

^{1*}Dr.Mamnoon Ahmad Khan

^{2*}Muhammad Kafil

Western Concerns over Security of Pakistan's

ABSTRACT

Pakistan's Nuclear Program is such a bitter pill which is not being swallowed by the western nations. A small country Israel can possess more than 100 nuclear warheads and no one has ever raised a finger on Israel's nuclear program.

The so-called terrorist attacks on September 11 raised concerns only about the security of Pakistan's nuclear arsenal, a country thousand kilometers away. There were no concerns about the security of nuclear arsenal of any other country. This shows a pre-planned course to wipe out Pakistan's nuclear arsenal, the only Islamic Nuclear State. Western countries don't have any concerns with the security of nuclear weapons of Israel, Russia or India. Then why only Pakistan has to pass all the tests to prove her innocence. These countries have tried their best to eliminate Pakistan's Nuclear Program but Pakistan's genius minds enable Pakistan to stand among the Nuclear Powers.

In 1976 France cancelled a deal for selling a nuclear reprocessing plant to Pakistan under US pressure. But our national hero Dr.Abdul Qadeer Khan did a breakthrough in the history of Pakistan and invented a cheap process to reprocess our fissile material. No other country in Asia has this capability except China and Japan. Even India reprocesses its atomic fuel from other countries.

Pakistani nuclear weapons are in a dismantle form. The fissile cores are stored separately from the non-nuclear explosives packages, and that the warheads are stored separately from the delivery systems. In a 2001 report, the Defense Department contends that "Islamabad's nuclear weapons are probably stored in component form" and that "Pakistan probably could assemble the weapons fairly quickly." Therefore the security of Pakistan's Nuclear Arsenal is far more adequate than other countries. In my paper I tried my best to defuse the atmosphere of mistrust and doubt between Pakistan and the West.

INTRODUCTION

Ever since Pakistan has acquired its nuclear capability, the only question that has been asked repeatedly by United States and the West is "Whether Pakistan would be able to secure her nuclear arsenal or not"?

According to the Western observers during times of relative political and social normalcy, the security of Pakistan's nuclear arsenal is probably satisfactory and could be expected to develop steady with other nuclear

^{1*} Assistant Prof., Department of International Relations,

Federal Urdu University, Karachi

Email: mamnoon.ahmed@fuuast.edu.pk

^{2*} Research Scholar., Department of International Relations,

Federal Urdu University, Karachi

Email: muhammadkafeel988@gmail.com

programs worldwide. However, fallout from Pakistan's decision to work together with the United States following the September 11, terrorist attacks may severely test Pakistan's security system all through its nuclear weapons complex. Wavering in Pakistan could make its nuclear weapons and stocks of nuclear explosive material dangerously vulnerable to theft. If domestic volatility leads to the collapse of the current Pakistani government, nuclear weapons and the resources to make them could fall into the hands of anti-state actors who are the bitter foe to the United States and its allies.

Pakistan's nuclear arsenal consists of approximately 60 nuclear warheads, though it could be larger. Islamabad is producing fissile material, adding up related production facilities, and deploying extra delivery vehicles. These steps will facilitate Pakistan to assume both quantitative and qualitative improvements to its nuclear arsenal. Whether and to what extent Pakistan's current development of its nuclear weapons-related facilities is a reaction to the 2008 U.S.-India nuclear assistance agreement is unclear. Islamabad does not have a public, detailed nuclear doctrine, but its "minimum credible deterrent" is widely regarded as primarily a deterrent to Indian military action.

Pakistan has in recent years taken a number of steps to boost international confidence in the security of its nuclear arsenal. In addition to significantly overhauling nuclear command and control structures since September 11, 2001, Islamabad has initiated new personnel security programs. Furthermore, Pakistani and some U.S. officials argue that, since the 2004 revelations about a procurement network run by Chief Pakistani Nuclear Scientist Dr. Abdul Qadeer Khan, Islamabad has taken a number of steps to develop its nuclear security and to avoid further proliferation of nuclear-related technologies and materials. A number of important initiatives, such as strengthened export control laws, improved personnel security, and international nuclear security cooperation programs have enhanced Pakistan's security situation in recent years.

Instability in Pakistan has called the amount and resilience of these reforms into question. Some observers fear radical coop of a government that possesses a nuclear bomb, or proliferation by radical sympathizers within Pakistan's nuclear complex in case of a collapse of controls. While U.S. and Pakistani officials keep on to articulate confidence in controls over Pakistan's nuclear weapons, continuous in security in the country could perish these safeguards. For a broader discussion, see CRS Report RL33498, *Pakistan-U.S. Relations*, by K. Alan Kronstadt. This report will be updated.

WESTERN WORRIES

Persistent political volatility in Pakistan and the current army action against the Taliban in the northwest of the country have called awareness to the issue of the security of the country's nuclear weapons. Some Western observers believe that Pakistan's strategic nuclear assets could be obtained by terrorists, or used by fundamentals in the Pakistani government. Chair of the Joint Chiefs of Staff Admiral Michael Mullen described U.S. concern about the matter during a September 22, 2008, speech: To the best of my ability to understand it—and that is with some ability—the weapons there are secure. And that even in the change of government, the controls of those weapons haven't changed. They said, they are their weapons. They're not my weapons. And there are limits to what I know. Certainly at a worst-case scenario with respect to Pakistan, I worry a great deal about those weapons falling into the hands of terrorists and either being proliferated or potentially used. And so, control of those, stability, stable control of those weapons is a key concern. And I think certainly the Pakistani leadership that I've spoken with on both the military and civilian side understands that.

U.S. officials continue to be concerned about the existential threat posed by nuclear weapons in aso called destabilized Pakistan. General David H. Petraeus, Commander, U.S. Central Command, testified March 31, 2009, that "Pakistani state failure would provide transnational terrorist groups and other extremist organizations an opportunity to acquire nuclear weapons and a safe haven from which to plan and launch attacks."

Nevertheless, U.S. officials have generally expressed confidence in the security of Pakistan's nuclear weapons. President Obama addressed this issue in an April 29, 2009, press conference, stating, "I'm confident that we can make sure that Pakistan's nuclear arsenal is secure, primarily, initially, because the Pakistani army, I think, recognizes the hazards of those weapons falling into the wrong hands. We've got strong military-to-military consultation and cooperation." He also recognized the sensitivity of the issue for Pakistan, saying, "We want to respect their sovereignty, but we also recognize that we have huge strategic interests, huge national security interests in making sure that Pakistan is stable and that you don't end up having a nuclear-armed militant state." [1] Declining to engage in "hypothetical's" when asked if the United States is ready to secure the nuclear arsenal if the Pakistani government could not do so, President Obama said he felt "confident that that nuclear arsenal will remain out of militant hands."

General Petraeus reaffirmed this confidence on May 10: “With respect to the—the nuclear weapons and—and sites that are controlled by Pakistan ... we have confidence in their security procedures and elements and believe that the security of those sites is adequate.” [2]Admiral Mullen echoed this appraisal during a May 14, 2009, hearing before the Senate Armed Services Committee. Former Pakistani President Pervez Musharraf told a journalist that Islamabad has “given State Department nonproliferation experts insight into the command and control of the Pakistani arsenal and its on-site safety and security procedures,” [3]but U.S. information of Pakistan’s arsenal remains limited, according to U.S. officials. Mullen stated that “we’re limited in what we actually know” about Islamabad’s nuclear arsenal. Leon Panetta, Director of the Central Intelligence Agency, similarly acknowledged in a May 18 speech that the United States does not possess the intelligence to locate all of Pakistan’s nuclear weapons-related sites. Pakistani efforts to improve the security of its nuclear weapons have been continuing and include some cooperation with the United States. Since the 1998 Pakistani and Indian nuclear tests, the international community has amplified attention to reducing the risk of nuclear war in South Asia.

The two countries came to the brink of full-scale war in 1999 and 2002, and, admitting the dangers, have developed some risk reduction procedures to avert accidental nuclear war. Islamabad has also developed its command and control systems and enhanced security of military and civilian nuclear facilities. Since the 2004 revelations of an extensive international nuclear proliferation network run by Pakistani nuclear Scientist Dr. Abdul Qadeer Khan, Islamabad has introduced supplementary efforts to improve export controls and monitor nuclear personnel. The main security challenges for Pakistan’s nuclear arsenal are keeping the reputation of the command structure, ensuring physical security, and preventing illicit proliferation from insiders.

Pakistan continues to produce fissile material for weapons and seems to be augmenting its weapons production facilities, as well as deploying additional delivery vehicles—steps that will facilitate both quantitative and qualitative improvements in Islamabad’s nuclear arsenal.

NUCLEAR WEAPONS

Pakistan’s nuclear energy program dates back to the 1950s, but it was the loss of East Pakistan (now Bangladesh) in a bloody war with India that most likely triggered a political decision in January 1972 (just one month later) to begin a secret nuclear weapons program. [4] Deterring India’s nuclear weapons and augmenting Pakistan’s smaller conventional forces

are widely believed to be the primary missions for Islamabad's nuclear arsenal. Western observers assume India's 1974 nuclear explosion "peaceful" and pivotal moment that gave additional urgency to the program. Pakistan produced fissile material for its nuclear weapons using gas-centrifuge-based uranium enrichment technology, which it developed by the mid-1980s. Highly-enriched uranium (HEU) is one of two types of fissile material used in nuclear weapons; the other is plutonium. The country's main enrichment facility is a centrifuge plant located at Kahuta; Pakistan may have other enrichment sites. [5]

According to Western observers Islamabad gained technology from many sources. This extensive assistance is reported to have received uranium enrichment technology from Europe, blueprints for a small nuclear weapon from China, and missile technology from China. America and western countries are unable to digest the fact that Pakistan Nuclear Program and its uranium enrichment technology is completely indigenous. According to most western public estimates, Pakistan has about 60 nuclear weapons, though it could have more; [6] a recent public estimate from two prominent experts on the subject stated that the country has between 70 and 90 nuclear weapons.[7] Pakistan's nuclear warheads use an implosion design with a solid core of approximately 15-20 kilograms of HEU.[8] Islamabad reportedly continues to produce HEU for weapons at a rate of at least 100 kilograms per year.[9] Pakistan has also pursued plutonium based warheads and continues to produce plutonium for weapons. According to US officials Islamabad has received Chinese and European assistance for at least some of its plutonium program. The 40-50 megawatt heavy-water Khushab plutonium production reactor has been operating since 1998. [10] It appears that Islamabad is constructing two additional heavy-water reactors, which will expand considerably Pakistan's plutonium production capacity, at the same site.[11] Additionally, Pakistan has a reprocessing facility [12] at the Some more nightmares of US authorities about Pakistan's Nuclear Program are that Pakistan Institute of Science and Technology (PINSTECH) is apparently constructing reprocessing facilities. *Nuclear Fuel* reported in 2000 that, according to "senior U.S. government officials," Islamabad had begun operating a "pilot-scale" reprocessing facility at the New Laboratories facility at PINSTECH.[13] Pakistan also appears to be constructing a second reprocessing facility at the site [14] and may be completing a reprocessing facility located at Chasma.[15] Islamabad's construction of additional nuclear reactors and expansion of its reprocessing capabilities could indicate plans to increase and improve Pakistan's nuclear weapons arsenal in the near future. Indeed, Defense Intelligence Agency Director Michael

Maples told the Senate Armed Services Committee on March 10, 2009, that "Pakistan continues to develop its nuclear infrastructure, expand nuclear weapon stockpiles and seek more advanced warheads and delivery systems." [16] Similarly, Admiral Mullen confirmed during the May 14 hearing that the United States has "evidence" that Pakistan is expanding its nuclear arsenal. In reality Pakistan cannot afford such huge amounts to expend on such mega projects. Pakistani people are struggling for their basic necessities of food, poverty, education, unemployment and health. These are all the nightmares of United States and western countries. In fact Pakistan is striving hard to get rid from its acute power shortage by using its nuclear program for electricity generation.

DELIVERY VEHICLES

Pakistan has two types of delivery vehicles for nuclear weapons: aircraft controlled by the Pakistan Air Force and surface-to-surface missiles controlled by the Pakistan Army. Pakistan could carry its nuclear weapons using F-16s, provided that modifications are made. It is extensively understood that Islamabad has made modifications to the F-16s previously sold to them.[17] Even though concerns have been sought about the impact of these sales on the strategic balance in South Asia,[18] the U.S. government believes that the sale of additional F-16s to Pakistan will not change the regional balance of power.[19] The agreement for provision of an additional 36 aircraft was signed on September 30, 2006, as was the contract for the weapons for those aircraft and a contract to perform the mid-life upgrade on Pakistan's F-16A/B model aircraft. Pakistan's F-16 fleet will therefore be extended, but it is unclear what segment of the fleet will be capable of a nuclear mission. Mirage III and V aircraft could also be used, although would have limited range. A-5's may have been modified to carry a nuclear payload.[20]

After India's first test of its *Prithvi* ballistic missile in 1988, Pakistan its own missile program and has three types of ballistic missiles thought to be nuclear-capable: the solid-fuel *Hatf-III (Ghaznavi)*, with a range of about 400 kilometers; the solid-fuel *Hatf-IV (Shaheen)*, with a range of over 450 kilometers[21] ; and the liquid-fuel *Hatf-V (Ghauri)*, with an approximate range of almost 1,300 kilometers. The solid-fuel *Hatf-VI (Shaheen-2)* missile, when deployed, will be "capable of reaching targets out to 2,000 kilometers," Maples stated March 10,[22] adding that Islamabad has made "significant progress" on the missile. A 2009 National Air and Space Intelligence Center report appears to support this conclusion, stating that the missile "probably will soon be deployed." Islamabad continues to carry out ballistic missile tests, but notifies India in advance in accordance

with an October 2005 bilateral missile pre-notification pact. Maples also indicated that Pakistan is developing nuclear-capable cruise missiles; the *Babur* (ground launched) and the *Ra'ad* (air-launched), both of which will have estimated ranges of 320kilometers.

COMMAND AND CONTROL

Pakistan's command and control over its nuclear weapons is compartmentalized and includes strict operational security. The government's command and control system is based on "C4I2SR" (command, control, communication, computers, intelligence, information, surveillance and reconnaissance). Islamabad's Strategic Command Organization has a three-piled structure, consisting of the National Command Authority (NCA), the Strategic Plans Division (SPD), and the Strategic Forces Commands.

The NCA, established in 2000, supervises the functions and management of all of Pakistan's organizations concerned in nuclear weapons research, development, and employment, as well as the military services that operate the strategic forces. The Prime Minister, as Head of Government, is Chairperson of the NCA.[23] The NCA also includes the chair of the joint chiefs of staff, the Ministers of Defense, Interior, and Finance, the Director- General of the SPD, and the Commanders of the Army, Air Force, and Navy. The final authority to initiate a nuclear strike requires consensus within the NCA; the Chairperson must cast the final vote. The NCA is comprised of two committees, the Employment Control Committee (ECC) and the Development Control Committee (DCC), each of which includes a mix of civilian and military officials. The ECC's functions include establishing a command and control system over the use of nuclear weapons. The DCC "workout technical, financial and administrative control over all strategic organizations, including national laboratories and research and development organizations associated with the development and modernization of nuclear weapons." [24]

The SPD is governed by a Director General from the Army and acts as the secretariat for the NCA. The SPD's functions include devising Islamabad's nuclear policy, strategy, and doctrine; developing the nuclear chain of command; and formulating operational plans at the service level for the movement, deployment, and use of nuclear weapons. The Army, Air Force, and Navy each have their own strategic force command, but operational planning and control residue with the NCA. The SPD coordinates operational plans with the strategic forces commands. According to current and former Pakistani officials, Islamabad employs a

system which requires that at least two, and perhaps three, people authenticate launch codes for nuclear weapons. [25]

On December 13, 2007, then-President Musharraf formalized these authorities and structure in the “National Command Authority Ordinance, 2007.” [26] The NCA was established by executive order, but now has a legal basis. Analysts point out that the timing of this order was meant to help the command and control system weather political transitions and potentially protect the military’s strong control over the system. The ordinance also addresses the problems of the proliferation of nuclear knowledge and personnel dependability. It outlines punishable crimes associated to infringe of discretion or leakage of “secured information,” gives the SPD authority to inspect doubtful conduct, states that punishment for these offenses can be up to 25 years detention, and applies to both serving and retired personnel, including military personnel, despite any other laws. As a result, Pakistani authorities say that the ordinance should strengthen their control over strategic organizations and their personnel.

SECURITY CONCERNS

According to a 2001 Department of Defense report, Islamabad’s nuclear weapons “are probably stored in component form,”[27] which suggests that the nuclear warheads are stored separately from delivery vehicles. According to some reports, the fissile cores of the weapons are separated from the non-nuclear explosives.[28] But whether this is in fact the case is uncertain; one report states that the warheads and delivery vehicles are most likely stored separately in facilities close to one another, but says nothing about the fissile cores.[29] And, according to an account of a 2008 experts’ group visit to Pakistan, Lt. Gen. Khalid Kidwai, the head of the SPD, suggested that the nuclear warheads (containing the fissile cores) may be mated with their delivery vehicles.[30] According to Kidwai, the report says, the SPD’s official position is that the weapons “will be ready when required, at the shortest notice; [but] the Pakistani doctrine is not endorsing a US-USSR model with weapons on hair trigger alert.” The 2001 Defense Department report says that Pakistan can probably assemble its weapons fairly quickly.[31]

It warrants state that, even though separate storage may supply a layer of protection against accidental launch or prevent theft of an assembled weapon, it may be easier for unauthorized people to take away a weapon’s fissile material core if it is not assembled. Scattering of the possessions may also generate more prospective access points for acquirement and may increase the risk of diversion.[32]

As the United States arranged to launch an attack on the Afghan Taliban after September 11,

2001, President Musharraf allegedly ordered that Pakistan's nuclear arsenal be redeployed to "at least six secret new locations." [33] This action came at a time of uncertainty about the future of the region, including the trend of U.S.-Pakistan relations. Islamabad's leadership was unsure whether the United States would choose to conduct military strikes against Pakistan's nuclear assets if the government did not support the United States against the Taliban. Certainly, President Musharraf cited security of Pakistan's nuclear and missile assets as one of the reasons for Islamabad's dramatic policy shift. [34]

These happenings, in blend with the 1999 Kargil crisis, the 2002 conflict with India at the Line of Control, and revelations about the A.Q. Khan proliferation network, motivated a variety of reforms to secure the nuclear structure. Threat of nuclear war in South Asia ran high in the 1999 Kargil crisis, when the Pakistani military is supposed to have begun preparing nuclear-tipped missiles. [35] It should be noted that, even at the high alert levels of 2001 and 2002, there were no reports of Pakistan mating the warheads with delivery systems. [36]

In the fall of 2007 and early 2008, some western observers uttered concern about the protection of the country's arsenal if political insecurity were to persist. [37]

Our own leaders gave confidential information to our masters just to remain in power or to gain power. Former Prime Minister Benazir Bhutto said in a November 5, 2007, interview that, although then-President Musharraf claimed to be in firm control of the nuclear arsenal, she feared this control could weaken due to instability in the country. [38] Similarly, Michael Krepon of the Henry L. Stimson Center has stressed that "an extended period of turmoil and power struggle among the country's President, Prime Minister, and Army Chief" could endanger the army's unity of command, which "is essential for nuclear security." [39] During that time, U.S. military officials also articulated apprehension about the security of Pakistan's nuclear weapons. [40] Director General of the International Atomic Energy Agency (IAEA), Mohamed El Baradei, also has expressed fears that a fundamental regime could take power in Pakistan, and thus obtain nuclear weapons. [41] Experts also be concerned that while nuclear weapons are currently under firm control, with warheads disassembled, technology could be sold off by insiders during a worsened crisis. [42]

However, U.S. intelligence officials have expressed firm confidence regarding the security of Islamabad's nuclear weapons. Deputy Secretary

of State John D. Negroponte in statement to Congress on November 7, 2007 said he believed that there is “plenty of succession planning that’s going on in the Pakistani military” and that Pakistan’s nuclear weapons are under “effective technical control.”[43] Similarly, Donald Kerr, Principal Deputy Director of National Intelligence, told a Washington audience May 29, 2008, that the Pakistani military’s control of the nuclear weapons is “a good thing because that’s an institution in Pakistan that has, in fact, withstood many of the political changes over the years.” A Department of Defense spokesperson told reporters December 9, 2008, that Washington has “no motive at this point to have any anxiety with regards to the security” of Islamabad’s nuclear arsenal. More recently, Maples stated March 10, 2009, that Islamabad “has taken vital steps to protect its nuclear weapons,” although he pointed out that “vulnerabilities exist.”

Other governments have also expressed opinions concerning the security of Pakistan’s nuclear arsenal. For example, Indian National Security Adviser M. K. Narayanan said that Pakistan nuclear arsenal is safe and has adequate checks and balances.[44] Similarly, Secretary of State for Foreign and Commonwealth Affairs David Miliband told the *Charlie Rose Show* December 15, 2008, that Islamabad’s nuclear weapons “are under pretty close lock and key.” Russian Deputy Prime Minister Sergei Ivanov, though, seemed fairly less optimistic in a March 24, 2009, television interview, stating that Moscow is “very much worried” about the security of Pakistan’s arsenal.[45]

Pakistani officials have constantly expressed confidence in the security of the country’s nuclear arsenal. Then-President Musharraf stated in November 2007 that Pakistan’s nuclear weapons are under “total custodial controls.”[46] More recently, President Asif Ali Zardari told CNN December 2, 2008, that the country’s nuclear command and control system “is working well.” Furthermore, a Pakistani Foreign Ministry spokesperson stated May 21, 2009, that “there is simply no question of our strategic assets falling into the wrong hands. We have full confidence in our procedures, mechanisms and command and control systems.”

In addition to the above scenarios, the security of Pakistan’s nuclear weapons could also be altered by another conflict between India and Pakistan, Michael Krepon argued, explaining that an “increasing war with nuclear forces in the field would add to the possibility of accidents, miscalculations, and the use of nuclear weapons.” This is because when tensions rise precipitously with India, the promptness level of Pakistan’s nuclear deterrent also rises. Because the geographical coordinates of Pakistan’s main nuclear weapon storage sites, missile, and air bases can be readily identified from satellites—and therefore targeted by opposing

forces—the dictates of deterrence mandate some movement of launchers and weapons from fixed locations during crises. Nuclear weapons on the move are inherently less secure than nuclear weapons at heavily-guarded storage sites. Weapons and launchers in motion are also more susceptible to “insider” threats and accidents.[47] Such a war, Krepon added, would also place stress on the army’s unity of command. Krepon has also pointed out that Islamabad faces a dilemma, because less-dispersed nuclear weapons may be more vulnerable to a disarming military strike from India.[48]

US AND WESTERN CONCERNS OVER PROLIFERATION

Many observers are anxious that other states or terrorist organizations could acquire material or knowledge related to nuclear weapons from Pakistan.[49] Beginning in the 1970s, Pakistan used concealed procurement networks to develop its nuclear weapons program. It is believed by the West that Former Pakistani Nuclear Scientist A.Q. Khan subsequently used a similar network to supply Libya, North Korea, and Iran with materials related to uranium enrichment.[50]

Western Observers also believed that Al-Qaeda has also wanted assistance from the Khan network. According to former Director of Central Intelligence George Tenet, the United States “received incomplete information from an intelligence service” that in 1998 Osama bin Laden had “sent emissaries to establish contact “with the network.[51] Other Pakistani sources could also supply nuclear material to terrorist organizations. According to a 2005 report by the Commission on the Intelligence Capabilities of the United States concerning Weapons of Mass Destruction, Al-Qaeda “had established contact with Pakistani scientists who discussed development of nuclear devices that would require hard-to-obtain materials like uranium to create a nuclear explosion.”[52] Tenet explains that these scientists were affiliated with a different organization than the Khan network.

The recent status of Pakistan’s nuclear export network is uncertain, while most U.S official reports point out that, at the least, it has been smashed considerably. Director of National Intelligence John D. Negroponte observed that the network had been dismantled when he asserted in a January 11, 2007, statement to the Senate Select Committee on Intelligence that “Pakistan had been a chief source of nuclear proliferation until the disruption of the A.Q. Khan network.”[53]

A January 12, 2009, State Department press release said that the network “is no longer working.” For its part, Pakistan’s Foreign Office stated

February 7, 2009, that Pakistan “has dismantled the nuclear black market network.” Asked during a July 20, 2009, interview whether Pakistan was transferring “nuclear weapons” or related advice to North Korea, Secretary of State Hillary Clinton replied that there is “no proof” that Pakistan is doing so.

However, when inquired about the network’s recent status during a July 25, 2007, Senate Foreign Relations Committee hearing, Undersecretary for Political Affairs Nicholas Burns replied that: I cannot assert that no part of that network exists, but it’s my understanding based on our conversations with the Pakistanis that the network has been basically dismantled.

Asked about Pakistan’s assistance in investigating the network, Burns recognized that the United States has not had “personal, consistent access” to Khan, but added that he did not “have all the details of everything we’ve done.” Likewise, the IAEA has not yet been able to interview Khan directly, according to an agency official. However, Islamabad has responded to written questions from the IAEA and has been cooperative with the agency’s investigation of Iran’s nuclear program.[54] Khan himself told *Dawn News TV* May 29, 2008, that he would not cooperate with U.S. or IAEA investigators. A Pakistani Foreign Office spokesperson told reporters in May 2006 that the government considered the Khan investigation “closed”—a position an Office spokesperson reiterated February 6, 2009.

The State Department announced January 12, 2009, that it was imposing sanctions on 13 individuals and three companies for their involvement in the Khan network. The sanctions were imposed under the Export-Import Bank Act, the Nuclear Proliferation Prevention Act, and Executive Orders 12938 and 13382.

PAKISTAN’S RESPONSE OVER US AND WESTERN CONCERNS

Undersecretary Burns admitted in July 2007 that the Bush administration has “told the Pakistani government that it is its liability ... to make sure” that neither the Khan network nor a “similar organization” resurfaces in the country. Since the revelations about the Khan network, Pakistan appears to have enlarged its efforts to prevent nuclear proliferation.

But whether and to what degree these efforts have been triumphant is not yet clear. It is worth noting that, because Khan performed his proliferation activities as a government official, they do not necessarily indicate a failure of Islamabad’s export controls.

Pakistani officials confirmed that Islamabad has taken a number of steps to prevent further proliferation of nuclear-related technologies and materials.

[55] For example, Islamabad adopted in September 2004 new national export controls legislation which includes a prerequisite that the government issue control lists for “goods, technologies, material, and equipment which may assist to designing, development, stockpiling, [and] use” of nuclear weapons and related delivery systems. According to a February 2008 presentation by Zafar Ali, Director of Pakistan’s Strategic Export Controls Division (SECDIV), [56] the lists, which were issued in October 2005 and are to be periodically updated, comprise of items controlled by multilateral export control regimes, such as the Nuclear Suppliers Group, the Australia Group, and the Missile Technology Control Regime.[57] The export controls legislation also includes a catch-all clause, which requires exporters to report the government if they are conscious or suspect that goods or technology are intended by the end-user for use in nuclear or biological weapons, or missiles capable of delivering such weapons.[58]

The legislation comprise of several other important elements, such as end-use and end-user guarantee requirements and new penalties for violators. Since its adoption, Pakistan has established the SECDIV and an associated Oversight Board. The SECDIV is accountable for making rules and regulations for implementing the legislation. The board is consisted of officials from various agencies and is governed by Pakistan’s Foreign Secretary.

Islamabad says that it has also taken several other steps to increase its nuclear security. For example, the government declared in June 2007 that it is “enforcing a National Security Action Plan with the [IAEA’s] assistance.” That same month, Pakistan also participated in the U.S.- and Russian-led Global Initiative to Combat Nuclear Terrorism. As noted above, the December 2007 National Command Authority Ordinance also includes measures to avoid the spread of nuclear associated materials and expertise.

Pakistani officials participating in an April 2007 Partnership for Global Security workshop stressed that Islamabad has enhanced the reliability of its nuclear employees by, for example, making security clearance procedures more strict. However, the officials also recognized that Islamabad still needs to do more to control its nuclear expertise.[59] Similarly, Admiral Mullen stated May 14, 2009, that the country’s personnel reliability system must “carry on to improve.”

The United States has also extended export control assistance to Pakistan. Burns described numerous such efforts in his July 2007 testimony.[60] Under Secretary of State for Arms Control and International Security-Designate Ellen Tauscher told the Senate Foreign Relations Committee

that the Obama administration does not support conditioning aid to Pakistan on permitting direct U.S. access to Khan, arguing, in part, that the United States has "obtained a great deal of information about the Khan network without having direct access to A.Q. Khan." [61].

CONCLUSION

American and Western observers assume India's 1974 and 1998 nuclear explosions "peaceful" while consider Pakistan's nuclear tests "hazardous". Why there have been double standards while dealing with India and Pakistan on nuclear issues.

A report last year suggested that the US send in Special Forces to help "secure the Pakistani nuclear arsenal. Pakistan's foreign office dismissed the report as "outlandish musings", insisting there was no danger of the country's strategic assets falling into the wrong hands.

At the moment, few believe Taliban could take power in Pakistan. But there has been enormous apprehension over Pakistan's nuclear facilities since 2004. That was when the "father of Pakistan's nuclear program", AQ Khan, most probably under pressure confessed to leaking nuclear secrets to Iran, North Korea and Libya. He received a presidential pardon and has since been under house arrest. Pakistan's government says he has revealed the full extent of his activities.

Estimates of the number of weapons Pakistan has vary from 40 to more than 100 warheads. Once upon a time, the received wisdom was that Pakistan needed three bombs, to attack Delhi, Mumbai and Calcutta in neighboring nuclear competitor, India. More weapons means more people having access to the weapons facilities.

But it is believed that the real weapons are safe. As far as the weapons themselves are concerned, I don't believe they can be stolen by fundamentalist groups like al-Qaeda. The days of smuggling centrifuges out of Kahuta (Pakistan's main nuclear research facility) defunct with AQ Khan.

Pakistan's nuclear weapons are only as much at threat as those of the US or India. There are differing zones of security and everyone is checked and double checked while entering and leaving the facility. Even highly trained troops would find it almost impractical to storm Pakistan's nuclear facilities.

In the first place there is the secrecy surrounding the real weapons storage and development facilities.

Everybody discuss about Kahuta, whereas it is no longer the main facility. The manner the nuclear facilities were built makes infiltration nearly impossible. Facilities like Kahuta are built hundreds of feet underground. Pakistan has taken steps to increase the safety of its nuclear weapons. These include sending personnel who safeguard the facilities for training in the US.

It is believed that even small amounts of Highly Enriched Uranium (HEU) or plutonium could not be smuggled out of Pakistan's nuclear facilities.

About 25kg of fissile material is required to make a device the size of [that used at] Hiroshima, and having so much quantity of fissile material is not easy.

It is easy to comprehend that the fissile material is the main component for the manufacture a nuclear device and it is not such a thing which is easily available.

Both the weapons and the fissile material are accorded the same level of security because both have the same possibility of being stolen.

United State has always played a Hippocratic role in the disguise of a friend. Whether there were Indo-Pak Wars of 1965, 1971, Pressler Amendment or additional sanctions after the Pakistan's nuclear tests in 1998. United States has always deserted Pakistan in the moment of distress. United States has made Pakistan its Buddy but only to get her interests and benefits. Pakistan is in dare need of Civil Nuclear Technology for generating electricity and has requested for it repeatedly from United States but all in vein on contrary America has signed a Civil Nuclear Cooperation Pact with India in 2008.

Nobody has ever suggest to send inspection teams at the nuclear sites of India, Israel, European Union Countries, Russia and USA or to send Special Forces to these countries for the protection of their nuclear weapons then why only Pakistan becomes the target of these harsh policies.

REFERENCES

1. President Obama's 100th-Day Press Briefing transcript, April 29, 2009, available at http://www.nytimes.com/2009/04/29/us/politics/29text-obama.html?_r=1&pagewanted=print.
2. Interview with General David H. Petraeus, FOX News Sunday, May 10, 2009. <http://www.foxnews.com/story/0,2933,519696,00.html>.
3. Seymour M. Hersh, "Defending the Arsenal: In an Unstable Pakistan, Can Nuclear Warheads be Kept Safe?" *The New Yorker*, November 16, 2009.
4. U.S. Department of Defense, *Proliferation: Threat and Response*, April 1996, a. p.37.
5. Zia Mian, A.H. Nayyar, R. Rajaraman and M.V. Ramana, "Fissile Materials in South Asia: The Implications of the U.S.-India Nuclear Deal," International Panel on Fissile Materials, September 2006 and David Albright, "Securing Pakistan's Nuclear Infrastructure," in *A New Equation: U.S. Policy toward India and Pakistan after September 11* (Washington: Carnegie Endowment for International Peace) May 2002. For a list of Pakistani nuclear facilities, see chart in Pakistan chapter of Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar, *Deadly Arsenals*, Carnegie Endowment for International Peace, 2005. Jeffrey Park, Richard Allen, Terry Wallace and Christel Hennet, "False Accusations, Undetected Tests and Implications for the CTBT Treaty," *Arms Control Today*, May 1998 http://www.armscontrol.org/act/1998_05/vimy98.asp.
6. Arms Control Association Factsheet, available at
 - a. <http://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat.aspx>; International Panel on Fissile Materials, 2008. http://www.fissilematerials.org/ipfm/site_down/gfmr08cv.pdf.
7. Robert Norris and Hans Kristensen, "Nuclear Notebook: Pakistan's Nuclear Forces, 2009," *Bulletin of the Atomic Scientists*, September/October 2009.
8. Robert Norris and Hans Kristensen, "Nuclear Notebook: Pakistan's Nuclear Forces, 2007," *Bulletin of the Atomic Scientists*, May/June 2007.
9. "Global Fissile Material Report 2007."
10. *The Nation*, April 13, 1998).
11. David Albright and Paul Brannan, "Update on Khushab Plutonium Production Reactor Construction Projects in Pakistan," Institute for Science and International Security, April 23, 2009; Mark Hibbs and Shahid-ur-Rehman, "Pakistan Civilian Fuel Cycle Plan Linked To NSG Trade Exception," *Nuclear Fuels*, August 27, 2007.
12. "Reprocessing" refers to the process of separating plutonium from spent nuclear fuel.
13. Hibbs, June 15, 2000. <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB114/chipak-11.pdf>.
14. David Albright and Paul Brannan, "Pakistan Expanding Plutonium Separation Facility Near

-
- a. Rawalpindi,” Institute for Science and International Security, May 19, 2009.
 15. David Albright and Paul Brannan, “Chashma Nuclear Site in Pakistan with Possible Reprocessing
 - a. Plant,” Institute for Science and International Security, January 18, 2007.
 16. Norris and Kristensen explain that plutonium reactors “provide the Pakistani military with several options:(Norris and Kristensen, 2007).
 17. The 1993 See National Security Council, *Report to Congress*.
 18. CRS Report RL33515, *Combat Aircraft Sales to South Asia: Potential Implications*, by
 - a. Christopher Bolkcom, Richard F. Grimmett, and K. Alan Kronstadt; Zachary Ginsburg, “US
 - b. Renews Fighter Exports to Pakistan,” *Arms Control Today*, September 2007.
 - c. http://www.armscontrol.org/act/2007_09/USPakistan.asp.
 19. “Defense Security and Cooperation Agency news release, June 28, 2006.
 - a. http://www.dsca.mil/PressReleases/36-b/2006/Pakistan_06-11.pdf.
 20. CRS Report RL30623, *Nuclear Weapons and Ballistic Missile Proliferation in India and Pakistan: Issues for Congress*, by K. Alan Kronstadt.

- 21 Dr. Samar Mubarakmand, Chairman of Pakistan's National Engineering and Scientific Commission, gave the missile's range as 700 kilometers during a 2004 television interview ("Capital Talk Special," GEO-TV, May 3, 2004).
- 22 "Worldwide Ballistic Missile Inventories," *Arms Control Today Fact Sheet*, <http://www.armscontrol.org/factsheets/missiles.asp>; and Mahmud Ali Durrani, "Pakistan's Strategic Thinking and the Role of Nuclear Weapons," *Cooperative Monitoring Center Occasional Paper 37*, July 2004 available at <http://www.cmc.sandia.gov/cmc-papers/sand2004-3375p.pdf>. Mubarakmand gave the missile's range as 2,500 kilometers in the 2004 interview.
- 23 When the NCA was established in 2000, the government's announcement designated the Head of Government, or Prime Minister, as Chairperson. At that time, General Musharraf, as Chief Executive, became Chairperson and stayed in that position after becoming President in 2002. He appointed the Prime Minister as Vice Chairman. However, President Zardari returned the NCA to its original structure when, in a November 2009 re-promulgation of the 2007NCA Ordinance, he specified that the Prime Minister would be Chairperson, removing himself from that position (thisre-promulgation also abolished the position of Vice Chairman). Zardari may have done this in reaction to Parliamentary pressure, and perhaps to boost his waning political support. According to Brigadier General (Ret.) Naeem Salik, the change in Chairmanship may have only a symbolic impact on nuclear policy-making, since no changes were made to the Strategic Plans Division itself. The Pakistani Parliament is now considering a bill, the National Command Bill of 2009, which includes these provisions, and could add reporting requirements on the safety and security of Pakistan's nuclear assets. A July 2009 Supreme Court decision required that the Ordinances from the Musharraf era be made law.
- 24 *Nuclear Black Markets: Pakistan, A.Q. Khan and the Rise of Proliferation Networks*, (London: The International Institute for Strategic Studies), 2007. p. 111; Pakistan Announcement of Nuclear-Weapons Command-and-Control Mechanism, Associated Press of Pakistan, February 3, 2000. *Nuclear Black Markets*, pp. 110-111, has organization charts of the NCA and SPD.
- 25 P. Cotta-Ramusino and M. Martellini, "Nuclear Safety, Nuclear Stability And Nuclear Strategy In Pakistan: A Concise Report Of A Visit By Landau Network - Centro Volta," January 14, 2002. Available at<http://www.pugwash.org/september11/pakistan-nuclear.htm>; Kenneth N. Luongo and Brig. Gen. (Ret.) Naeem Salik, "Building Confidence in Pakistan's Nuclear Security," *Arms Control Today*, December 2007; Robin Walker, "Pakistan's Evolution as a Nuclear Weapons State: Lt. Gen. Khalid Kidwai's CCC Address, *Strategic Insights*, November 1, 2006.
- 26 "President Promulgated National Command Authority Ordinance," *Associated Press of Pakistan*, December 13, 2007.
- 27 *Proliferation: Threat and Response*, p. 27.

- 28 Joby Warrick, "Pakistan Nuclear Security Questioned; Lack of Knowledge About Arsenal May Limit U.S. Options," *Washington Post*, November 11, 2007; Peter Wonacott, "Inside Pakistan's Drive To Guard Its A-Bombs," *Wall Street Journal*, November 29, 2007; David E. Sanger, "Trust Us: So, What About Those Nukes?," *New York Times*, November 11, 2007; *Nuclear Black Markets*, 2007, p.33; Cotta-Ramusino and Martellini, 2002. See also, George Perkovich of the Carnegie Endowment for International Peace quoted in Nigel Hawkes, "Pakistan Could Lose Control of its Arsenal," *The Times (London)*, September 20, 2001.
- 29 Lavoy, "Islamabad's Nuclear Posture: Its Premises and Implementation." p. 141.
- 30 Maurizio Martellini, "Security and Safety Issues about the Nuclear Complex: Pakistan's Stand points. A Concise Report Of A Visit To Islamabad By Landau Network Centro Volta (LNCV) Mission Carried Out On February 9-132008."
- 31 *Proliferation: Threat and Response*, p. 28.
- 32 Graham Allison, "What About the Nukes?" *Newsweek Web*, December 28, 2007. <http://www.newsweek.com/id/82259>
- 33 Molly Moore and Kamran Khan, "Pakistan Moves Nuclear Weapons - Musharraf Says Arsenal Is Now Secure," *Washington Post*, November 11, 2001.
- 34 "Partial transcript of Pakistan President Musharraf's televised speech asking the people of Pakistan to support his course of action," September 19, 2001. http://www.washingtonpost.com/wp-srv/nation/specials/attacked/transcripts/pakistantext_091901.html.
- 35 Bruce Riedel, "American Diplomacy and the 1999 Kargil Summit at Blair House," Center for the Advanced Study of India, Policy Paper Series, 2002. <http://www.ccc.nps.navy.mil/research/kargil/reidel.pdf>.
- 36 Lavoy, 2006.
- 37 "Opinions Mixed on Pakistani Nuclear Security," *Global Security Newswire*, November 6, 2007. http://www.nti.org/d_newswire/issues/recent_stories.asp?category=nuclear#6783E660.
- 38 David Albright in the same interview ("Pakistan in Crisis: Interview with Benazir Bhutto," *CNN*, November 5, 2007).
- 39 "U.S.-Pakistan Strategic Relations," Statement before the Committee on Senate Homeland Security and Governmental Affairs Sub committee on Federal Financial Management, Government Information, Federal Services, and International Security June 12, 2008.
- 40 "Lieutenant General Carter Ham Holds a Defense Department Briefing," *CQ Transcripts*, November 7, 2007.
- 41 "Al Baradei to Al Hayat," *Dar Al Hayat*, English Edition on-line, January 10, 2008, <http://english.daralhayat.com/Spec/01-2008/Article-20080110-639032eb-c0a8-10ed-01ae-81ab2ea588db/story.html>.
- 42 Also see comments by David Albright in "Pakistan in Crisis," 2007.
- 43 House Foreign Affairs Committee Hearing on Democracy, Authoritarianism and Terrorism in Contemporary Pakistan, November 7, 2007.

- 44 "Pak Nukes Safely Guarded, Says Narayanan," *The Press Trust of India*, December 16, 2007.
- 45 Lyubov Pronina and Ellen Pinchuk, "Russia 'Concerned' About Security of Pakistan's Nuclear Arsenal," *Bloomberg*, March 25, 2009.
- 46 "Pakistan Nukes Under Control: Musharraf," *Agence France Presse*, November 13, 2007.
- 47 Krepon, June 12, 2008.
- 48 Michael Krepon, "Complexities Of Nuclear Risk Reduction In South Asia," *The Hindu*, May 29, 2009.
- 49 CRS Report RL32745, *Pakistan's Nuclear Proliferation Activities and the Recommendations of the 9/11 Commission: U.S. Policy Constraints and Options*, by Richard P. Cronin, K. Alan Kronstadt, and Sharon Squassoni. Also see CRS Report RL33498, *Pakistan-U.S. Relations*, by K. Alan Kronstadt.
- 50 Libya obtained uranium enrichment technology and nuclear weapons designs that could support a nuclear weapons program. North Korea currently has a plutonium-based nuclear weapons program and may also have a uranium-based program. Iran is suspected of pursuing both plutonium- and uranium-based nuclear weapons programs.
- 51 Tenet, George and Harlow, Bill, *At the Center of the Storm: My Years at the CIA*, Harper Collins: New York, 2007. p.261.
- 52 The report is available at <http://www.wmd.gov/report/index.html>.
- 53 Unclassified Statement for the Record Annual Threat Assessment, Senate Select Committee on Intelligence, January 11, 2007.
- 54 Personal communication, November 9, 2007.
- 55 Details of Pakistan's nuclear-related legislation can be found in the country's reports to the UN 1540 Committee. Both can be found at <http://daccessdds.un.org/doc/UNDOC/GEN/N04/597/46/PDF/N0459746.pdf?OpenElement>.
- 56 Presentation given to Partnership for Global Security Workshop, "Meeting the Nuclear Security Challenge in Pakistan," February 21-22, 2008. http://www.partnershipforglobalsecurity.org/documents/zafar_export.pdf.
- 57 The Nuclear Suppliers Group is a multilateral, voluntary group of nuclear supplier states which have agreed to coordinate their exports of civilian nuclear technology and materials in order to prevent importers from using them to produce nuclear weapons. The Australia Group is a voluntary, informal, export-control arrangement through which participating countries coordinates their national export controls to limit the supply of chemicals and biological agents, as well as related equipment, technologies, and knowledge, to countries and non state entities suspected of pursuing chemical or biological weapons capabilities. The Missile Technology Control Regime is an informal, voluntary arrangement in which participants agree to adhere to common export policy guidelines applied to an "annex" that lists items related to the proliferation of ballistic and cruise missiles, rockets, and unmanned air vehicles capable of delivering weapons of mass destruction.

-
- 58 The Chemical Weapons Convention Implementation Ordinance of 2000 regulates the import and export of chemicals in accordance with the convention.
- 59 Building Confidence in Pakistan's Nuclear Security: Workshop Synopsis. April 30, 2007.
- 60 Burns mentioned Pakistan's participation in the Container Security Initiative and the Secure Freight Initiative. Under these programs, "the United States and Pakistan worked together to install screening and radiation detection equipment to scan U.S.-bound cargo." He also stated that the Department of Energy "is working with Pakistan on radiation source security and is in the process of finalizing an agreement to install radiation detection equipment at Pakistani ports and border crossings."
- 61 Question #54, Pre-Hearing Questions for the Record by Senator Richard Lugar Senate Foreign Relations Committee, Nomination of Ellen M. Tauscher to be Under Secretary of State for Arms Control and International Security.<http://lugar.senate.gov/sfrc/pdf/TauscherQFR.pdf>.