

## **Securing Pakistan's Nuclear Arsenal – The Threat from Within**

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In the early 1970s, Pakistan's leaders launched a determined effort to acquire nuclear weapons. Their motivations included the experience of defeat in wars by neighbor and rival India, and fear that India might be close to getting nuclear weapons. Pakistan succeeded in the 1980s and carried out its first nuclear weapon test in 1998. For the outside world, there was great fear that in the next crisis or war with India, Pakistan would carry out its threats to escalate and initiate the use of nuclear weapons. The attacks of September 11, 2001 fueled a new concern, especially in the United States, involving grim scenarios in which Islamist militants or others successfully gained access to a Pakistani nuclear weapon or to nuclear weapon material and used it to carry out a nuclear attack.

Pakistan's military and political have sought to address concerns about the security of their nuclear weapons and materials by assuring the world that they have put in place many protective measures to keep them safe. The chief of Pakistan's Strategic Plans Division (SPD) from its founding in 1999 until 2014, and architect of the nuclear weapons program for this period, Lieutenant General (retired) Khalid Kidwai told an audience in Washington DC in 2015 that "For the last 15 years Pakistan has taken its nuclear security obligations seriously... We have invested heavily in terms of money, manpower, equipment, weapons, training, preparedness and smart site security solutions... Our nuclear weapons are safe, secure and under complete institutional and professional control" (Kidwai, 2015).

In public, these measures have been praised by United States policy makers and officials. After being briefed by SPD about nuclear security during a visit to

Pakistan, Senator Joseph Lieberman, the chair of the Senate Homeland Security and Governmental Affairs committee, and at the time a presidential hopeful, told a press conference: “Overall I felt reassured... and I will take that message back to Congress” (NTI, 2008). In April 2009, President Barack Obama declared “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... I feel confident that that nuclear arsenal will remain out of militant hands” (Obama, 2009). In 2011 Admiral Mike Mullen, the Chairman of the United States Joint Chiefs of Staff, stated that Pakistan's control over its nuclear weapons appeared tight enough to protect against the possibility of seizure by extremist sympathizers who might infiltrate the nation's army or intelligence service (Grossman, 2011).

There is evidence, however, that the public confidence expressed by U.S. leaders in the security of Pakistan’s nuclear weapons and materials may have less foundation than would appear. In 2013, the Washington Post reported that secret documents provided by National Security Agency whistle-blower Edward Snowden revealed that the Director of National Intelligence James R. Clapper Jr. had warned that “knowledge of the security of Pakistan’s nuclear weapons and associated material encompassed one of the most critical set of... intelligence gaps” and this was a concern “given the political instability, terrorist threat and expanding inventory [of nuclear weapons] in that country” (Miller, Whitlock and Gellman, 2013).

It is true that there has been no reported attack against a Pakistani nuclear facility to snatch a nuclear weapon or credible evidence of nuclear weapon material having fallen into the hands of Islamist militants or others currently at war with the state. Nonetheless, there is a near civil war situation prevailing in Pakistan as Islamist militancy and ideology challenges the state and its institutions and society at large, sharpening a long standing polarization in national identity and testing loyalties already torn between faith and nation. Pakistan’s armed forces are not immune to these challenges, and this includes those charged to manage and guard the nuclear

arsenal. Since any security system is only as dependable as the people who manage and operate it, this chapter assesses the threat to Pakistan's nuclear weapons and weapon-usable materials by focusing on how changing attitudes within the Pakistani military affect these dangers.

### **Pakistan's Nuclear Forces and Potential Threats**

As of the end of 2014, Pakistan was believed to have on the order of 130 fission weapons, based on a stockpile of about 3 tons of weapon-grade (90%-enriched) highly enriched uranium (HEU) and about 200 kg of plutonium (Mian, 2015). The estimated number of weapons has grown almost ten-fold from the year 2000. The growth of the arsenal appears to have been steady for most of the past decade but it may begin to increase at a faster rate in coming years as additional plutonium becomes available from the production reactors that came online in 2013 and 2014 and as new ballistic missile and cruise missile delivery systems move from development to deployment.

An extensive nuclear infrastructure allows Pakistan to produce both HEU and plutonium for nuclear weapons, and to assemble, store and deploy warheads. Facilities are required for uranium mining, uranium enrichment, nuclear reactor fuel fabrication, and spent fuel reprocessing for plutonium recovery. While the largest source for HEU is still the Kahuta Research Laboratory near Islamabad, a smaller plant exists at Gadwal near Wah, which is a military city about 40 miles from Islamabad. Pakistan has also been producing plutonium since the mid 1990's at Khushab, where there are now four dedicated reactors. Nuclear weapon fabrication is concentrated in Wah, which also has an extensive conventional armaments industry.

Nuclear warheads are said to be stored in "hardened silos at secret locations" designed to 'withstand external attack" (Khan, 2012, p. 344).Independent analysts

have suggested these sites may include areas at or close to several major airbases and, possibly, under the Salt Range mountains midway between Islamabad and Lahore.

The wide geographical distribution of Pakistan's nuclear facilities containing nuclear weapon usable material, warhead components or assembled warheads helps protect it from attack by an external power. On the other hand, it makes protection from internal enemies more challenging. The risks to warheads and weapon-usable materials are different, but the sets of risks are growing.

Pakistan's early warheads were intended for delivery by aircraft and large ballistic missiles and could be relatively heavy and kept separate from their delivery system. The new delivery systems are air-launched, ground-launched and naval cruise missiles, and short-range battlefield weapons, which require relatively lighter and more compact warheads that may have to be integrated into delivery systems. These systems will present new issues for maintaining tight control.

As more and more weapons are distributed over many diverse delivery systems, deployed across large areas and in different environments, greater authority over the control and use of the weapons may need to be granted to low-level commanders (Mian, 2013). When to disperse these forces and lessen direct central command authority in a crisis becomes an issue in its own right, as does the question of how to ensure central control over the weapons will be regained when a crisis is managed successfully.

The risk to nuclear weapon usable materials is growing as the stockpile increases. It is more important for HEU than plutonium, since it is widely accepted that HEU can be made into a simple improvised gun-type nuclear explosive device even by a small group lacking extensive technical experience with nuclear weapons. Such a group may be able to use stolen plutonium only to make a weapon that disperses radioactivity rather than creates a nuclear explosion.

A nuclear command and control system began only to take shape after the nuclear weapon tests of 1998 (Khan, 2012). General Pervez Musharraf in February 2000 formally established a National Command Authority (NCA), Strategic Plans Division (SPD) and three Strategic Force Commands (one each for the army, air force and navy). The NCA has responsibility for policy concerning the development and use of Pakistan's nuclear weapons. The NCA is chaired by the Prime Minister, and includes the ministers of foreign affairs, defence, and interior, the chairman of the Joint Chiefs of Staff committee, the military service chiefs, and the director-general of SPD. The founding director-general of SPD, Lieutenant General Khalid Kidwai, retired after fourteen years of service in December 2013 and was replaced by Lieutenant General Zubair Mahmood Hayat, who was in turn replaced in April 2015 by Lieutenant General Mazhar Jamil.

The SPD acts as a secretariat for the National Command Authority (NCA) and has a security division with a counter-intelligence network. Employing at least 12,000 personnel, the SPD manages the nuclear weapon production complex and the arsenal, and is responsible for the security of facilities, materials, weapons and personnel and for command and control.

Keeping Pakistan's nuclear facilities and weapons safe from attack by enemies has been a long standing concern. In the decades that Pakistan was developing its weapons the threat was seen as coming from a preemptive attack by India, or possibly Israel, directed especially against the uranium enrichment plant at Kahuta, its first nuclear weapon material production facility. The site was defended by anti-aircraft guns and ground to air missiles (Khan, 2014). Pakistan also threatened to retaliate against an Indian attack on the site by attacking Indian nuclear facilities at Trombay, near Mumbai. There were also concerns about possible attack by Israel and even by the United States.

After the 1998 tests, Pakistan requested senior U.S. officials visiting Islamabad for nuclear weapon safety systems known as Permissive Action Links (PALs) and

Environment Sensitive Devices (ESDs that are directly integrated into the firing mechanism and electronics of a nuclear weapon and serve to protect against unauthorized use or accidental nuclear detonations. The United States declined, since these devices also make it possible for the weapons to be maintained at a higher state of alert for the same level of safety.

After the attacks of September 2001, United States Secretary of State Colin Powell offered assistance to Pakistan to enhance the safety of its nuclear weapons (International Institute for Strategic Studies, 2007). The fear was some extremist groups might seek to get a nuclear weapon or weapon-usable material from Pakistan for use against some U.S. or European city, delivered perhaps by truck or ship. Targets could also include Western economic interests in the Gulf and nearby areas or perhaps an enemy government in an Arab country. Other groups may consider attacking an Indian city to ignite war between Pakistan and India, and some might even use it to attack a Pakistani city. Such a goal would be consistent with the apocalyptic vision of Al-Qaida type groups.

These potential internal threats can be binned into three categories:

- From outside: Islamic militants attacking a nuclear storage site or facility with the purpose of capturing a nuclear weapon, or a sizeable amount of HEU that could be fashioned into a crude nuclear device.
- From inside: Islamic elements in the army who have responsibility for protecting and operating nuclear sites, facilities, or fissile materials.
- From inside and outside: a collaborative effort.

There are some technical measures that can help reduce such dangers, but the fundamental issue is that of the people charged with managing and guarding the weapons and where their loyalties lie.

## Technical Safety Measures

Pakistan is said to have accepted some U.S. nuclear security assistance in the years after 2001, including “physical security, like fencing and surveillance systems, and equipment for tracking nuclear material if it left secure areas” from “helicopters to night-vision goggles” as well as “training of Pakistani personnel in the United States and the construction of a nuclear security training center” (Sanger and Broad, 2007). Many details of this assistance are unknown, but David Albright, a U.S. nuclear security analyst, offered a typical list of the kinds of measures that could be of help to Pakistan:

“Generic physical protection and material accounting practices; theoretical exercises; unclassified military handbooks on nuclear weapons safety and security; more sophisticated vaults and access doors; portal control equipment; better surveillance equipment; advanced equipment for materials accounting; personnel reliability programs; and programs to reduce the likelihood of leaking sensitive information. In addition, aid could focus on methods that improve the security of nuclear weapons against unauthorized use through devices not intrinsic to the design of the nuclear weapon or through special operational or administrative restrictions.”

It seems there was grudging acceptance by Pakistani authorities of some safety devices under the condition that the end point use would remain opaque. Other aspects of the assistance included training courses for Pakistani nuclear weapons personnel where they were instructed on nuclear safety and security issues. The basic question, however, is the extent to which Pakistan has benefited in terms of building up its arsenal, enhancing nuclear weapon secrecy, and maintaining readiness for use rather than keeping weapons and materials as safe and secure as possible.

A semi-official account (Khan, 2012) of the history of Pakistan’s nuclear weapons program by a former SPD officer, claims that SPD uses a two-man rule and a three-

man rule and a system of authorization codes for access to weapons depending on the particular action being undertaken, and suggests that weapons are moved under a two-man rule and weapons can only be armed under a three-man rule, with the weapons being equipped with a PAL safety feature. It also suggests that warheads are kept de-mated from their delivery systems and are stored separately. As physical security SPD uses “infrared and motion sensors, locks, video cameras” (Khan, 2012, p.374).

There is a system of nuclear weapon material control and accounting that is said to include “regular and surprise inspections to tally material production and waste” and nuclear weapon material transport involves “professional guards at static sites and escorts with tight security procedures... special theft- and tamper-proof vehicles and containers” (Khan, 2009). Nuclear weapon materials are stored at sites in “safe areas... within quick reach of designated rapid reaction forces, which are specially trained and operate under command of the security division of SPD” (Khan, 2012, p. 332). This security division has about 8,000 to 10,000 members and includes counter-intelligence teams. There is also a separate intelligence unit of 10,000 people.

On the other hand some public claims are less convincing; for example, the claim (Khan, 2009) that the controls on nuclear materials especially to respond to possible theft have been strengthened under a Pakistan Nuclear Regulatory Authority training program for the Coast Guard, Frontier Corps, Pakistan Rangers, the Customs service, emergency and rescue services, intelligence and law enforcement agencies, and the SPD which involves “nuclear security, physical protection, emergency preparedness, detection equipment, recovery operations, and border monitoring.”

How well these organizations involved could carry out the task of nuclear security even after such training is an open question. They are well-known to be beset by chronic problems of incompetence, cronyism, and corruption. Pakistan’s cities are



lawless despite the police, the arrest rate is extremely small. It is rare for terrorists to be caught despite the damage they do. Even though it is relatively easy to apprehend, smuggling is rife across all of Pakistan's borders, especially with Afghanistan. Smuggling of goods and weapons has historically been a major occupation for tribes on both sides of the border. It is hard to imagine installing detection equipment that would stand a chance of intercepting stolen nuclear material there.

One telling example may suffice to show how much confidence one can place in the reliability of existing security procedures. In 2008 President Pervez Musharraf was asked by if he thought Pakistan's nuclear weapons were safe from Islamic militants. He confidently replied, "Absolutely. [The SPD] is like an army unit. Can one rifle be taken away from an army unit? Can the bullet of a rifle be taken away from an army unit? I challenge anyone to take a bullet, a weapon, away from an army unit" (Hoodbhoy, 2008). Two weeks later, it was reported that Taliban militants had captured four military trucks, some carrying ammunition and others transporting military vehicles fitted with sophisticated communications and listening gear. The trucks were later recovered, minus their cargo.

A more personal example casts light on an unexpected challenge that may face any command and control or nuclear security system. In late 1989, a group of seven senior military officers studying at Pakistan's National Defense College came to visit one of the authors at the physics department of Quaid-e-Azam University (Hoodbhoy, 2013). The officers were required to write a paper on Pakistan's nuclear strategy and posture. The discussion covered nuclear weapon effects and safety systems. When asked what circumstances, in their opinion, would warrant the use of nuclear weapons by Pakistan, one officer declared "they shall be used only defensively if at all, and only if the Pakistan Army faces defeat. We cannot allow ourselves to be dishonored." The other officers agreed. The calculus of *ghairat*—the protection of honour — took precedence over any rational calculation of outcomes in terms of cities and populations that would be destroyed.

## **The Guardians of the Bomb**

Defending nuclear weapons against its internal enemies poses a difficult security dilemma. The fear is that people working inside the nuclear weapons production complex or in military units charged to protect or to use nuclear weapons could collude with an Islamist group or a foreign enemy. To meet the insider threat the SPD has initiated a Personnel Reliability Program (PRP) for scientists and other civilians working in the nuclear weapons complex and a Human Reliability Program (HRP) for members of the armed forces assigned to the program.

The PRP is a battery of checks designed to ferret out individuals who might betray secrets. It relies on monitoring psychological well-being, personal finances and political views. Even after retirement scientists are monitored by intelligence agencies. SPD claims to understand the challenge of religious extremism in Pakistan and its risks for nuclear security. According to former SPD officer Feroz Hassan Khan, “The system knows how to distinguish who is a 'fundo' [fundamentalist] and who is simply pious” (Wonnacott, 2007).

But the basis for this statement is questionable. How can ideological extremism be recognized reliably? One example offered to a reporter by a senior officer at SPD was that:

“One employee recently was booted from the nuclear program for passing out political pamphlets of an ultraconservative Islamic party and being observed coaxing colleagues into joining him at a local mosque for party rallies.... Even though the employee did nothing illegal, his behavior was deemed too disturbing” (Wonnacott, 2007).

The culture of Pakistan's nuclear institutions has visibly changed over the decades. Expressions of extreme piety such as long beards and prayer marks on the forehead

are now common, and religious zeal is especially apparent during the Muslim month of fasting (Ramzan). This makes it an even harder task to detect religious extremism, especially among those who choose to hide it as a matter of strategy.

It is said that individuals who have applied for jobs at various nuclear weapon complex related institutions have been asked questions about their personal religious practice and are required to furnish the following information:

1. Sect within Sunni Islam (Shias seem to be discouraged as they go into “any other” column).
2. Name of *murshed* (spiritual leader) if any.
3. Mosque where the applicant prays on Friday and name of *khateeb* (prayer leader).
4. How many times an applicant prays daily.
5. Whether the applicant is a member of a religious party.

But this does not really reassure. It is not possible, even in principle, to devise a questionnaire – or a set of criteria – that can accurately tell the difference between a very devout but peaceful and law-abiding Muslim committed to a particularly conservative interpretation of all the detailed requirements of his faith and a Muslim extremist who believes that practicing the faith involves loyalty to higher cause and justifies possible violent action.

There also is no way of checking whether the SPD’s Personnel Reliability Program and the Human Reliability Program are effective or if the counter-intelligence teams have what it takes. Effective intelligence gathering able to anticipate and prevent major attacks by militant Islamist groups in Pakistan has been rare in the long war now being fought against these groups by the army. It also is unclear how the SPD officers in charge of making security clearance decisions will be chosen, and whether their own commitment to fighting Islamic radicalism is genuine. In a religion that stresses its completeness, and in which righteousness is given higher

value than obedience to temporal authority, there is plenty of room for serious conflict between piety and military discipline.

The Strategic Plans Division, charged with protecting Pakistan's nuclear weapons and materials, is a military body, led by an officer with the rank of Lieutenant General, and has over 100 senior military officers as its key staff. However, as Khalid Kidwai, the founder and the first head of SPD, has admitted, "SPD is not an island. SPD is very much part of the large military of Pakistan" (Kidwai, 2015). This is an important insight and raises profound and troubling questions about the security of Pakistan's nuclear weapons given the changing character and polarization within the Pakistan army and society as a whole. It is especially a concern given that SPD believes it has to "rely on the rationality and loyalty of individuals who... handle sensitive nuclear responsibilities" (Khan, 2012, p. 375).

Post-independence, the Pakistan Army was a disciplined, modern force fashioned along British lines. Its ranks contained Sunnis, Shias, Ahmadis, Christians, and even a few Hindus. It could even boast of non-Muslim heroes in the 1965 and 1971 wars with India. But this secular culture steadily dissipated after Army chief General Zia-ul-Haq seized power in a coup in 1977.

Over his 10 year period as ruler of Pakistan, General Zia expanded the role of the army from protecting national territory to include defending its ideology, which he saw as being a conservative form of Sunni Islam. He also set out to redefine its character to fit its new mission. Army recruiting stations across the country were festooned with big banners with "*Iman, Taqwa, Jihad fi Sabilillah*" (Faith, Piety and Fight for Allah). Jihad, rather than defense of national borders, became a way to draw recruits. In time, the culture of the army changed. The last Ahmadis – no longer considered Muslims after a law passed in 1973 – left the military, Christian recruitment fell. Shia officers and men steadily began to feel the pinch. It began to matter which sect of Sunni Islam you were.

These developments were hastened by Pakistan's decision to join the U.S. fight against the Soviets in Afghanistan, which was to be waged using Islamist militants rather than Afghan nationalists and funded by Saudi Arabia and other Sunni Arab states. This brought Pakistan's army into a close working relationship with Islamist fighters, foreign and domestic radical Islamic political groups, and the Islamic seminaries (madrassahs) that radicalized a generation of young Afghans and young Pakistanis. The withdrawal in defeat of the Soviet Union from Afghanistan in 1989 and its subsequent collapse encouraged the Pakistan army to try applying the same strategy against India. Through the 1990s, Pakistan backed militant Islamist fighters and political groups against the Indian forces in Kashmir in what was relentlessly portrayed to its public as a heroic religious and national struggle for freedom and justice.

After the attacks of September 2001, President George W. Bush's ultimatum to the world that the choice was to be "with us or against us" had a particular and eventually devastating impact upon General Pervez Musharraf, the Chief of Pakistan's Army who in 1999 had seized power in a coup and declared himself President. Musharraf felt compelled to publicly abandon the Taliban regime in Afghanistan that Pakistan had helped create and bring to power and which had been hosting Osama bin Laden and Al-Qaeda. This action against Pakistan's long-standing Islamist proxies enraged supporters from a multitude of Pakistani jihadist groups.

The Taliban who fled Afghanistan after the U.S. invasion took shelter across the border in Pakistan's remote tribal areas and began their war against the American occupation. Eventually, under U.S. pressure, Pakistani soldiers were ordered into the tribal areas to fight against the Taliban and their local supporters, the Tehrik-i-Taliban Pakistan, who have been inspired to seek to create their own Islamic state. Fighting coreligionists, who claimed to be engaged in jihad for Islam, created a crisis for the Pakistan army. Morale sank, with junior army men openly wondering why they were being asked to attack their ideological comrades. Local clerics

refused to conduct funeral prayers for soldiers killed in action. The reported refusal of some military units to confront the Taliban during the 2010 South Waziristan operation is said to have shocked senior officers and severely limited their battle options in North Waziristan.

The crisis within the Pakistani army also has led to multiple insider attacks directed at the armed forces. General Musharraf was targeted twice while he was President by air force and army officers in 2003. A military court sentenced the mutineers to death, and a purge of officers and men associated with militants was ordered. In a spectacular, meticulously planned jail break in May 2012, involving “scores of Taliban fighters... firing rockets and... heavy and light machine guns,” some of Musharraf’s would-be assassins escaped, together with at least 384 other prisoners (Dawn, 2012). It is also reported that prison guards stood aside and then raised slogans in support of the Taliban attackers who arranged the jail-break and for imposition of Islamic sharia law. The ones who could not escape were hanged in December 2014.

Heavily secured military facilities have been targeted. Extremists led by Aqeel Ahmed, formerly of the Army Medical Corps, in October 2009 attacked the General Headquarters of the Pakistan Army in Rawalpindi (Dawn, 2011a). There also have been devastating suicide attacks on regional headquarters of the military’s Inter-Services Intelligence agency in Rawalpindi, Multan, Peshawar, and Faisalabad. The suicide bombers had apparently been informed by insiders of the locations of these largely secret facilities.

Of direct relevance to the issue of the security of nuclear weapons and materials was the attack in May 2011 on Karachi’s Mehran naval base. The armed attackers, numbering between six and twenty, “scaled the perimeter fence and continued to the main base by exploiting a blind spot in surveillance camera coverage, suggesting detailed knowledge of the base layout” (Walsh, 2011). They fought off hundreds of security forces for 18 hours, which included elite commandos.

Subsequently the military authorities arrested a former Special Services Group commando of the Pakistan Navy, Kamran Ahmed, and his younger brother, Zaman Ahmed (Dawn 2011b). During an in-camera briefing, naval officials told the Standing Committee on Defence of Pakistan's National Assembly that "insiders" were involved in the attack (Dawn, 2011c).

Even senior military officials have proven to have ties to religious extremists. For example, in 1995 Major General Zahirul Islam Abbasi and 38 other officers with links to Islamic militant groups were arrested for a military coup attempt against Prime Minister Benazir Bhutto (Burns, 1995). In 2009, the former commanding officer of Shamsi Air Force Base, Colonel Shahid Bashir, was arrested for leaking "sensitive" information to *Hizb-ut-Tahrir*, a radical organization that seeks to establish a global Islamic caliphate and believes its mission should begin from Pakistan (Umar, 2011). In 2012, Brigadier Ali Khan and four other officers were court-martialed and convicted for having ties to *Hizb-ut-Tahrir* (Dawn, 2012). Among other charges, Ali Khan was accused of trying to incite mutiny and planning to attack the General Headquarters of the Pakistan army. He was reported to belong to a family with three generations of military service and is said to have a strong professional record.

These examples suggest that today it might be useful to think of the Pakistan Army as two armies (Hoodbhoy and Mian, 2011). The mainstream army is headed today by General Raheel Sharif, the Chief of Army Staff, and considers the protection of national borders its primary goal, with protection from internal enemies gaining importance. It also seeks to maintain the status quo, which includes the army's extraordinary power in national decision making, and its financial privileges. A second army is Allah's army. It is currently leaderless but it seeks to turn Pakistan into a state run by Islamic law and is inspired by groups like the *Hizb-ut-Tahrir*.

There is, of course, a strong commonality between these two armies. They share the belief in the Two-Nation Theory, the belief of Pakistan's founder Mohammed Ali

Jinnah that Hindus and Muslims could never live together in peace and led to the demand for a separate state. Both armies are resolutely hostile to India. They also share the deep contempt for Pakistani civilian authority and fellow citizens who are civilians. This attitude has resulted in Pakistan spending half its history under direct military rule.

But the differences between the two armies are also significant. Many mainstream officers are soft Islamists in that they are satisfied with a belief that Islam is their religion and that occasional prayer and ritual fasting in Ramzan is sufficient, and believe that most other Muslim sects are bona fide Muslims rather than *mushriks* (idolators) or apostates. They take the position that fundamentalism is okay, but extremism is not. For them, defending Saudi Arabia is not a religious obligation but while the role that the United States has played in Pakistan and in the Muslim world more generally, they are not anti-American.

The more radical officers, on the other hand, have traveled further down the road of Islamism and believe that Islam and the state should be inseparable. Their political philosophy is inspired by Maulana Abul Ala Maudoodi, the founder in 1941 and for 30 years the leader of Pakistan's first Islamist political party, the *Jamaat-i-Islami*. Maudoodi preached that 7<sup>th</sup> century Arab Islam provides a complete blueprint for society and politics, and imagined the ideal society as one modeled on the first Islamic state. This vision is one shared by many of the Islamist groups who are waging war against the Pakistani state and claim that the state and the mainstream army represents the forces of *kufr* (unbelief). It has obvious implications for SPD and the security of nuclear weapon and materials.

In conclusion, it is not possible to give a satisfactory answer to the question: are Pakistani nuclear weapons and materials adequately safe. What is clear is that the divide within Pakistan's military makes safeguarding of its nuclear weapons much more challenging.



More broadly, in thinking about how well Pakistan may be able to secure its nuclear weapons and materials, it is worth remembering that Pakistan has been unable to protect its constitution from military coups, has failed to safeguard the lives of its most prominent political leaders, lost half its territory (East Pakistan, now Bangladesh) in 1971, and is waging war against separatist insurgents in its province of Balochistan as well as against Islamist militants. Its many crises are symptoms of a deeper set of problems involving national identity, failures of governance and a lack of social and economic equity. To achieve internal stability, Pakistan needs peace, economic justice, and the rule of law based on a new social contract. Its nuclear weapons stand in the way of such progress.

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