon (which the junta calls Yangon), the traditional capital, to Pyinmana, a small logging town some 250 miles north -- reportedly on the advice of a soothsayer and for fear of possible U.S. air raids. And this past summer, the government cracked down brutally on scores of Burmese citizens who had taken to the streets to protest state-ordered hikes in fuel prices.

Burma's neighbors are struggling to respond to the spillover effects of worsening living conditions in the country. The narcotics trade, human trafficking, and HIV/AIDS are all spreading through Southeast Asia thanks in part to Burmese drug traffickers who regularly distribute heroin with HIV-tainted needles in China, India, and Thailand. According to the U.S. Drug Enforcement Administration, Burma accounts for 80 percent of all heroin produced in Southeast Asia, and the UN Office on Drugs and Crime has drawn a direct connection between the drug routes running from Burma and the marked increase in HIV/AIDS in the border regions of neighboring countries. Perversely, the SPDC has been playing on its neighbors' concerns over the drugs, disease, and instability that Burma generates to blackmail them into providing it with political, economic, and even military assistance.

Worse, the SPDC appears to have been taking an even more threatening turn recently. Western intelligence officials have suspected for several years that the regime has had an interest in following the model of North Korea and achieving military autarky by developing ballistic missiles and nuclear weapons. Last spring, the junta normalized relations and initiated conventional weapons trade with North Korea in violation of UN sanctions against Pyongyang. And despite Burma's ample reserves of oil and gas, it signed an agreement with Russia to develop what it says will be peaceful nuclear capabilities. For these reasons, despite urgent problems elsewhere in the world, all responsible members of the international community should be concerned about the course Burma is taking.

[deletia]
Burma Plays Nuclear Card
By AUNG ZAW
JULY, 2007 - VOLUME 15 NO.7

Assurances of peaceful intentions arouse only skepticism

Burma’s confirmation of plans to build a 10-megawatt nuclear reactor with the help of Russia’s federal atomic energy agency Rosatom has created nervousness and anxiety among Burma observers.

The regime in Naypyidaw, facing international isolation and sanctions, claims that the planned nuclear reactor is to be built for a “peaceful purpose.” Back in January 2002, then-deputy Foreign Minister Khin Maung Win declared that Burma’s “interest in nuclear energy for peaceful purpose is longstanding.”

Such assurances have met with skepticism on the part of the international community and Burmese at home and abroad, however.

Skepticism has also greeted Rosatom’s official statement that the 10-megawatt nuclear reactor, fueled by less than 20 percent uranium-235, will contribute to Burma’s “research in nuclear physics, bio-technology, material science as well as…produce a big variety of medicines.” A first round of talks on details of the project has begun and further discussions are scheduled for the second half of this year.

Burma’s interest in developing nuclear energy is not new. It dates back as far as the 1950s, with the creation of the Union of Burma Atomic Energy Center headed by Hla Nyunt, a student of renowned Japanese physicist Hideki Yukawa, who was awarded the Nobel Prize in 1949.

The UBAEC recruited young and talented physicists and sent them to the US and Britain for further studies. At least six were trained in 1956 at the Argonne National Laboratory, one of the US Department of Energy’s largest research centers.

Burma was well advanced in those days to develop a nuclear project, compared to neighboring countries. In the early 1960s, a site for a nuclear research reactor was designated near the Hlaing Campus in Rangoon.

The UBAEC became inactive after Ne Win staged a military coup in 1962. The general was busy creating his “Burmese Way to Socialism,” placing priority on the consolidation of a power base to counter serious threats posed by communist rebels and ethnic insurgents. Above all, the dictator simply did not trust Hla Nyunt.

So the nuclear project fell by the wayside, although in 1984 Ne Win admitted to university professors at a dinner party that he had made a blunder by ending it.

The current regime revitalized the nuclear project. Thein Oo Po Saw, an Arakanese professor who was a student of Hla Nyunt in the 1950s, initiated the revival of the Atomic Energy Committee in 1990 and renewed links with the International Atomic Energy Agency. Since then, Burma has been demonstrating its intention to develop nuclear energy for a “peaceful purpose.”

The regime outwardly supports the concept of nuclear free zones and signed the Treaty on the Southeast Asia Nuclear Weapon-Free Zone, or Bangkok Treaty, in 1995. A year later, Burma signed the Comprehensive Nuclear Test Ban Treaty.

Simultaneously, it was planning to build a nuclear reactor. The Ministry of Science and Technology was created in 1997 and headed by extreme nationalist U Thaung, a graduate of Defense Services Academy Intake 1. Two years later, Burma began negotiations with Russia on a nuclear reactor project, and in January 2002 the military government confirmed plans to build a nuclear research reactor for peaceful purposes.
As was to be expected, Burma’s dissidents in exile got busy gathering information on these developments, but little hard evidence has yet emerged. The location of the planned nuclear reactor is still unknown, although some dissidents used Google “Earth” to pinpoint some possible sites and even buildings in central Burma. Magwe has been mentioned.

The truth must be faced, however, that if the nuclear reactor is to be built with a military use in mind its location will be a state secret. The possibility of Burma becoming a nuclear power is anyway still very many years off.

At the moment, the spotlight falls on Russia’s role in fueling Burma’s nuclear ambitions, but exile groups and regime critics allege that Burma has also been seeking nuclear technology from North Korea. Military missions from North Korea have been seen visiting Burma, and North Korean technicians have been spotted unloading construction materials from trains in central Burma. Russian planes have also been sighted landing in central Burma.

Even the US has its suspicions, and as early as 2004 American officials and congressmen were warning of renewed secret relations between Burma and North Korea.

Richard Lugar, then chairman of the US Senate Foreign Affairs Committee, warned in 2005 that North Korea’s main export is dangerous weapons technology, a major threat to Asian security and stability. The US State Department has also registered official complaints with the Burmese government over rumored missile transfers from North Korea.

An important factor in these developments was the restoration of diplomatic ties between Burma and North Korea in April. Relations between the two countries were broken in 1983 after a bomb attack in Rangoon by North Korean terrorists on a visiting South Korean delegation headed by then-President Chun Doo-hwan.
Clandestine contacts between the two countries had been established several years ago, as Burma stepped up its search for sources of conventional weapons. Burma defense analyst Andrew Selth, author of the recent report “Burma and nuclear proliferation: policies and perceptions,” reported that Burma had bought conventional weapons and ammunition from North Korea, including 16 130mm M-46 field guns, in the late 1990s. Burma has also reportedly sent military missions and officers to Pyongyang. These military ties can only spell more trouble on the horizon.

Hard as it is to read the minds of Snr-Gen Than Shwe and his top military leaders, they are known to harbor dreams of a “Fourth Burmese Empire,” supported by military might. Just the uncertainty surrounding their nuclear ambitions is likely to intimidate such neighbors as Thailand and Bangladesh, and the generals might also believe a nuclear capability gives them the upper hand in dealings with Western nations and their sanctions policies.

The regime plans to create a nuclear nation by 2025, according to researchers in Burma. Some Burmese professors who worked with the Ne Win government and who have been advising the current regime disclosed that nuclear reactors of 100-400 megawatts are planned. They say plans also include smaller reactors and further development in the area of nuclear research.

Aside from Thein Oo Po Saw, Burma’s nuclear project has been developed by Minister U Thaung, who signed the reactor agreement in Moscow in June with his Russian counterpart Sergei Kiriyenko, the head of Russia’s atomic agency. U Thaung is known to be close to Than Shwe and his deputy, Vice Snr-Gen Maung Aye.

U Thaung has in-depth knowledge of Burma’s mining and uranium sectors and resigned his army post to become director general of Burma’s Department of Geological Survey and Mineral Exploration in the 1980s.

His loyalty to the military is beyond question, and he continues to serve under the current regime. Appointed Burma’s ambassador to the US in 1996, he was recalled to Rangoon to head the Ministry of Science and Technology, with instructions to deal with the Russians and begin the reactor project.

U Thaung visited Moscow several times in the past seven years in pursuit of the deal. Earlier negotiations were interrupted in 2003 because of a dispute over the terms of payment, but perhaps the regime might now feel cash is no longer a problem in view of Burma’s newly-discovered vast natural gas reserves.
Although Burma has science and engineering students, U Thaung realized they need nuclear orientation and training and Burma began sending students and army officers to Moscow. In 2006, Nuclear Physics departments were established in the universities of Rangoon and Mandalay, with enrolment controlled by the government.

Last year, Russia’s ambassador to Burma, Dr Mikhail M. Mgelandze, confirmed that about 2,000 Burmese students had been admitted to 11 academic institutions in Russia, under a bilateral agreement, and about 500 had returned to Burma with bachelor, master’s or doctorate degrees.

Burmese nationals had also been trained by the IAEA in the application of nuclear technology for peaceful purpose, then-deputy Foreign Minister Khin Maung Win announced in January 2002.

Chinese intelligence sources believe that Maung Aye oversees Burma’s nuclear project. Maung Aye paid an official visit to Russia last year.

The reactor project has involved an intensification of the search for uranium in Burma. In the early 2000s, the regime confirmed publicly that uranium deposits had been found in five areas: Magwe, Taungdwingyi, Kyaukphygon and Paongpyin in Mogok, and Kyauksin. Residents of Thabeikkyin township, 60 miles north of Mandalay, said recently that searches were underway in the area. Other activity was reported from southern Tenasserim Division.

Recently, a Russian mining company accidently found large deposits of uranium in upper Burma, according to Chinese sources. The Russian companies Zarubezneft, Itera, Kalmykia and the state-owned enterprise Tyazhpromexport have been involved in oil and gas exploration and the establishment of a plant to produce cast iron in Shan State. Tyazhpromexport’s investment alone is worth about US $150 million.

It’s not so much the Russian nuclear involvement with Burma that creates nervousness and speculation, however, as the generals’ new chumminess with North Korea.

In April, a North Korean freighter, the Kang Nam I, docked at Thilawa port, 30km south of Rangoon. Burmese officials said the ship, the first to visit Burma since the restoration of diplomatic relations, sought shelter from a storm. The Thilawa port is run by AsiaWorld Company Limited, owned by former drug kingpin Lo Hsing-han. Two local reporters working for a Japanese news agency were briefly detained and turned back when they went to the port to investigate.

It wasn’t the first time a North Korean ship reported running into trouble in Burmese waters—by a strange coincidence, the North Korean cargo vessel M V Bong Hoafan sought shelter from a storm and anchored at a Burmese port last November. The Burmese government reported that an on-board inspection had “found no suspicious material or military equipment.” But journalists and embassies in Rangoon remained skeptical.

Early last July, a dissident source told The Irrawaddy that a North Korean ship carrying a senior Korean nuclear technology expert, Maj Hon Kil Dong, arrived in Rangoon with a biological and nuclear package. Western analysts and intelligence sources quickly dismissed this report but conceded it was possible that Burma would seek conventional arms and technology rather than high-tech long-range missiles from Pyongyang.

Indeed, to skeptics, the go-ahead for the nuclear reactor project and the arrival of that North Korean ship are two developments that can hardly be coincidental. The Russian involvement in Burma’s nuclear project and the arrival of North Korean ships also sent alarms bells ringing in Beijing, although Burma’s close and powerful political ally remained tight-lipped on the issue. But Beijing can hardly afford to have two nuclear neighbors: North Korea and Burma.

It is admittedly premature to conclude that Burma intends to undertake the complicated and perilous process of reprocessing uranium to get weapons-grade plutonium, as things stand at the moment, although strong suspicions will continue to grow. But as Burma has set a goal of becoming a nuclear power nation by 2025 does it make sense to develop a nuclear weapon? Maybe not.
But one chilling theory is that if the North Korean freighters that arrived last November and this year carried not only conventional weapons but plutonium and processing materials to Burma, it could indeed be suspected that Burma plans to skip the messy process of obtaining plutonium and move straight to the production of weapons.

It is easy to speculate that Burma may be seeking nuclear technology from Pyongyang, although no solid evidence has emerged so far. It is legitimate, however, to raise the issue and to inquire into the regime’s intentions, in the interests of keeping nuclear technology out of the hands of irresponsible governments.

The Burmese government has declared that it has no desire to develop nuclear weapons. Its nuclear program is solely for “peaceful purposes,” runs the government line. All fine and good—if it weren’t for the questionable source of those assurances.
Myanmar drops a nuclear 'bombshell'
By Larry Jagan
May 24, 2007

BANGKOK - Myanmar's military leaders have never made a secret of their interest in developing a domestic nuclear-energy industry. Plans to buy a nuclear reactor from Russia have been in the pipeline for years, and this month in Moscow the two sides formally resurrected those controversial plans.

Myanmar's move notably comes at a time when both Iran and North Korea have raised US hackles through their nuclear programs. Washington in recent years has referred to Myanmar as an "outpost of tyranny" and maintains trade and investment sanctions against the military regime. Some political analysts are already speculating whether Myanmar might try to use the threat of re-gearing its nuclear test reactor to reproduce weapons as a way to counteract US-led pressure for political change.

Under the new agreement, Russia's atomic energy agency Rosatom will build a nuclear-research center, including a 10-megawatt light-water nuclear reactor with low-enriched uranium consisting of less than 20% uranium-235, an activation analysis laboratory, a medical isotope production laboratory, a silicon doping system, and nuclear-waste treatment and burial facilities, according to a statement released by Rosatom.

The project is initially slated to focus on medical and agricultural research in support of Myanmar's languishing and highly underdeveloped economy, a Western diplomat acquainted with the nuclear plans told Asia Times Online on condition of anonymity. As part of the agreement, Russian universities would also be tasked with training an additional 350 Myanmar-national specialists to work at the planned nuclear center.

Over the past six years, more than 1,000 Myanmar scientists, technicians and military personnel have received nuclear training in Russia, according to Myanmar government officials. Under a 2002 agreement, Russia was set to build a nuclear reactor in Myanmar but later scrapped the plan over the junta's lack of funds. Nonetheless, Moscow informed the United Nations' International Atomic Energy Agency (IAEA) in mid-2003 that it planned to provide training in nuclear science to some 300 Myanmar citizens each year.

According to Russian officials, the construction and supervision of the planned research center will come under the control of the IAEA. Myanmar is currently a member of the IAEA and already reportedly has a so-called "safeguards agreement" in place. Under the nuclear Non-Proliferation Treaty (NPT), states in compliance with their safeguards' obligations and other provisions are allowed to pursue nuclear energy or technology solely for peaceful purposes.

In practice, however, verifying the fulfillment of those obligations has proved difficult, most recently witnessed in the case of Iran's secretive nuclear-energy program, which it insists is for peaceful purposes and within its NPT rights, while others, such as US, suspect it is geared for a weapons program. Russia is also involved in developing a nuclear facility for Iran.

There are already concerns in some diplomatic quarters that Myanmar's notoriously reclusive regime could throw up similar challenges to IAEA inspectors. No timetable has yet been set for the implementation of this one-off safeguards agreement, nor have any provisions been set for procuring supplies beyond what is required initially to establish the nuclear-research center, diplomats note.

Moreover, the junta's stated motivation for establishing a nuclear-research reactor has vacillated over time. In January 2002, then-foreign minister Win Aung told this correspondent that Myanmar was committed to developing a nuclear-research facility for medical purposes and also possibly to generate nuclear power. Myanmar "is keen to explore the use of nuclear energy", he said at the time. "After all, many other countries in the world are using nuclear power."
At that time, Win Aung said no deal had been signed, but that initial research had been undertaken. Apparently the initial plans to develop a nuclear-energy industry emerged a year or two earlier. Win Aung told the IAEA in September 2001 of the country's plans to acquire a nuclear-research reactor and requested the agency's help in securing one, according to IAEA officials who spoke on condition of anonymity.

Two months later, the IAEA sent an inspection team to Myanmar to assess the country's preparedness to use and maintain a nuclear reactor safely. The team concluded that the safety standards in place were well below the minimum the body would regard as acceptable, according to the IAEA officials. At the time, Myanmar failed to respond to the IAEA report and prompted UN nuclear officials in Vienna to fear that Myanmar planned to proceed with its nuclear ambitions without the necessary safety requirements.

Groundbreaking had reportedly commenced, but construction was halted when Moscow realized the junta didn't have the financial resources to pay for the facility. Yet the junta never fully abandoned its nuclear ambitions.

**On the nuclear prowl**

In recent years, Myanmar has sent emissaries abroad to explore different options for developing a nuclear reactor and avenues for acquiring nuclear technology, according to Western diplomats tracking the junta's nuclear plans. They contend that this year Deputy Foreign Minister Kyaw Too made a low-profile visit to Iran in the regime's search for nuclear technology and materials.

Myanmar's close contacts with Pakistan have also recently come under diplomatic scrutiny. Western diplomats based in Islamabad say they are convinced that the junta's desire to acquire nuclear know-how has been a central focus of the budding bilateral relationship. Pakistani officials have fervently denied that they are in any way abetting Myanmar's nuclear ambitions. But widespread rumors that two Pakistani nuclear scientists accused of nuclear proliferation were given sanctuary in Myanmar in 2003 still linger.

More ominous have been the growing contacts between Myanmar and North Korea - last month the countries formally re-established diplomatic relations. According to a US State Department official involved in monitoring nuclear-proliferation issues, several suspicious shipments have arrived from North Korea over the past six months. "We have been tracking North Korean ships and several docked in Yangon late last month originated from the port where we believe nuclear materials may be shipped," he said.

After one North Korean ship docked at Yangon's port last November, the official said, Washington reminded the junta that it was obliged to search the ship under the UN sanction measures adopted the previous month after Pyongyang staged its controversial nuclear test. Myanmar authorities reported back three days later, according to US sources, saying that the vessel in question contained nothing illicit or suspicious.

Last year's shipments from North Korea also reportedly upset China - as neither Pyongyang nor Yangon informed Beijing of the two countries' increasing military-to-military contacts. For their part, Chinese authorities are convinced that Myanmar has recently received military hardware, including missiles, from North Korea, but not nuclear weapons or materials, according to a senior government source in Beijing.

The latest North Korean shipment arrived in Yangon this week and its cargo is being unloaded amid exceptionally tight security, according to Yangon residents who have passed by the port facilities.

There is still no confirmed site for the planned nuclear reactor, though reliable sources believe it will be built somewhere in the country's central Mandalay division. North Korean technicians reportedly visited the site last year, according to a Myanmar military source who spoke with Asia Times Online.

At the same time as the junta presses ahead with its plans for a nuclear reactor, the government has stepped up its exploration for uranium in the country. Surveys and test mining are taking place at four sites, including in the ethnic Kachin and Shan states, a government official told Asia Times Online on condition of anonymity. At the time the original plans for a nuclear reactor were mooted, the government had reportedly discovered uranium deposits in five areas in central and northern Myanmar, according to official government statistics.
The nuclear reactor that the regime now plans to build is reportedly not capable of producing enriched uranium or potentially of any military use, according to senior nuclear specialists who monitor these matters closely. Nonetheless, there are still concerns both in the West and in the region that Myanmar's military rulers over the long term could harbor nuclear-weapon ambitions.

"The generals cannot be trusted," said a Bangkok-based Western diplomat who follows Myanmar affairs. "While they say they will let the IAEA in at the moment, the history of rogue regimes like the one in Yangon is that they never keep their promises."

Larry Jagan previously covered Myanmar politics for the British Broadcasting Corp. He is currently a freelance journalist based in Bangkok.
Summary: Embassy contacts XXXXXXXXXXXX shared with us on XXXXXXXXXXXX documents for 112 metric tons of “mixed ore” shipped on January 25 from Burma to China via Singapore. XXXXXXXXXXXX noticed that authorities treated the shipment as highly sensitive, and suspect it may have included uranium. Our contact had no direct evidence to support this claim. End summary.

1. (S) XXXXXXXXXXXX, told emboffs that XXXXXXXXXXXX informed him they were suspicious about the behavior of authorities when handling a January 25 shipment of mixed ore from Rangoon. According to XXXXXXXXXXXX, security was tighter than usual, surveillance was heavier, and officials paid closer attention to the movement of the shipment and activity at the port. XXXXXXXXXXXX also claimed that metals are usually exported in blocks, whereas the bags in this shipment were filled with loose earth and mud. The source of the mixed ore, Maw Chi, is also a source for uranium, they claimed. XXXXXXXXXXXX said the destination in China, Fang Chen, and the shipping line, Advance Container Lines, were unusual for routine ore shipments. Shipments normally go to other ports in China via Myanmar Five Star Line, the government-owned shipping line, according to them. The shipper, Myanmar Ruby Enterprise, is a joint venture, 30% owned by the Ministry of Mines. XXXXXXXXXXXX

2. (S) XXXXXXXXXXXX told emboffs that XXXXXXXXXXXX informed him they were suspicious about the behavior of authorities when handling a January 25 shipment of mixed ore from Rangoon. According to XXXXXXXXXXXX, security was tighter than usual, surveillance was heavier, and officials paid closer attention to the movement of the shipment and activity at the port. XXXXXXXXXXXX also claimed that metals are usually exported in blocks, whereas the bags in this shipment were filled with loose earth and mud. The source of the mixed ore, Maw Chi, is also a source for uranium, they claimed. XXXXXXXXXXXX said the destination in China, Fang Chen, and the shipping line, Advance Container Lines, were unusual for routine ore shipments. Shipments normally go to other ports in China via Myanmar Five Star Line, the government-owned shipping line, according to them. The shipper, Myanmar Ruby Enterprise, is a joint venture, 30% owned by the Ministry of Mines. XXXXXXXXXXXX

3. (S) Key information contained in the documents we have seen includes: Carrier: Advance Container Lines Co., Ltd. Shipper: Myanmar Ruby Enterprise Address: No. 24/26 Sule Pagoda Road, Kyauktada Township, Rangoon Shipped from Rangoon: January 25, 2007 Vessel: Kota Teraju to Singapore Destination: Fang Chen, China Port of Discharge: Fang Chen, Guang Xi, China Consignee: Yunnan Minmetals Trading Co., Ltd. Address: F/8 No. (408) Beijing Road, Kuming, PR China Shipment: Six containers holding 3080 bags, 112.0049 net metric tons of Mawchi Mixed Ore: (tin, tungsten, scheelite mixed concentrate) Value: 534,263.37 euros.

4. (S) We have no further information about the shipment or the reliability of the documents. We would be pleased to forward copies of the documents received to anyone interested.

VILLAROSA
The material in this report derives from many different sources. Dictator Watch has received a large quantity of information, much more than what is presented here. We can hint at a bit of the balance but the majority we cannot discuss at all, because of risk to the sources. If you have any additional information about these subjects, including information that confirms or contradicts what is described below, please get in touch. We will disclose publicly only what you authorize.

In our November 7th statement, we reported that the SPDC is mining and refining uranium and then bartering the final product, “yellowcake,” to North Korea and Iran. We have now learned that the announcement by the SPDC later the same day, that a North Korean ship in distress had taken refuge in Rangoon harbor, was an attempt to discredit the report. This in itself is indirect confirmation of the news. Also, the SPDC announcement was widely ridiculed, since Than Shwe and his fellow generals are known to be pathological liars.

We have now received word from a second, independent source, with a completely different means of access to the information, that the yellowcake transactions are taking place, including to Iran. We do not yet know the nature of the arrangements with Iran, if they are direct with the SPDC or if North Korea is acting as an intermediary (or Russia). The transactions with North Korea, though, for which the SPDC is receiving missiles and also technical assistance on its own nuclear weapons program, are direct, although they may also be taking place with China and Russia as intermediaries.

(Note: North Korea has its own high-grade uranium deposits, but the state of its mining and refining capabilities is unknown.)

North Korean ships have been visiting Burma for at least the last five years. Ships either dock at a mainland port at night and under tight security, or they anchor at a lighthouse island an hour away in international waters. At the island, Burmese navy ships exchange cargos with the Koreans. (Navy, Customs and Immigration ships are permanently stationed there.) This is also one of the ways that Burmese methamphetamines were distributed in the past, with speedboats bringing the pills to the island for loading onto ships bound for Bangkok.

Uranium deposits

Nuclear proliferation begins with uranium. In a 2001 document at http://www.energy.gov.mm/Nuclear_1.htm, five known uranium deposits are listed:

1. Magway [Magwe]
2. Taungdwingyi
3. Kyaukphygon (Mogok)
4. Kyauksin
5. Paongpyin (Mogok)

The document also includes a call for assistance: “Interested parties from inside the country and abroad are welcomed for possible cooperation...”

It is evident that in the intervening years the exploitation of uranium ore has been successful. We are uncertain if this involves any foreign companies.

We also learned that additional uranium deposits have been found, including in Moehnyin, Kachin Division; southwest of Taunggyi; and also possibly near Moulmein. It is noteworthy that some gemstones from Burma are
radioactive, due to their proximity in the earth to radioactive ores. We further learned that in 2001, Russian geologists, with Burma Army security, prospected for uranium in Karenni State. They were discouraged from this enterprise by the KNPP.

The ores vary in quality, including earthen ores and solid rock, and in percentage of uranium metal. Also, the private concession for one of the Mogok deposits was cancelled two years ago and taken over by Burma Army soldiers.

Once the uranium is mined it is refined into yellowcake. We have reason to believe that there is a second uranium refinery in Burma, in addition to the facility on the Irrawaddy River north of Mandalay at Thabeikkyin.

Nuclear reactors and weapons research

Burma’s nuclear program dates from Ne Win, who sent a professor to Russia for five years, which individual received International Atomic Energy Commission certification. The program collapsed after 1988, but it was later revived by Khin Nyunt, who searched the states left over after the breakup of the Soviet Union for nuclear experts. The program was again suspended following his purge, but it was quickly restarted.

Russia offered in 2001 to sell Burma a nuclear reactor for research purposes. Similarly, the Soviet Union also helped establish North Korea’s nuclear program, in 1964, by offering and then helping to assemble in the country a Soviet research reactor.

The Far Eastern Economic Review reported in November 2003 that North Koreans were now involved in Burma’s effort, after technicians from the country were seen unloading large crates and construction equipment at Myothit, Magwe Division. Bertil Lintner in a July 2006 Asia Times article added that North Koreans had been seen at Natmauk, but commented “there is no evidence that Russia ever delivered the reactor.” However, he also noted that the North Koreans built a huge underground bunker at Taundwingyi, which is one of the acknowledged uranium ore sites.

According to a 2004 article in the Irrawaddy by Kyaw Zaw Moe, Magwe is an area of active fault lines, and it experienced a strong earthquake in September 2003. There is also a report that a bunker in this area shelters ten MIG-29s from Russia.

A second possible site, where Burma’s “nuclear battalion” is located, is in the Setkya Valley east of Mandalay and south of Maymyo near the villages of Lun Kyaw and Taung Taw. This valley is perpetually covered by clouds, and it is surrounded by mountains. There is a new report of a related nuclear research facility in a restricted area near Wetwun village, northeast of Maymyo. Drivers who make deliveries to the area have to hand over their trucks to personnel from inside.

Another source says that the reactor in Magwe may be relocated, it is also possible that it already has been relocated, to the Setkya Valley site, because of the earthquake risk at the former.

We can also report that the businessman Tayza is the primary dealmaker for Burma’s nuclear and missile programs. He is organizing many of the specific transactions, with the North Koreans, Chinese and Russians. For example, Tayza is the agent for Aeroflot, which flies to Mandalay. The hundreds of trainees who went to Russia were taken in a special train to Mandalay, from which they completed their journey by Aeroflot.

We have learned that twenty-five nuclear physics academics are now in North Korea on a three-year training course.

We also received a report that the SPDC has uranium enrichment centrifuges at one end of the South Nawin Dam (which was built with funding from Japan, and forced labor). If true, this is a significant escalation in the SPDC’s program, since enrichment is used to create not only fuel for nuclear power reactors, but also the fissile cores for nuclear weapons.
Location of Lun Kyaw/Lunkyaw

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http://hydro.iis.u-tokyo.ac.jp/GAME-T/GAIN-T/routine/myanmar/index.html

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**Coordinates of places named Taungdaw in Mandalay**
Locations of the large building (BOB), possible locations of Lun Kyaw, location of Setkya Hill (possibly Setkhya Mountain0, location of Lungyaw and three locations given for Taungdaw
Series of structures at base of Setkya Hill
Facilities near one Taungdaw location
Facility 1
Facility 2
Facility 3
Location of Wetwun relative to Kone Baw, Naung Laing and the new large building (BOB). Note the presence of an apparently new east-west road just north of Wetwun.
NUCLEAR PROLIFERATION AND BURMA
THE HIDDEN CONNECTION

Roland Watson
November 2006

[EXCERPT]

Dictator Watch has received information that Burma’s military junta, the SPDC, is intimately involved in one of the greatest security threats the world faces, nuclear proliferation. The SPDC is mining and refining uranium and then bartering it to North Korea and reportedly also Iran. In return it is receiving, from North Korea, missiles including SAMs (surface to air missiles) and also possibly ballistic missiles, and technical assistance on its own nuclear weapons program.

While we do not have independent confirmation of this information, the case it presents is compelling. Uranium ore is being mined in Moehnyin Township in Kachin State and Mogok in Mandalay Division. The ore is then transported to a refinery on the Irrawaddy River at Thabeikkyin (just over one hundred kilometers north of Mandalay), which is conveniently located between the two mine sites. There the ore is processed into a material known as “yellow cake,” which is likely what is being bartered.

Yellow cake is the raw material for the uranium enrichment process, which increases the proportion of uranium 235 isotope, the fissionable form of the element used in weapons and also nuclear fuel. The process involves adding fluorine to create uranium hexafluoride. This is then melted and pressurized to create uranium hexafluoride gas, which is subsequently filtered via gas diffusion, or put through a series of gas centrifuges, to yield higher concentrations of U235.

The SPDC has many secret facilities spread throughout Burma, but the most important are east of Mandalay in Maymyo (a.k.a Pyin-U-Lwin) and to the southwest of this in the Setkhya Mountains. The military complex at Maymyo includes Defense Industry buildings, the Defense Institute of Technology, and the Defense Services Academy. Approximately forty kilometers south of this the Chinese built a hydroelectric dam on the Myit Nge River. Local villagers who have fled to Thailand report that there is a tunnel from this dam leading to the defense complex, presumably to deliver electricity for weapons production. Just west of this, in the Setkhya Mountains, Burma’s “Nuclear Battalion” has in its own network of tunnels and reportedly is engaged in bomb-making research. Democratic Voice of Burma has reported that the center of this operation is near the villages of Lun Kyaw and Taung Taw, and that the latter is well guarded. Local villagers reported hearing huge explosions at night in April, June and September this year.

The implosion triggering system for a nuclear weapon uses conventional high explosives. The explosives surround the fissile material core and on detonation rapidly compress it to a supercritical state.

As background, beginning in 2001 Burma’s junta began a project to build a research reactor with Russian assistance (Miniatom) and training. Technicians who are sent to Russia are prohibited from seeing their families on their return to Burma. The families are given cell phones for communication. This program is also known to involve North Korean technicians and possibly Pakistani nuclear weapons experts who took refuge in Burma, also in 2001.
**Burma seeks nuclear weapons alliance with N Korea**

Greg Sheridan, Foreign editor [*of The Australian*]

July 05, 2006


Burma's military junta has attempted to buy nuclear weapons technology from North Korea's rogue regime in an alliance that presents a frightening new threat to regional security.

The US issued a heavy-handed warning to Burmese military dictator Than Shwe to cease and desist all such activities after discovering Rangoon's bid late last year.

The prospect of the two pariah states of Asia joining together has alarmed Western intelligence agencies, with the US privately circulating a draft resolution condemning Burma's actions for the UN Security Council.

The terms of the resolution would say that Burma constituted a "threat to peace and security".

This would be a Chapter Six resolution, which does not imply that the Security Council would authorise the use of force against Burma or move directly to sanctions. But it would be the first time Burma has been formally censured by the Security Council. It is understood that no nuclear material has been transferred.

North Korea, which is believed to possess six or seven nuclear weapons, has engaged in tense brinkmanship with the US, recently threatening to launch a new generation of Taepodong missile.

If the North Koreans are able to miniaturise their nuclear weapons sufficiently, they will eventually be able to place them on Taepodong missiles, which are capable of reaching some targets in the US and Australia.

Intelligence sources confirmed to The Australian that the Burmese military had a booming relationship with the North Korean military. Burma and North Korea do not have formal diplomatic relations. These were broken in 1983 when, in an act of state terrorism, the North Koreans detonated a bomb in Rangoon which killed most of the visiting South Korean cabinet.

But Than Shwe and the equally eccentric and reclusive North Korean leader, Kim Jong-il, have been engaged in intensive proxy diplomacy designed to re-establish formal diplomatic relations between the two states.

Western intelligence agencies believe Burma gets surface-to-air missiles, artillery and small arms from North Korea. The Burmese have also asked the Koreans for Scud missile technology.

The highly secretive Burmese state maintains the biggest army in Southeast Asia, with a regular military estimated at about half a million people and a paramilitary force of some 100,000.

Diplomatic observers do not believe the US resolution at this stage would pass at the Security Council because China would oppose and, if necessary, veto it.

However, presenting it publicly would acutely embarrass Burma's defenders, especially China.

The resolution makes no specific mention of Burma's nuclear ambitions. Instead it focuses on Burma's human rights abuses, which led to the outflow of large numbers of refugees. Because of the poor state of Burma's health services, many of these refugees are HIV-positive.
Burma also threatens international security through its drug-growing activities. Australian authorities believe much of the heroin sold in Australia is grown in Burma.

Apart from China, which has deep strategic interests in Burma, some Third World members of the Security Council may also object to a resolution based mainly on the internal human rights record of a member nation.

Burma has also made separate inquiries with Russia over the possibility of developing a peaceful nuclear power industry. At different times the Burmese have denied this. The Russians are believed to have been unresponsive to the Burmese requests.

Their lack of embassies in each other's countries has not inhibited the development of the military-to-military relationship.

This growing relationship is of acute concern to Western intelligence.

Both Burma and North Korea have their chief external strategic relationship with China.

China sees Burma as an important strategic asset.

Much Chinese diplomacy has centred on energy security and Burma offers China substantial oil and gas reserves.

Burma also offers China strategic reach into the Indian Ocean through access to its naval ports.

It also provides China with enhanced intelligence capabilities through intelligence establishments, especially on the Burmese border with India.

Burma's ruling military junta has become increasingly erratic and unpredictable in recent years. Last year, it moved its entire capital from Rangoon to Pyinmana in central Burma and built a new capital, virtually from scratch.

This was apparently because it feared a US attack on Rangoon, but the timing of the move, which was scheduled to within a minute, was reportedly determined by astrological readings.

At the same time as cracking down on the opposition National League for Democracy, headed by imprisoned Nobel laureate Aung San Suu Kyi, the Burmese regime has intensified a vicious war against the Karen and other ethnic minorities.

The other nine members of the Association of Southeast Asian Nations are increasingly frustrated with Burma.

Malaysia's Foreign Minister, Syed Hamid, called last month for the UN to take responsibility for encouraging the Rangoon junta towards greater openness and moderation.

This call represents a humiliation for ASEAN and a realisation that the strategy of reforming Burma through ASEAN membership has failed.

Some ASEAN leaders have asked US President George W. Bush to take a hard line on Burma to help break the paralysis on political movement within the country.

The Americans are considering convening a meeting of like-minded nations to discuss Burma at ministerial level at this year's ASEAN meetings, scheduled to take place in Kuala Lumpur later this month.

Australian Foreign Minister Alexander Downer has committed to attend this meeting.

The Japanese and some members of ASEAN are likely to be invited.
Mr Downer is also likely to meet Burma's Foreign Minister in Kuala Lumpur.

Last November, the UN Security Council met privately for a briefing on Burma from a member of the UN Secretariat, the first time the Security Council had considered Burma, even informally.

The international mood is hardening against Burma and this could result in renewed calls to expel it from ASEAN.
Mysterious blasts near Burma’s Kyaukse cause concerns to local people

April 19, Democratic Voice of Burma

Local residents living in Lunkyaw and Taungdaw Villages, Mandalay Division’s Kyaukse Township in central Burma, have been living in fear due to some mysterious explosions, presumed to be weapon tests, carried out by the State Peace and Development Council (SPDC) ‘nuclear’ battalion.

The villagers reportedly have been hearing mysterious explosions and rising flames almost every night from the beginning of April. When the villagers enquired about the explosions and flames, they were told by local authorities to shut up and stay put if they don’t want their villages to be relocated.

The ‘nuclear’ battalion has been built up among Setkhya mountains situated between Lunkyaw and Taungdaw since 2000. The battalion is based in Taungdaw and made up of artillery and communication battalions.

The ‘nuclear’ battalion itself is built into the mountains with a complex tunnel system. The battalion is said to be supervised by the SPDC army officers who were trained in Russia, according to sources close to the military.
U.S. pushes for regime change in Burma
John calls for release of political prisoners, beginning of democratic process
By Alvin Powell
Harvard News Office
February 23, 2006

[EXCERPT]

A U.S. State Department official reiterated the Bush administration's support for continued economic sanctions on Burma Friday (Feb. 17) [2006] as part of a multipronged effort to convince the repressive military regime to embrace democratic reforms.

In addition to sanctions, the United States is working with Burma's neighbors and nations that have close ties with the country in hopes that international pressure will bear results that have so far been elusive.

Eric John, deputy assistant secretary of state for the Bureau of East Asian and Pacific Affairs, described the United States' Burma policy during a lunchtime talk at the Center for Government and International Studies. The talk, part of the Asia Center's Modern Asia Series, was moderated by Thomas Vallely, director of the Vietnam Program at the John F. Kennedy School of Government's Center for Business and Government.

John said that U.S. concerns about Burma have been heightened recently with the re-establishment of diplomatic relations between Burma and North Korea. The authoritarian regimes have isolated themselves to the point where they were almost driven into each other's arms, John said. The potential transfer of technology from North Korea, which has developed nuclear weapons, to Burma heightens the administration's concern.

"As they isolated themselves from the rest of Asia and the world," John said, "they were almost pointed to each other."

[deletia]
As Rangoon gears up for the transfer of the center of state power to Pyinmana in central Burma, reports have reached the border of activities on the western slopes of the Shan hills that sources suspect as the construction of a secure site for Burma's nuclear program.

The new location near Maymyo, officially known as Pyin Oo Lwin, 42 miles east of Mandalay, lies in a flat land surrounded by on all sides by steep hills "not unlike the crater in You only live twice (a James Bond movie) where the bad guy prepares his scheme to conquer the world." In addition, the area is shrouded in an all-year round mist that the project's planners believe it would be virtually invisible from the air.

The villages and their fields had already been confiscated without compensation since 2003. Roads, some say tunnels as well, are being constructed. It has also been declared off-limits to the local populace with long-term imprisonment as punishment for trespassers.

An airfield has also been under construction since last year at Aneesakhan on the way to Mandalay. Half of the homes in the town and all homes in the surrounding villages of Singaunggyi, Kangyigon and Nyannya thantha were demolished for the purpose. As for Paungdaw, another village nearby, it lost all of its farmlands.

Sources close to the military say the Army is transferring the nuclear plant from Magwe to Maymyo. However, they have so far been unable to give further details.

Editor's Note:

Drawn according to information obtained by Mizzima News that adds the program was ordered suspended on 11 August. The site appears to be also in the vicinity of the Yeywa dam site, under construction by Chinese engineers.
Maymyo, once part of Shan State's Hsipaw principality, was occupied by the British as the seat of government from where they administered the affairs of Upper Burma. Eventually, it became part of the district of Mandalay.

The city has become so militarized during the last decade sources are estimating its population as half civilian and half military. The country's West Point, Defense Services Academy, is located here.

For years, Burma has been under suspicion of developing nuclear power with assistance from North Korea and Russia, where thousands are receiving nuclear training. However, Rangoon has maintained that it was only acquiring nuclear technology for medical research purposes and denied its nuclear program being a front for bomb-making.

Still, the junta's critics have pointed out that the topic of atomic energy, atomic fuel and atomic radiation is being placed under the Defense List. "It should instead be placed under the Energy and Electric Power list," suggested a participant from a ceasefire group on 9 June 2004 at the military-organized National Convention to draft the country's constitution.

[Sourcebook note: “Lunkyaw” also appears as “Lungyaw.”]
Reports from two years ago suggest North Korea has been quietly helping Burma’s military regime build a nuclear reactor. While covert interactions between these pariah states have raised alarm in regional and Western security circles for quite some time, most mainstream Western media have ignored them. The following is a review of those activities, based largely reports appearing in the recently defunct Far Eastern Economic Review (FEER) and the work of Australian military scholar Andrew Selth:

FEER first revealed evidence about Burma’s attempt to build an nuclear reactor with North Korean help in a report it published in November of 2003.

North Korean technicians were spotted unloading large crates and heavy construction equipment from trains at Myothit, Magwe Division, in central Burma, where the nuclear reactor was believed to be under construction, diplomats told FEER. The diplomats also saw aircraft belonging to Air Koryo, North Korea’s national airline, landing at military airfields in central Burma.

The international community had already learned that Burma’s regime wanted a nuclear reactor, possibly for peaceful purposes. In 2000, the military government formed the Department of Atomic Energy under its Ministry of Science and Technology. After that, Burma asked the International Atomic Energy Agency to help it build a nuclear research reactor. The regime had also approached Russia and China to that end.

In 2002, Russia agreed to sell Burma a nuclear reactor for peaceful research purposes. Burma selected and sent hundreds of students to study nuclear engineering and science in Russia. Moscow was to provide aid for the reactor, but the arrangement reportedly died when Burma’s government could no longer fund it.

By 2003, FEER’s report said, North Korea had taken over from Russia as the source of Burma’s nuclear technology. At roughly the same time, Andrew Selth observed that 80 Burmese military personnel had departed for North Korea to study “nuclear and atomic energy technology.”

The reason Burma wanted a nuclear reactor was not clear. The Burmese junta denied any ambition to possess nuclear weapons. Analysts noted that the reactor could be used as a bargaining chip against the United States and its allies.

Since the junta assumed power in 1988, it has been criticized by Western countries, especially the United States, for its poor human rights record and its oppression of political dissents. Because of its alienation from the West, the military regime buys its advanced jet fighter-bombers, warships, tanks, small arms and ammunition from suppliers such as China, Russia, India, Pakistan, Israel and Eastern European countries.

North Korea and Burma have not had formal diplomatic ties since 1983, when Pyongyang sent a three-man team to assassinate then South Korean president Chun Doo Hwan while he was visiting Rangoon. A remote-controlled bomb planted by North Korean agents exploded prematurely and the President escaped. But the explosion killed seventeen South Korean officials—including four cabinet ministers—and four Burmese officials. Burmese police killed one North Korean intelligence officer and arrested two more after the attack.
A secret trade in conventional weapons appears to have begun in 1990, two years after Burma’s military staged its bloody coup and fell under arms embargos. According to Selth, Burma seems to have succeeded in buying 20 million rounds of 7.62mm AK-47 rifle ammunition from North Korea in 1990. Burma managed to purchase 16 130mm M-46 field guns in the late 1990s, Selth says. Jane’s Defense Weekly has reported that North Korea has been exporting weapons to Burma since 1998. Some reports claim the arms deals were arranged through Thai and Singaporean agents. Others suggest China brokered a missile deal between the two regimes.

Officials from North Korea and Burma have exchanged several visits despite the absence of formal diplomatic ties. In June 2001, North Korean Vice Foreign Minister Pak Gil-yon and visited Rangoon with an unofficial delegation. Later it was reported that a team of North Korean technicians arrived and started working at Rangoon. Burma’s military officials also made secret visits to Pyongyang.

As unofficial ties continued, North Korea reportedly sold surface-to-surface missiles to Burma. In July 2003, according to diplomatic sources, around 20 North Korean technicians were sighted at Burma’s main Monkey Point naval facility in Rangoon. They were believed to be installing missiles in patrol boats. Residents and diplomats in Rangoon said the North Korean technicians were staying at a Defence Ministry guesthouse in the capital.

Meanwhile, talks took place between Rangoon and Pyongyang over the purchase of one or two small submarines, and possibly even a number of short-range ballistic missiles. In August 2003, according to Selth, there were unconfirmed reports of a secret meeting in Rangoon over purchase of the submarines and missiles. The submarine sale seems to have been postponed. Even if a missile deal occurred, according to Selth, delivery would take some years.

The diplomats quoted by Far Eastern Economic Review suggested that Burma, said to be Southeast Asia’s largest producer of illicit drugs, was trading drugs for weapons. A senior US official said in 2003 that Burma’s regime had agreed to supply heroin to North Korea in exchange for missiles and nuclear technology.

The United States later warned the Burmese regime over its dealings with North Korea.

“The link-up of these two pariah states can only spell trouble,” said Senator Richard Lugar, Chairman of Senate Foreign Relations Committee. “North Korea's main export is dangerous weapons technology. These developments are the seeds of a major threat to Asian security and stability.”

The US State Department announced in March last year that it had registered an official complaint with the Burmese government over the rumored missile transfers from North Korea. Matthew Daley, deputy assistant secretary in the bureau of East Asian and Pacific Affairs, confirmed the junta had been seeking a nuclear reactor but dismissed rumor the reactor was already being built as “not well-founded,” according to a Bloomberg report.

Otherwise, the story appears to have been forgotten.
Friday, 27 August 2004, 08:08
SECRET SECTION 01 OF 02 RANGOON 001100
SIPDIS
EO 12958 DECL: 08/26/2014
TAGS PARM, PINR, PREL, KNNP, BM, KN
SUBJECT: ALLEGED NORTH KOREAN INVOLVEMENT IN MISSILE ASSEMBLY AND UNDERGROUND FACILITY CONSTRUCTION IN BURMA
Classified By: CDA, A.I. RON MCMULLEN FOR REASON 1.5 (A/C).

1. (S) SUMMARY: North Korean workers are reportedly assembling “SAM missiles” and constructing an underground facility at a Burmese military site in Magway Division, about 315 miles NNW of Rangoon, according to XXXXXXXXXXXX. This unsolicited account should not be taken as authoritative, but it tracks with other information garnered and reported via XXXXXXXXXXXX. End Summary.

2. (S) XXXXXXXXXXXX

3. (S) XXXXXXXXXXXX some 300 North Koreans are working at a secret construction site west of Mimbu, Magway Division, in the foothills of the Arakan Yoma mountains. (Comment: the number of North Koreans supposedly working at this site strikes us as improbably high. End comment.) The XXXXXXXXXXXX claims he has personally seen some of them, although he also reported they are forbidden from leaving the construction site and that he and other “outsiders” are prohibited from entering. The XXXXXXXXXXXX was confident that XXXXXXXXXXXX had the ability to distinguish North Koreans from others, such as Chinese, who might be working in the area. The exact coordinates of the camouflaged site are not known, but it is reportedly in the vicinity of 20.00 N, 94.25 E.

4. (S) The North Koreans are said to be assembling “SAM missiles” of unknown origin. XXXXXXXXXXXX the North Koreans, aided by Burmese workers, are constructing a concrete-reinforced underground facility that is “500 feet from the top of the cave to the top of the hill above.” He added that the North Koreans are “blowing concrete” into the excavated underground facility.

5. (S) The XXXXXXXXXXXX is supposedly engaged in constructing buildings for 20 Burmese army battalions that will be posted near the site. Of these, two battalions are to be infantry; the other 18 will be “artillery,” according to this account.

6. (S) [XXXXXXXXXXXX]

7. (S) COMMENT: The [XXXXXXXXXXXX second-hand account of North Korean involvement with missile assembly and military construction in Magway Division generally tracks with other information Embassy Rangoon and others have reported in various channels. Again, the number 300 is much higher than our best estimates of North Koreans in Burma, and exactly how the XXXXXXXXXXXX allegedly came to see some of them personally remains unclear. Many details provided XXXXXXXXXXXX match those provided by other, seemingly unrelated, sources.

8. (S) COMMENT CONTINUED: We cannot, and readers should not, consider this report alone to be definitive proof or evidence of sizable North Korean military involvement with the Burmese regime. The XXXXXXXXXXXX description made no reference at all to nuclear weapons or technology, or to surface-to-surface missiles, ballistic or otherwise. XXXXXXXXXXXX This account is perhaps best considered alongside other information of various origins indicating the Burmese and North Koreans are up to something ) something of a covert military or military-industrial nature. Exactly what, and on what scale, remains to be determined. Post will continue to monitor these developments and report as warranted.

McMullen
Sourcebook comment: The information in paragraph 3 of the above cable should be compared with dissident reporting concerning a project in the vicinity of Nga Phae/Ngape.

The coordinates 20d 00m N, 94d 25m E are just west of an area south of Ngape that contains numerous buildings built along roads, some of them dug into hillsides. At least one location there appears in Google Earth imagery of 2004 to be suggestive of underground construction.
North Korea Offered Surface-to-Surface Missiles to Rangoon

By Min Zin/Washington

Friday, March 26, 2004

The US administration has reason to believe that North Korea has offered surface-to-surface missiles to the Burmese military regime, a senior US State Department official said yesterday.

The official made the allegation prior to the joint hearing of the Subcommittee on Asia and the Pacific and the Subcommittee on International Terrorism, Nonproliferation and Human Rights, held yesterday at the US Congress in Washington.

"We have raised this issue of possible missile transfers with senior Burmese officials and registered our concerns in unambiguous language," said Matthew Daley, deputy assistant secretary for East Asia and the Pacific, who presented his testimony to both subcommittees.

Burmese officials have indicated that they have not accepted offers of the weapons, according to Daley. He said the US administration will continue to monitor the situation and deal with it vigorously and rapidly. "Burma and North Korea do have a military and trade relationship," Daley said.

Daley added that the administration is aware of Burmese military interest in acquiring a nuclear research reactor, however, he denied press reports that suggested Burma has provided heroin in exchange for military or nuclear technology or equipment, noting that available evidence does not support this conclusion. "News reports of construction activities are not well founded," said Daley.

Lorne Craner, assistant secretary for Democracy, Human Rights and Labor, also presented his testimony at the joint hearing, called Developments in Burma, which condemned the worsening human rights situation in Burma.

During the hearing, Daw San San, an NLD elected MP from Burma, Thomas Malinowski of Human Rights Watch and Veronica Martin of the US Committee for Refugees, presented cases of human rights violations in Burma to the panel and advocated a tougher stance on Rangoon and the renewal of current US sanctions, which took effect in September and ban bilateral trade and financial transactions.

Two invited representatives who support an engagement policy with Burma—David Steinberg, director of Asian Studies at Georgetown University, and Morten Pedersen of the International Crisis Group—explained how tightened US sanctions are counterproductive and undermine US intended objectives to restore democracy to Burma.

The trading of missiles between the two countries was reported in November, 2003, when an article published in the Far Eastern Economic Review indicated North Korea was supplying or planning to supply missiles to Burma, possibly in exchange for heroin.

Daley told the Congressional panel that Burma’s drug trade profits could be financing the military government.

Prior to renewed ties between the two countries, Burma and North Korea abolished diplomatic relations in 1983, when North Korea assassinated 17 South Korean officials in Rangoon in an attempt to kill the South Korean President Chun Doo Hwan on his visit to the country. Meanwhile, international efforts to ensure North Korea freezes its nuclear programs remain to be resolved.
Evidence of a blossoming military relationship between pariah regimes in Rangoon and Pyongyang is causing growing concern overseas.

Signs of growing military ties between North Korea and Burma's ruling junta are stirring concern among United States and Asian security officials. In recent months, Rangoon- and Bangkok-based diplomats say they've detected fresh indications that Pyongyang may be supplying or planning to supply Burma with new weapons, possibly in exchange for shipments of heroin.

Among other new developments, Burma has begun negotiating the purchase of a number of surface-to-surface missiles from North Korea, U.S. and Asian officials believe. About 20 North Korean technicians are working at the Monkey Point naval base near Rangoon, possibly to prepare to install the missiles on Burmese warships, Rangoon-based diplomats say. The envoys, citing on-the-ground intelligence reports, say the technicians are residing at a Burmese Defence Ministry guest house in a northern Rangoon suburb.

More worrying, some Rangoon-based Asian diplomats say North Korean technicians have been spotted by intelligence operatives unloading large crates and heavy construction equipment from trains at Myothit. The diplomats note that Myothit is the closest station to the central Burmese town of Natmauk, near where the junta hopes to build a nuclear-research reactor. Aircraft from North Korea's national airline, Air Koryo, have been seen landing at military airfields in central Burma, they say.

What is particularly alarming is that these indications of military cooperation come at a time when both countries are under mounting political pressure from the U.S.--North Korea to halt its nuclear brinksmanship and Burma to open a real dialogue with its political opposition. An alliance between two pariah states up against the wall could be dangerous for the region and beyond, especially as one of them may have nuclear-weapons technology that it is ready to export, analysts say.

The U.S., anxious to curb nuclear proliferation, is clearly worried. "Regimes like North Korea's... obviously look upon the sale of WMD [weapons of mass destruction] as just a neat way to gain hard currency. And almost automatically they have a fairly limited market--terrorist groups, rogue states and pariah states," says a senior U.S. administration official. "It's a concern, whoever they end up selling that stuff to, and we are trying to take steps to limit it and get it under control."

The signs of growing military ties have also coincided with the arrival of representatives of the Daesong Economic Group--an enterprise under Bureau 39, which is charged with earning foreign currency for North Korea--in Burma, according to Rangoon-based diplomats who have seen official documents detailing Daesong's activity in Burma. Daesong-affiliated companies have a documented history of exporting sensitive missile technologies. In the past, North Korea has also used Daesong-affiliated companies to purchase and import dual-purpose technologies used in Pyongyang's nuclear-weapons programme. One of these, Changgwang Sinyong, played a key role in Pakistan's nuclear-weapons programme in the 1990s, according to the U.S. State Department, which sanctioned Changgwang in 1998 and 2001 for selling missile-related technology to Pakistan.

Diplomats believe Burma's rapprochement with North Korea is linked to its concern that it is vulnerable to a U.S. military attack, especially after the Iraq War. A recent classified State Department report seen by the
REVIEW expresses concern that Pyongyang is supplying "small arms, ammunition, artillery, and missiles" to Burma. It doesn't mention North Korean activity at Natmauk, nor does it refer to Daesong. But a senior U.S. Senate staffer says the Senate Foreign Relations Committee is monitoring developments at Natmauk.

"The link-up of these two pariah states can only spell trouble. North Korea's main export is dangerous weapons technology," said Senator Richard Lugar, chairman of the committee, in a prepared statement for the REVIEW. Noting State Department reports that Burma has been receiving weapons from Pyongyang, he warned: "These developments are the seeds of a major threat to Asian security and stability."

Hla Min, a spokesman for Burma's ruling junta, calls reports of increasing military links between Rangoon and Pyongyang and North Korea "speculative," citing in particular reports about North Korean involvement in constructing the nuclear reactor. Replying to faxed questions from the REVIEW, Hla Min said: "Why would [Burma] want to develop weapons of mass destruction, when the country needs all her strength and resources" to pursue a "transition to multi-party democracy and an open market economy?" He didn't respond to questions about a possible missile purchase from Pyongyang. North Korean officials could not be reached for comment.

Anxiety over Burma's military moves has prompted at least one neighbour to take countermeasures. In late October, Thailand took delivery of an undisclosed number of medium-range air-to-air missiles from the U.S., nominally to guard against the threat of terrorism, but more likely to strengthen its defences, say military analysts. In 2002, Burma purchased a number of MiG-29 combat jets from Russia, a move analysts view as a response to Thailand's fleet of U.S.-supplied F-16s.

Apart from the U.S. pressure, which includes tough new sanctions imposed in July, Burma has come under rare pressure from its colleagues in the Association of Southeast Asian Nations to renew a political dialogue with democracy leader Aung San Suu Kyi. China, too, has recently begun to waver in its significant military and economic support of the junta.

Similar Mindsets

Rangoon's growing isolation, diplomats and regional security experts say, is prompting the military government to seek new ways to maintain its grip on power and neutralize perceived threats, especially from the U.S. Burma's military, for example, is constructing a massive bunker near the central Burmese town of Taungdwingyi to shield its MiG-29s from possible U.S. attack, according to Rangoon-based envoys. "[North Korea and Burma] share a similar sort of mindset," says a Bangkok-based Western diplomat. "They have both drawn their wagons into a circle ready to defend themselves. [Burma's generals] admire the North Koreans for standing up to the United States and wish they could do the same. But they haven't got the same bargaining power as the North Koreans."

That's led some security officials to fear Rangoon might try to buy more potent weaponry from North Korea. In particular, these officials are scrutinizing activity near Natmauk. In 2002, Russia agreed to sell Burma a nuclear reactor for medical research and to provide assistance for its construction and operation. But Moscow shelved the project earlier this year because the junta couldn't pay for it.

Now, some Western and Asian diplomats and regional security analysts with links to Thai military intelligence suggest Pyongyang wants to help the junta restart construction of the reactor. "We are watching the situation at Natmauk very, very closely," says a Bangkok-based Western diplomat who recently visited Burma. It's not clear how poverty-stricken Rangoon, which lacks foreign currency, is paying for any military hardware or assistance it's receiving from North Korea. But some Western security officials suspect Rangoon is using drugs to pay. A senior U.S. official, for example, suggests Pyongyang and Rangoon have recently entered into an arrangement, whereby Burma supplies high-grade heroin to North Korea in exchange for missiles and possibly nuclear know-how.
To back up such claims, officials note that at least two North Korean ships have been implicated in smuggling Burmese "Double U-O Globe" brand heroin into Taiwan and Australia since 2002. Russian police have recently seized Burmese heroin carried by North Korean intelligence agents on their mutual border, according to news reports. "We're very suspicious that they're cooperating on drugs," says a senior U.S. official in Washington, citing intelligence reports that Pyongyang agents have recently been spotted in Burma's Golden Triangle opium-producing region.

Murray Hiebert in Washington contributed to this article
US Warns Myanmar On Nuclear Reactor Aspirations
Yangon (AFP) Jan 22, 2002

The United States warned Myanmar on Tuesday that it must honor its obligations under the Non-Proliferation Treaty, after Yangon signalled that it intended to build a nuclear reactor with Russian help.

The military-ruled state, often a target of US ire for suppressing a democracy movement and its much-criticised human rights record, said earlier Monday that it wanted to erect a nuclear research reactor.

"We expect the government of Burma to live up to its obligations and to not pursue production of weapons grade fissile material," said a State Department official on condition of anonymity using the country's former name.

The official declined to say if Washington was concerned over Myanmar's capacity to maintain a safe, secure nuclear site, or whether US officials would address the project in discussions with Russia.

Washington's response to the Myanmar nuclear plan was a marked contrast to its frequently unflattering appraisal of the country's human rights record and political situation.

Some observers in Southeast Asia have questioned whether the ruling junta, which already has trouble maintaining its creaking electricity grid has the expertise and scientific base necessary to safeguarding nuclear materials.

In a statement issued late Monday, Myanmar's Deputy Foreign Minister Khin Maung Win said the junta had informed the International Atomic Energy Agency (IAEA) of its intention to construct the reactor which would be used "for peaceful purposes".

Russia said last February that it planned to enter talks with Myanmar on building a nuclear reactor in the Southeast Asian country. Media reports have said hundreds of Myanmar scientists are now in Russia receiving training.

Khin Maung Win said that under the Non-Proliferation Treaty which Myanmar signed in 1992, it had the right to pursue "the peaceful use and application of nuclear technology".

He denied reports that Myanmar has secretly brought two Pakistani nuclear scientists into the country to help it fulfill its nuclear ambitions.

Thailand's Bangkok Post has reported that the Vienna-based IAEA was concerned about the plans to build a reactor in Myanmar and had asked Moscow to provide details of the negotiations.

During an inspection last year, an IAEA mission found that the country's safety standards were "well below the minimum the body would regard as acceptable," it quoted an unnamed official with the agency as saying.

earlier report

Myanmar Confirms Plans To Build Nuclear Research Reactor
Washington (AFP) Jan 22, 2002

The military regime in Myanmar (Burma) is planning to build a nuclear research reactor and is in negotiations with Russia over the facility, Deputy Foreign Minister Khin Maung Win has confirmed.

In a statement issued late Monday, Khin Maung Win said the junta had informed the International Atomic Energy Agency (IAEA) of its intention to construct the reactor which would be used "for peaceful purposes".
"The Myanmar government is striving to acquire modern technology in all fields, including maritime, aerospace, medical and nuclear," he said in the statement.

"It is in the light of these considerations that Myanmar made enquiries for the possibility of setting up a nuclear research reactor. A proposal has since been received from the Russian Federation."

Russia said last February that it planned to enter talks with Myanmar on building a nuclear reactor in the Southeast Asian country for scientific purposes.

Media reports have said that hundreds of Myanmar scientists are presently in Russia receiving nuclear training.

Khin Maung Win said that under the Non-Proliferation Treaty which Myanmar signed in 1992, it had the right to pursue "the peaceful use and application of nuclear technology".

"All our neighbouring countries, with the exception of Laos, are already reaping the benefits from nuclear research reactors operating in their countries," he said.

"In this age of globalization it is imperative that developing countries such as Myanmar actively seek to narrow the development gap so as not to be marginalized."

However, the development is likely to raise concerns among western governments who view military-run Myanmar as a pariah regime due to its poor human rights record and refusal to make democratic reforms.

There will also be questions over whether Myanmar, whose economy has been brought to its knees by heavy international sanctions, can afford such a facility.

Khin Maung Win denied media reports that Myanmar has secretly brought two Pakistani nuclear scientists into the country to help it fulfil its nuclear ambitions.

"The Myanmar government categorically states once again that no nuclear scientists from Pakistan have been given sanctuary in Myanmar," he said.

However, he said Myanmar scientists had been trained by the IAEA "in the application of nuclear technology for peaceful purposes".

Thailand's Bangkok Post has reported that the Vienna-based IAEA was concerned about the plans to build a reactor in Myanmar and had asked Moscow to provide details of the negotiations.

It said Myanmar had approached the IAEA in September with its plans to acquire a reactor, and that two months later a team from the organisation made an inspection visit.

The team concluded that the country's safety standards were "well below the minimum the body would regard as acceptable," it quoted an unnamed IAEA official as saying.
Burma-North Korea Ties Resurface as Hot Issue
By WAI MOE
Wednesday, May 12, 2010

Military ties between Burma and North Korea, and the related issue of Burma's suspected nuclear development program, have come front and center once again as a regional topic of debate following the visit to Burma on Monday by United States envoy Kurt Campbell, the assistant secretary of state for East Asian and Pacific affairs.

Campbell's visit came on the heels of a report in April that a vessel linked to North Korea had arrived in Thilawar Port, near Rangoon, and one of Campbell's key meetings was with Burmese Minister of Science and Technology U Thaung, a former ambassador to the United States who is said to manage Burma's nuclear development program.

According to a report in state-controlled The New Light of Myanmar on Wednesday, U Thaung's message to the US envoy was ambiguous. While acknowledging that the Burmese government had publicly announced its agreement to comply with United Nations Security Council resolutions 1718 and 1874, which ban all North Korean arms exports, U Thaung also said the Burmese government has “the duty to maintain and protect national sovereignty.”

Following the meeting with U Thaung, the US envoy issued a strong warning concerning Burma's arms purchases from North Korea, which some analysts suspect include nuclear technology.

And after leaving Burma, Campbell flew to Beijing, where his discussions with Chinese officials regarding North Korea are expected to include the relationship between Pyongyang and Naypyidaw.

US-based policy advisers have warned Washington that ties between Burma and North Korea threaten regional stability.

“Several factors could intensify the threat that Burma poses to regional stability and security, including its murky relationship with North Korea,” said Asia Society, an influential New York think-tank, in a report on Burma published in March.

Further talks regarding the ties between Burma and North Korea are likely to be scheduled for the upcoming Association of Southeast Asian Nations’ regional forum, to be held in Hanoi in July. US Secretary of State Hillary Clinton and Jim Webb, the chairman of the US Senate’s committee for East Asia and Pacific Affairs, are expected to attend the forum.

Security experts agree that North Korea has provided Burma with Scud-type missiles, missile parts, rocket launchers, other conventional weapons and underground warfare technology.

The debate now centers on Burma's nuclear development capabilities and the extent to which North Korea is supporting such capabilities.

An intelligence report suggested that at least 1,000 Burmese military personnel have graduated from nuclear technology programs in Russia and North Korea in the past year.

According to observers, and data from Burma’s Ministry of Energy, there are nine uranium mines in Burma, and some security analysts believe that in exchange for North Korean nuclear technology and expertise, the Burmese regime has exported enriched uranium and primary products to North Korea.

Desmond Ball, an Australian expert on Burma, wrote a 2009 report that, quoting Burmese defectors, said the Burmese armed forces established a ‘nuclear battalion’ in 2000 whose operational base includes an underground complex in the mountains southwest of Naung Laing, near Pyin Oo Lwin, where the regime is reportedly constructing a nuclear reactor.
Ball's report said that with North Korea's aide the reactor in Naung Laing could be completed around 2012 and Burma could develop its first deliverable nuclear weapons by 2020.

Although it is presently unclear how North Korea manages to smuggle arms and technology into Burma, speculation over the North Korean vessel that arrived in Rangoon in April followed the controversy last June when the Kang Nam 1, a North Korean vessel believed to be heading to Burma, made a u-turn in the South China Sea after being tailed by a US Destroyer.

Some observers believe that North Korea may also ship arms to Burma by air through China. Sources in Meiktila, in central Burma, have reported seeing military cargoes, believed to be from China and North Korea, arriving at Meiktila Airport, which serves as a Burmese Air Force base.
Appendix B

Imagery
Overview of area showing locations mentioned in various reports. “BOB” is the large building near Naung Laing.
Detail of Pyin Oo Lwin/Maymyo area
Digital Globe imagery of 2005-10-22

Apparently the site had been noticed and targeted for unclassified imaging by late 2007.
Browse image corresponding to Google Earth image of 2005-10-22. The building is clearly visible.


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Ikonos 1 browse image of 2004-04-13

The image appears to be centered on the site, suggesting it was specifically targeted.
Ikonos image of 2004-04-13

The site has been cleared and excavated but no foundation or building is present.
Ikonos image of 2009-02-21.
Google Earth Image of 2011-02-09.
Google Earth Image of 2014-02-14 showing extensive new construction to the west.
WorldView 1 browse image of 2009-06-16. The building is clearly visible. A new road running from a cleared area on the river east to a hilltop has been constructed.
The hilltop at the eastern end of the new road has been cleared.
Northern part of western clearing
Southern part of western clearing
Eastern clearing
Topographic setting of the building
Elevations of the terrain around the building.
The elevations near the building presumably represent previously existing terrain.
The building site is cut into the south end of a 40-meter high ridge that extends most of a kilometer to the north east and has an extension to the southeast and south that reaches 80 meters in height above the site.
JJ above fell for the same optical illusion I did, sort of an earthen step-pyramid up above a mostly flat surrounding terrain.

This is a goof, as topology and other sources available now indicate. To illustrate what I mistakenly saw at first close look, and the real topology, I created this graphic:

http://www.retro.com/employees/gherbert/Myanmar/Topo-Goof.png

I have cross sections roughly W-E and N-S for the mistaken “pyramid” topology, and the actual “cut into hillside” topology which the other sources including better read on the slope and hill heights support.

— George William Herbert · Aug 11, 02:06 AM ·
Appendix C

Possible Correlations between Google Earth Images and an Embassy and Dissident Report
1. (S) SUMMARY: North Korean workers are reportedly assembling “SAM missiles” and constructing an underground facility at a Burmese military site in Magway Division, about 315 miles NNW of Rangoon, according to XXXXXXXXXXXX. This unsolicited account should not be taken as authoritative, but it tracks with other information garnered and reported via XXXXXXXXXXXX. End Summary.

2. (S) XXXXXXXXXXXX

3. (S) XXXXXXXXXXXX some 300 North Koreans are working at a secret construction site west of Mimbu, Magway Division, in the foothills of the Arakan Yoma mountains. (Comment: the number of North Koreans supposedly working at this site strikes us as improbably high. End comment.) The XXXXXXXXXXXX claims he has personally seen some of them, although he also reported they are forbidden from leaving the construction site and that he and other “outsiders” are prohibited from entering. The XXXXXXXXXXXX was confident that XXXXXXXXXXXX had the ability to distinguish North Koreans from others, such as Chinese, who might be working in the area. The exact coordinates of the camouflaged site are not known, but it is reportedly in the vicinity of 20.00 N, 94.25 E.

4. (S) The North Koreans are said to be assembling “SAM missiles” of unknown origin. XXXXXXXXXXXX the North Koreans, aided by Burmese workers, are constructing a concrete-reinforced underground facility that is “500 feet from the top of the cave to the top of the hill above.” He added that the North Koreans are “blowing concrete” into the excavated underground facility.

5. (S) The XXXXXXXXXXXX is supposedly engaged in constructing buildings for 20 Burmese army battalions that will be posted near the site. Of these, two battalions are to be infantry; the other 18 will be “artillery,” according to this account.

6. (S) XXXXXXXXXXXX

7. (S) COMMENT: The [XXXXXXXXXXXX second-hand account of North Korean involvement with missile assembly and military construction in Magway Division generally tracks with other information Embassy Rangoon and others have reported in various channels. Again, the number 300 is much higher than our best estimates of North Koreans in Burma, and exactly how the XXXXXXXXXXXX allegedly came to see some of them personally remains unclear. Many details provided XXXXXXXXXXXX match those provided by other, seemingly unrelated, sources.

8. (S) COMMENT CONTINUED: We cannot, and readers should not, consider this report alone to be definitive proof or evidence of sizable North Korean military involvement with the Burmese regime. The XXXXXXXXXXXX description made no reference at all to nuclear weapons or technology, or to surface-to-surface missiles, ballistic or otherwise. XXXXXXXXXXXX This account is perhaps best considered alongside other information of various origins indicating the Burmese and North Koreans are up to something) something of a covert military or military-industrial nature. Exactly what, and on what scale, remains to be determined. Post will continue to monitor these developments and report as warranted.

McMullen
CLANDESTINE NUCLEAR PROJECTS OF BURMESE JUNTA ALMOST COMPLETED.

2009 April 15
by peacerunning

[EXCERPTS]

**First project** among other is located in the area of Maymyo (Pyinoolwin) and groups of villages were removed by force since year 2001. Construction of Nuclear Reactor in that area locally known as *Kone-Baw [Konhaw]* village is almost completed. The most important raw material Uranium, require for Nuclear Project was founded in Lashio area of North-Eastern Shan State thus transportation is very convenience because the project site and Lashio are on the same road famously known in the old day called Burma-China road. It is also has easy access from port City of Rangoon to carry the old second-hand machinery and parts from North Korea. Training of technicians to run that reactor was commenced since year 2001. Groups of Army Engineering graduates were sent to Russia for further study. Sad news for Burmese people are that the *Pwe-Kauk [Pwekawk]* water-fall originally known as BE fall in Maymyo, which remained as recreation centre for people almost a century long was now blocked to build Dam to provide require irrigation system for Nuclear Project.

[deletia]

**Second project** was started in Magwe Division, Min-Bu district, near Nga Phae [probably Ngape] village adjacent to the famous Scared Foot Print of Lord Buddha Which is call in Burmese “*Mann-Shwe-Set-Taw Pagoda*”. That project was built and supported by Russian Government with agreement of completion in 5 years term. Project included the building of Dam on the scared and famous Mann creek.

[deletia]

**Third project** will be building in east of Ya-Mae-Thinn [perhaps Yamethin] Township. Military authority starts giving the marching order to local inhabitants that those refuse to move or try to delay were encountered with shooting incident by soldiers. Military authority issuing the Civil Act Section (144) in that area means authorizing the soldiers with license to kill.

[deletia]

Reported by Thu Ye Kaung.
Google Earth image showing locations of the sites identified in the above report and cable
Google Earth image showing locations of Kone Baw and Pwe Kauk relative to Maymyo/Pyin Oo Lwin and the new large building (BOB)
Image of 31 December 2009 showing new construction underway on river, a candidate for the first project site
Shwe Set Taw and Ngape/Nga Phae
Minbu, Ngape, Shwe Set Taw, and the 20 00 N, 94 25 E coordinates
Imagery of 2004 showing an area southwest of Ngape with numerous buildings along a system of roads. Several buildings are in excavations in hillsides, and one site may be the location of the second project. The coordinates given in the Rangoon Embassy cable (20 00, 94 25) are shown just to the west of the candidate second project facility.
Image of November, 2004 showing candidate second project site
Topography of candidate second project site. Map tack A marks embassy cable coordinates.
DigitalGlobe images in area of candidate second project site. Two images taken in December 2007 are centered precisely on the site.
Candidate location of third project in east Ya-Mae-Thinn Township
View of candidate third project site showing northern and southern parts
Northern part of candidate third project site
Topography of northern part of candidate third project site registered with and to the same scale as the previous satellite image
Southern part of candidate third project site
Topography of southern part of candidate third project site registered with and to the same scale as the previous satellite image