

# WORKING P A P E R S

**A NEW  
EQUATION**

**U.S. Policy  
toward India and  
Pakistan after  
September 11**

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**Non-Proliferation  
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## CONTENTS

<b>Preface</b> .....	<b>3</b>
<i>Lee Feinstein</i>	
<b>Acknowledgments</b> .....	<b>4</b>
<b>When Policy Priorities Converge: U.S. Relations with India and Pakistan</b> .....	<b>5</b>
<i>Lee Feinstein</i>	
<b>An Unexpected Chance to Get Down to Fundamentals</b> .....	<b>13</b>
<i>James C. Clad</i>	
<b>Balancing Nuclear Security and Nonproliferation in South Asia</b> .....	<b>23</b>
<i>Lewis A. Dunn</i>	
<b>Securing Pakistan's Nuclear Infrastructure</b> .....	<b>33</b>
<i>David Albright</i>	



## PREFACE

For much of the past half century, U.S. relations with India and Pakistan were perceived in the region and by Washington as part of the same equation. Improvements in U.S. relations with one were generally perceived (and sometimes intended) to come at the expense of the other. Since last September's attacks, however, the United States has found itself in the unaccustomed position of having good relations with India and Pakistan at the same time.

The Afghan crisis is testing whether Delhi and Islamabad can adjust to this new reality. It is also a test for Washington and whether it can leverage its new position to address core concerns, including the dispute over Kashmir, Pakistan's crisis of governance, and the evolving nuclear and missile rivalry in the region.

To help answer these questions, the Stanley Foundation asked me to write and commission the following four essays by leading specialists as part of its 42<sup>nd</sup> Annual Strategy for Peace Conference held at Airlie House in Warrenton, Virginia, in October 2001. The first essay is my overall assessment of U.S. policy options in the region since September 11. The essay highlights the interconnectedness of the nuclear issue to broader U.S. foreign policy goals. It also discusses the importance of building on previous efforts to promote nuclear restraint, noting that key decisions by India and Pakistan on their nuclear and missile programs remain open. The second essay, by James Clad, evaluates the foreign policy objectives of India and Pakistan in and around the region and how their relative positions are changing in light of recent events. It notes the "strange outcome" of September 11, which might provide an "unexpected chance to get down to fundamentals" over Kashmir. The third essay, by Lewis Dunn, identifies new and enduring nonproliferation priorities for U.S. policymakers. Dunn pays special attention to the tension between promoting programs on the subcontinent intended to enhance nuclear security, on the one hand, and the requirement to observe legal prohibitions on nuclear assistance to India and Pakistan, on the other. The last essay, by David Albright, examines the special concerns surrounding the security of Pakistani nuclear weapons and technology.

These essays focus on the interconnected challenges for U.S. policy in and around the subcontinent in the aftermath of the September 11 attacks. Yet they address longstanding concerns which, in light of the current crisis, may now get the attention they require.

LEE FEINSTEIN

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The authors also acknowledge the generosity of the Stanley Foundation in sponsoring the essays that comprise this working paper and for convening the meeting where these issues were discussed by a distinguished group of American specialists.

# When Policy Priorities Converge: U.S. Relations with India and Pakistan

*Lee Feinstein*

The shifting geopolitical furniture on the subcontinent since last September's terrorist attacks has placed the United States in the unaccustomed position of having good relations with India and Pakistan at the same time. This has helped to forge a consensus in the United States on some of the core challenges India and Pakistan face, and on the approach Washington must pursue to advance its long-term goals for the region.

Perhaps most welcome is a growing convergence of views between "regionalists" and "functionalists," that is, specialists whose expertise focuses on India or Pakistan on the one hand, and those concerned primarily with the consequences of continued nuclear rivalry on the subcontinent on the other. For much of the last quarter century, since India exploded its first nuclear device, American policy toward New Delhi concentrated on reversing and later containing Indian development of nuclear weapons and missiles to deliver them. Since the withdrawal of Soviet troops from Afghanistan in 1989, Washington has treated Pakistan as something of a boutique item, with priorities shifting from nuclear proliferation, to threats to democracy, to terrorism.

During this time, regionalists contended that U.S. policy focused too emphatically on the nuclear question and other single issues at the expense of important U.S. regional and geostrategic interests. Functionalists viewed the regionalists as overstating the importance of these two nations to America, and undervaluing nonproliferation as a core U.S. interest.

In this light, it is reassuring to find basic agreement among leading specialists and policymakers on the following points.

- The regional and nuclear issues in South Asia are now inextricably linked; over the years, overemphasis on the nuclear issue has hampered U.S. policy, and brought limited results in any event;
- Nuclear sanctions, which the United States lifted on both countries within two weeks of the terrorist attacks, had already run their course before the Afghan crisis; and
- The most effective nonproliferation measure would be for India and Pakistan, with discrete assistance from Washington, to resolutely devise a process to address the half-century-old dispute over Kashmir.

## **PAKISTAN: FROM PARIAH TO FRONT-LINE STATE**

Pakistan's adroit, if opportunistic, decision to align itself with the United States is more of an opportunity than a threat to Pakistan's military ruler and self-appointed president, Pervez Musharraf. So far, Musharraf has faced down the immediate danger that his government would not survive expected challenges by radical Islamist elements inside Pakistan, who were supportive and, in many cases, closely linked to the Taliban as well as to al Qaeda.

Islamic reaction has been milder than many expected. Musharraf is counting on a self-interested and highly disciplined army corps to prevent a coup by radicals. As James Clad writes, Pakistan's "most important buttressing feature . . . is the Army [which] continues to have great institutional durability." The army acts out of self-interest, wanting to preserve the perquisites long enjoyed by its leadership. Many American officials worry, nonetheless, about the growing influence of radical Islam, including in the army, a danger they say is aggravated by the cutoff of U.S. military cooperation with Pakistan since 1990, consequent on Islamabad's advancing nuclear program.

The alliance with the United States, and America's emerging role as a guarantor of Pakistani stability offers an opportunity for Musharraf to crack down on radical support for terrorist organizations. U.S. and international economic support, if sustained, offers the possibility of addressing years of social and economic decline that fuel the militancy.

It may not be clear for some time whether Musharraf or a subsequent Pakistani government—elected or not—will move forcefully to rein in radicalism or, as India fears, seek to balance rejection of the Taliban with increased aid for or acceptance of insurgency. Last October's attack by militants on a municipal building in Srinagar, the capital of Indian controlled Kashmir, and the terrorist attacks on the Indian Parliament in New Delhi in December tested Pakistan's commitment to opposing terrorist groups. Musharraf's strong speech in January 2002 and subsequent decisions to freeze bank accounts of militant groups and place several militant leaders under house arrest were welcome but incomplete steps.

### **Pakistan's Regional Position**

The effects of the Afghan war will likely accelerate shifting power balances in the region, where Pakistan's relative influence has been declining for many years. Apart from more or less nuclear parity, the gap between India and Pakistan, measured by any range of social or economic indicators, continues to widen. It is hoped that postwar international assistance will help to address Pakistan's crisis of governance, rather than exacerbate the cronyism that has characterized the tenure both of elected and military leaders. The transitional government established in Afghanistan will be less friendly to Pakistan than the odious but accommodating Taliban regime.

The future relationship between Beijing and Islamabad is likely to remain close, but less intimate than in the past. Increasing concern about Islamic militancy in western China, and the spillover effect of lawlessness to its southwest regions, has caused China to begin to distance itself from Pakistan. In this respect, China and India share strategic interests, and Beijing has shown signs of adopting a more pragmatic relationship with Delhi.

Under American pressure, China's assistance to Pakistan's nuclear and missile program has generally ebbed since the high point of the transfer of M-11 missiles in the 1990s. Yet, China will probably continue the relationship as part of a hedge strategy against India, and China's nonproliferation behavior is also rapidly responsive to ups and downs in Sino-U.S. relations. For example, China has yet to address satisfactorily U.S. concerns that Beijing has not lived up to its November 2000 pledge not to assist the Pakistani missile program "in any way," despite two meetings in China between Presidents Bush and Jiang during the first year of the administration. It is also unclear at this time what priority the Bush administration will assign the nonproliferation issue in the bilateral relationship, or how Washington will address it in the aftermath of the Afghan war.

## Indian Reaction

The week of September 10, 2001, U.S. officials were readying a briefing for congressional staff that the Bush administration was preparing to suspend all nuclear-related sanctions on India, while leaving in place many sanctions that limited U.S. assistance to Pakistan. As it happened, that briefing would be postponed and 12 days later the United States would announce the lifting of sanctions on both India and Pakistan. The equal treatment came as something of a shock for India, and reportedly lobbyists for India in Washington actually sought to block sanctions relief for Islamabad at a time when Washington wanted to consolidate its alliance with Pakistan, now a front-line state in the war against terrorism.

The sanctions issue was one of several tests for Indian diplomacy after the terrorist attacks. Initial Indian reaction was disappointing especially to U.S. administration enthusiasts, who promoted the strategic value of closer ties with New Delhi.

India stood to benefit from already shifting balances in the region, which would likely be driven further by the rout of the Taliban. The wisest course for India was to avoid the temptation to press for immediate advantage. In that sense, India found itself in a position similar to Israel's during the 1991 Gulf War. For India, the longer term benefits included replacement of a hostile regime in Afghanistan with a transition government dominated by Northern Alliance forces it had long supported; more realpolitik by Beijing in its relationship with India, marked by recent meetings between President Jiang and Prime Minister Vajpayee; negotiations toward resolution of the Chinese-Indian border dispute in Kashmir; and a global focus on terrorism, which held out the possibility of curbing Pakistan's support to anti-Indian militancy.

In addition, the United States was in a position for the first time in a decade to influence Pakistan, which enlightened Indian analysts understood offered the best, if slim, chance for Islamabad to reverse its downward spiral into ungovernability.

Prime Minister Vajpayee and the Bharatiya Janata Party (BJP) leadership seem to understand that closer U.S. relations with Pakistan benefit India and, moreover, that the Indo-U.S. relationship now stands on its own feet. But it is still an open question how deeply they have absorbed this fact and, even if they have accepted it, whether the BJP can overcome Cold War attitudes inside the foreign service bureaucracy, and whether the hothouse of Indian politics can accommodate Indian acceptance of an enduring U.S.-Pakistani relationship.

## Kashmir

As the Bush administration begins to contemplate subsequent phases of the war against terrorism, Kashmir interferes more often than India, Pakistan, or the United States would like. Washington has been well aware of the connection of Pakistani-supported militants in Kashmir to Osama bin Laden and al Qaeda. Since the bombings of U.S. embassies in East Africa in 1998, U.S. effort to enlist the Musharraf government in the hunt for bin Laden overtook proliferation concerns as the major issue in the bilateral relationship. The Bush administration temporarily set aside these concerns immediately following September 11, but Pakistani support for insurgency will no longer be tolerated after the defeat of the Taliban and rout of al Qaeda.

The key goal for the foreseeable future is to work behind the scenes with both countries to establish that process for addressing the Kashmir dispute. Washington must be prepared to take a

more active, if still discrete, role in moving India and Pakistan toward that process. The outlines of what an ultimate Kashmir settlement might look like are less important at this time than establishing a way to get there. Kashmiri representatives would have to be associated with the process at some point for all interested actors to consider it legitimate.

Musharraf must come to understand that the new breed of insurgents in Kashmir is very similar to the new breed that came to dominate Afghanistan and, now that Islamabad has joined the U.S.-led fight against terrorism, these groups are no more Islamabad's friends than they are Washington's.

U.S. diplomacy should also send a clear message to Indian Prime Minister Vajpayee that if there is a discernible reduction in infiltration across the Line of Control by Pakistani-backed insurgents, India must be prepared to reciprocate in tangible terms, including reducing deployed Indian troops in the region as well as making a political-level commitment to a process for addressing the Kashmir dispute.

### NUCLEAR PRIORITIES

Al Qaeda's attacks on New York and Washington have injected the policy debates on what to do about proliferation in South Asia with a heavy dose of frightening reality. U.S. policy toward the region must now address three fundamental concerns:

- Preventing weapons of mass destruction from falling into the wrong hands;
- Preventing a nuclear confrontation in South Asia; and
- Mitigating negative side effects on countries outside South Asia that have flirted with developing ballistic missiles and nuclear weapons.

### Nuclear Security

The issue initially garnering the most attention was whether Pakistani nuclear weapons, either through theft or an overthrow of the government by militants, might fall into the hands of al Qaeda or other forces sympathetic to its radical Islamic goals.

In the most basic sense, the security of Pakistani nuclear weapons is a function of the political stability of the Musharraf government. Musharraf is likely to manage challenges to his leadership effectively in the short and medium term, but Pakistan's crisis of governance is the longer-term threat we must address.

Of greater concern may be Musharraf's ability to control the Inter-Services Intelligence agency or ISI. Musharraf fired its chief, who was in Washington meeting with senior U.S. officials on September 11. Based upon suspected ties to al Qaeda, Musharraf has also jailed two former senior officials with past responsibility for various aspects of Islamabad's nuclear program.

While analysts have bandied about any number of military options for the United States to commandeer or destroy nuclear weapons in the event of a radical coup, none of the options is very promising. Commando units would have little confidence that they had seized all of Pakistan's nuclear weapons. Even if they captured all the weapons, Pakistan's fairly extensive nuclear infrastructure would have to be extensively bombed to have a chance of success. According to published sources, Pakistan's nuclear infrastructure includes stockpiles of nuclear material (both weapons and non-weapons grade), as well as facilities for uranium enrichment and plutonium separation.

If Pakistan is ultimately ruled by a radical regime, no military action would be likely to prevent it from acquiring nuclear capability. The United States would have to learn to live with the consequences of an Islamic bomb, just as it reluctantly learned to live with China's acquisition of the bomb in 1964.

An overlooked issue meriting discussion is the degree to which Indian nuclear weapons or materials might also be vulnerable to theft or diversion. India is a multiethnic society with the world's second largest Muslim population, and Arab fighters could blend into Indian society. It is unclear whether Delhi has given serious attention to this potential in light of official overconfidence about the security of India's nuclear weapons.

Consensus is growing on the kind of assistance the United States could and ought to offer Pakistan and India to provide better security of their nuclear weapons. Most of this assistance could be given quickly and in response to short-term needs. These would include:

- Organizational “best practices,” including personnel reliability programs, site security, and rapid response teams;
- Table top exercises to assist in identifying potential vulnerabilities and requirements;
- The promulgation of “U.S. lessons learned” during the last 50 years to identify likely issues that Pakistan and India should address more comprehensively;
- Provision of non-sensitive equipment, including monitoring equipment for vaults; tracking equipment for nuclear weapons; and communications equipment.

## **NPT Dilemma**

The Nuclear Nonproliferation Treaty does not and should not be interpreted to hamper the types of measures described above to promote security of nuclear weapons and materials in the region. The NPT was envisioned to avert nuclear war, so it should not now be used to stand in the way of efforts to do just that, particularly if the information shared is in the public domain.

The NPT obligates nuclear weapons states “not in any way to assist, encourage, or induce any non-nuclear weapons State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices.” U.S. government lawyers will debate the exact meaning of this provision but it is clear that the NPT affords ample room to provide information of the type described above, particularly if it is already publicly available. Also, the NPT would not be contravened if U.S.-India and U.S.-Pakistan discussions were about procedures and technologies that have a general application rather than a solely nuclear weapons-related purpose. In addition, where there is concern about NPT prohibitions, information could be given on an unofficial basis without the direct involvement of the government on either side.

In general, the guiding principle of all U.S. aid and advice in this regard should be, “Do no harm.” Washington should withhold any technologies and components that would allow Pakistan and India to “operationalize” nuclear weapons by deploying them on missiles. Forbidden technologies should continue to include Permissive Action Links and other safety and security devices intrinsic to advanced U.S. weapons designs. Although it is true that such devices would make Indian and Pakistani weapons safer (less prone to accidental detonation) and more secure (impervious to unauthorized use), these technologies would also have the side effect of increasing either country's ability to deploy their weapons on a regular basis.

## Whoops! The Risk of Accidental Nuclear War

Transporting nuclear weapons is a particular concern, and making available technology to prevent catastrophic accidents is a priority. In Pakistan, for example, components of its nuclear weapons infrastructure are located diffusely throughout the country, according to published information. Fissile cores for nuclear weapons are believed to be stored separately from the warheads, likely in different vaults. Pakistani nuclear weapons are probably not designed according to U.S. or Soviet safety standards and therefore are probably more vulnerable to accidental detonation.

One of the routes to a nuclear confrontation would be an escalating conventional clash between India and Pakistan during which the sides took steps to ready their nuclear forces by mating warheads and moving them into position over the region's very poor roadways. An accidental detonation, for instance, of a Pakistani nuclear weapon could be interpreted by Pakistan as part of an Indian first strike, while India could interpret it as signaling an imminent Pakistani attack.

To prevent accidental nuclear war, one approach is an unclassified dialogue between retired officials of both sides to think through possible "pathways" to a nuclear crisis. This is especially important in light of continuing tensions over Kashmir. Indian and Pakistani officials publicly deny that the Kargil conflict of 1999 or earlier periods of conflict had a nuclear dimension, despite public reports to the contrary.

## The Restraint Agenda

With the suspension of nuclear-related sanctions, should the United States continue to promote the nuclear restraint agenda the Clinton administration developed after the May 1998 tests? The fundamental point is that the United States must not be tempted to shunt aside the issue of nuclear restraint for fear of offending an important ally in the region or destabilizing its government. Nuclear restraint on the subcontinent is integral to the global effort to prevent weapons of mass destruction from falling into the wrong hands.

More broadly, key decisions are still open in India and Pakistan as to how many and what type of weapons each side plans to build; how they plan to deliver those weapons; what doctrine they will adopt to govern their potential use; whether they would be operationally deployed; and the type of command and control system each chooses to maintain. Another issue is the potential effect on the nuclear dynamic if theater missile defenses are introduced into the region.

Despite having demonstrated an ability to test nuclear weapons, the direction Indian and Pakistani nuclear programs take can still be influenced by the type of relations each has with the United States and others. The suspension of the sanctions and the Afghan crisis may give the United States more leverage now than in the aftermath of the tests. U.S. nuclear diplomacy should focus on the following points:

- Encourage India and Pakistan to define their announced goal of possessing a "credible minimum deterrent" at the lowest possible level. The approach should be to make the case for why nuclear restraint is in the mutual self-interest of India and Pakistan.
- Promote India's and Pakistan implementation by confidence- and security-building measures envisioned at the Lahore summit meeting in 1999.

- Work with India and Pakistan to prevent the export of knowledge, materials, and expertise relating to weapons of mass destruction. This was a growing problem, even before September 11, for both Pakistan and India.
- Promote cooperation with India and Pakistan on the global problem of proliferation. The dilemma is how to enlist India and Pakistan as partners in nonproliferation without undercutting the basis for cooperation with other nations that have given up the nuclear option. Certain areas of high-tech and other trade could be rewards for good behavior. A guiding principle to be considered is not undercutting existing control regimes, such as the Nuclear Suppliers Group. Enhanced cooperation in the Australia Group, where membership by non-NPT members is permitted, may be a place to start.
- Promote continued adherence to the moratorium on nuclear tests and pursue a moratorium on the production of fissile material, either on a bilateral basis between India and Pakistan, or as part of a multilateral halt by, for instance, the countries that have tested nuclear weapons.

### **The Broader Nonproliferation Picture**

The United States is at a critical juncture in the effort to prevent the proliferation of weapons of mass destruction, and developments on the subcontinent will significantly affect other key states' perceptions and decisions. The concern is to avoid a "cascading effect" where second-tier states feel increasingly exposed by their earlier decision to give up the nuclear option.

For this reason, U.S. nonproliferation policies toward South Asia will be watched closely. The United States must not be perceived as walking away from these concerns but, instead, adjusting its approach to deal with the present situation. In this regard, the United States should maintain "red lines" in its cooperation with both countries, including the prohibition on nuclear cooperation with India and Pakistan because of the operation of unsafeguarded reactors in both countries. The United States maintains close ties with Israel, but not nuclear cooperation, due to Israel's nuclear program. U.S. and Indian policymakers might consider this example as their relationship progresses. The U.S. position regarding eventual UN Security Council membership for India is also a critical issue. Until and unless there is Indian restraint the United States should continue not to support permanent membership because it would undercut broader U.S. nonproliferation goals.

### **CONCLUSION: A NEW ROLE FOR THE UNITED STATES IN SOUTH ASIA?**

In the aftermath of last September's attacks, India and Pakistan found themselves as declared members of the same side in the fight against terrorism. Meanwhile, the United States found itself in the unaccustomed position of having good relations with both countries at the same time. These realignments presented new opportunities for India, Pakistan, and the United States to address longstanding regional and nonproliferation concerns. What will we make of them?



# An Unexpected Chance to Get Down to Fundamentals

*James C. Clad*

Despite persistent tensions, India and Pakistan manage their rivalry better than alarmist views of nuclear competition often admit. Durability and continuity of national security objectives persist in each country.

The current Afghan-focused crisis poses to each country an opportunity, welcome or not, to influence longer-term American policy directions. Its outcome may yield new leverage for changes in an Indo-Pakistani bilateral agenda defined—but by no means encompassed—by a half-century dispute over the former princely state of Jammu and Kashmir. A post-Taliban Afghan regime points to major changes in Central and South Asia's power balance and possibly a permanent diminution of Pakistan's influence in its neighborhood.

That prospect depends on China. More specifically, it depends on Beijing's willingness to work toward the alteration of the subcontinent's basic power features in ways that may suit China's longer-term objectives. China's classic role has been that of patron for Pakistan, with extensive economic and military aid over the past several decades. Whether Pakistan's leadership can continue its increasingly strained efforts to “balance” the much greater economic and military power of India will depend to a large extent on China's bilateral relationship with Pakistan after September 11. China's future focus, in turn, depends on its evolving relationship with India. Will China regard India as a friend, a foe, or something in between? Signs of China's and India's sharper strategic focus have emerged in recent border dispute discussions and in planning for India's Prime Minister A. B. Vajpayee's May 2002 visit to Beijing. This does not mean China is abandoning longtime ally Pakistan, however.

## **SOUTH ASIA DYNAMICS BEFORE SEPTEMBER 11**

### **The Kashmir Dispute**

Kashmir has a “definitional” resonance for both South Asian states, that is, Kashmir remains central to each country's self-identity. Since 1947 the dispute has come to define progressively more of Pakistan's national mission, if only because the rest of Pakistan's purpose has come under increasing question. Without Kashmir, Pakistan's national mission and identity would be based entirely on its evolving status as a bastion of extreme jihad-based Islam.

Pakistan's position (rejecting incorporation into India of the former princely state of Jammu and Kashmir) has remained unchanged since the first Kashmir war in 1948. However, events in Kashmir have not by any means been under Pakistan's perfect control. When an urban-based indigenous insurgency erupted against India in the Srinagar area in December 1989, it took both Delhi and Islamabad by surprise—whatever subsequent Indian accusations of Pakistan's complicity may say. India's counterinsurgency “successes” in the early 1990s, based on incorrect assumptions about the central role of Pakistan in the intifada, had a double-edged consequence. In comparatively short order, Indian repression identified and eliminated middle-class adherents of the preeminent separatist group, the Jammu and Kashmir Liberation Front (JKLF). This left a vacuum at a time when the

Afghan war against the Soviets was winding down. By 1989 Soviet troops were being withdrawn from Afghanistan, leaving intact a fractious Islamist-inspired insurgency, funded during the 1980s by the United States and nurtured by Pakistan. Using Afghan war-hardened veterans, invariably with no ethnic link to Kashmiris and enamored of strict, Saudi-financed Wahhabi or Salafiyah Islam, Pakistan's Inter-Services Intelligence Directorate facilitated Pashtun militants and even Arabs and other co-religionists from farther afield to enter the valley. Thereafter, they applied far more ruthless insurgency tactics than the JKLIF had ever envisaged.

Thus the Koranic injunction of jihad, once applied without American objection to the struggle to expel the Russians, found a new target of opportunity: Kashmir. Afghan and Arab infiltrators into Indian-occupied Kashmir belong to a long list of such groups, and a steady progression of these have found their way into the terrorist watch lists the State Department publishes each year. And fleeing Taliban fighters from the 2001 Afghan war may find a new vocation in Kashmir—a prospect the Indians are absolutely determined to prevent.

### Pakistan

By American priorities and by any objective standard, Pakistan's steady marginalization since the Cold War has become an inescapable feature of that country's foreign relations. The Afghan war of 2001 marks a temporary reversal of that longer-term trend. Following the Soviets' departure from Afghanistan after 1989, an ensuing power vacuum and an apparent U.S. disinterest in the Afghan outcome enabled Pakistan to supervise after 1996 the installation of a compliant, albeit ideologically unpleasant, regime in Kabul. After September 11, that policy collapsed. General Musharraf's enemies within Pakistan describe the post-September 11 environment as a "strategic debacle," and they are not far wrong.

The period from 1996 to September 11, 2001, gave what Pakistanis often describe as "strategic depth"—a friendly if fanatic regime ruling Afghanistan, enabling Pakistan to devote full attention to India's mismatched bulk to the east. But "depth" came at a high social and political price. Ongoing failure in Pakistan's state capacity exacerbated the country's position vis-à-vis India in nearly all other respects. Only an overt nuclear capability has given Pakistan a "force equalizer" to prevent the country's defeat and dismemberment in warfare by India.

Short of that, just about every other comparative index vis-à-vis India pushes Pakistan well into negative territory. These include economic performance, educational attainment, social capital investment, identification of and investment in competitive trading advantages, perpetuation of feudal attitudes in political life, and grotesque corruption exacerbated by discredited parliamentary governments. All these traits have come to define the Pakistani state.

Adding to this litany are moves that have pounded investor confidence, both within and outside the country in recent years. These include breaches of foreign energy project contracts and badly lagging telecommunication investment. Overall, a sense of comprehensive slippage dominates Pakistan by century's end. Against this backdrop, Pakistan's traditionally able statecraft cannot reverse the trends. Adept in earlier decades at leveraging Pakistan into near parity with India, Islamabad's diplomacy had retracted in the later 1990s into formulaic calls for "multilateralizing" the Kashmir dispute—which the Indians handily reject—and investing in the failed Taliban project. For Pakistan,

the most durable foreign relationship has been with the Chinese. Yet in recent years, even Beijing was beginning to have second thoughts about the wisdom of backing Pakistan in a range of issues, from open-ended arms development and arms supplies to diplomatic support for Islamabad's position on Kashmir. Pakistan has repeatedly sought a Chinese endorsement of its version of the Kashmir dispute, including the nature of the low-level conflict and the likely optimal solution for ending that conflict. Beginning in the late 1980s—when Indian Prime Minister Rajiv Gandhi visited Beijing—and accelerating during the 1990s, Beijing began to back away from automatic endorsement of Pakistan's irredentist position on Kashmir. When fighting between India and Pakistan erupted in summer 1999 at Kargil—a Himalayan ridge overlooking the Indian-controlled road to Ladakh—Beijing opted for a position of near neutrality.

By any objective standard, therefore, Pakistan had slid very severely down the scale by September 11. New infusions of multilateral money only partly lifted the international capital markets' low assessment of the country. Internally, the picture gives little room for optimism. Few options for legitimate dissent exist. Parliamentary politics stand discredited. Leaders of the largest political parties lack widespread legitimacy.

Provincial politics have assumed new levels of mendacity and corruption. Social indices—notably markers such as women's literacy, child mortality, and primary education standards—have continued to fall as fertility continues to exceed 2.5 percent per annum. This augurs the impending arrival of an increasingly ignorant population of 200 million people in just 20 years, a populace devoid of training appropriate to the contemporary age.

While these trends point downward, the Pakistani state's most important buttressing feature often escapes notice. As a central facet of Pakistan's stability, the army continues to have great institutional durability—far more than periodic alarms over the extent of "Islamist" influence would indicate. Indeed, with the marked deterioration of most other countrywide institutions in recent years, the army stands relatively even higher in cohesion and purpose. This is not a state where maverick colonels seize power. Pakistan's coups have a fated air to them: periodically and collectively, the army corps commanders back their highest-ranking officer's move into front-seat power. But even in times of civilian control, the army retains a huge amount of autonomy, far more than in, for example, Thailand or Indonesia. And despite the attraction of Islamist ideas, this chain of command remains reliable.

Beyond that, intra-ethnic divisions within Pakistan do not go so far as to imperil the Punjabi-dominated army's keen sense of self-interest. Deep as the fissures go in Pakistan's society, they stop short of leading the army to abandon its supremely privileged place at the apex of the state. The corps commanders will never countenance a surrender of power, including the keys to Pakistan's assumed 24 to 28 nuclear weapons, to Islamist groups popular on the street.

Prior to September 11, the gain to Pakistan of its successful sponsorship of the Taliban regime could be counted as net-neutral. After that date, Pakistan displayed adroit (if extreme) realpolitik and decided, on good evidence, that the advantage had turned net-negative. From Afghanistan, an illicit drug trade, arms smuggling, ethnic hatred, and exacerbated religious division had already spilled over into Pakistan, badly corroding the social fabric. After September 11, if Pakistan had continued on its 1990s course, Pakistan would have had to contend with fierce international ostracism and possibly armed attack (should the Islamabad regime have wished to thwart American air power en route to

Afghan targets). The opportunist streak in Pakistan's independent history, and in the dynastic history of countless earlier satrapies and kingdoms occupying the same territory, pointed just one way: accommodate the prevailing wind, at least for the time being.

### India

Though a victim to its own excessive expectations, India has seen its global position rising since its senior Bharatiya Janata Party (BJP) leadership kept an election manifesto promise to test, and eventually to deploy, nuclear weapons.

Far from marginalizing itself, India's nuclear tests in May 1998 pushed the country into a higher circle of concern across Asia and the world. American, Japanese, and other countries' sanctions proved ineffectual. Coupled with more assertive diplomacy, India has given China new reason to contemplate a more evenhanded approach to South Asia.

India's prestige rose on the back of the information technology boom in which so many Indian and Indian-American technicians and entrepreneurs figured. As American strategic thinking focused more on the implications in Asia of emerging Chinese power, a rapprochement with India became more compelling. With the nuclear weapons capability a fait accompli, and with domestic American opinion divided over the Comprehensive Test Ban Treaty (CTBT), moves to refurbish the U.S.-Indian relationship gathered pace in the last year of the Clinton administration.

The Bush administration's senior foreign policy team includes a large number of people attracted to the prospect of dealing more routinely and across a wider spectrum of issues with India. The deputy secretaries of state and defense are particularly prominent in this regard.

With Pakistan increasingly perceived as a problem, India came to be viewed as an opportunity—even though the Vajpayee government has fallen well short of expectations in the economic sphere. India's need to make up for glaring shortfalls in infrastructure—notably roads, telecommunication, and energy—had spawned foreign investors' rush to tap a seemingly ready market.

On the down-side, successive commercial disappointments, notably in energy investment, have had a negative effect on the American business community. Specifically, the promise of a rapidly growing Indian market, one in which the middle class was estimated to reach 100 million people by some overoptimistic accounts, proved far more difficult to penetrate. Capital-intensive projects such as Enron's Dabhol power station fell afoul of Indian federal and state relationships, and patronage-ridden state electricity boards, facing bankruptcy, defaulted on commitments.

Even Indian sovereign guarantees backing payment on agreed-upon projects worked to no avail. By mid-2001, Dabhol faced the local electricity board's default on agreed power payment terms. Other investments, such as a gas supply deal by CMS Energy or another power station by AES, collapsed in 2001. India's high public sector deficit crimped financing options and, as global recession spread in early 2001, Western foreign investment began to dry up—in sharp contrast to continuing business optimism about China's prospects.

Meanwhile, Indian attitudes toward launching a new trade round at the World Trade Organization's (WTO) meeting at Doha in November 2001 also deeply disappointed the Bush administration. For example, U.S. Trade Representative Robert Zoellick visited Delhi in July 2001,

but Indian obstruction of a new round alienated a major backing of the Bush administration's tilt to India. Washington still possesses scant understanding of domestic Indian political imperatives that impel Delhi to identify with developing countries' agenda at the WTO; these "push factors" include longstanding protectionist attitudes within Indian industry. And the ruling BJP-coalition's principal rival, the Congress Party, is happy to endorse "Third World" attitudes not least because a crucial state electoral test awaited the BJP in late 2001 in Uttar Pradesh, India's largest state.

Nonetheless, the Indian prime minister himself and his national security adviser, Brajesh Mishra, have taken a direct interest in the broadening of the U.S. relationship. Vajpayee reciprocated President Clinton's March 2000 visit to India when he came to Washington in September of that year. Vajpayee, in mid-2001, overrode objections from his foreign ministry to send a message of qualified endorsement of the Bush administration's plans for a national missile defense (NMD) system. He came again to Washington in early November 2001.

If Pakistan's problem lies in its self-inflicted marginalization, India's challenge may be found in the mismatch between its assumed strategic importance to the United States and the fact of its comparatively uninspiring position vis-à-vis China. Consider, for instance, that China routinely attracts 30 times or more the amount of annual direct foreign investment than does India.

A range of issues still bedevils ties with the United States, from extradition to solving commercial disputes, such as a payment default imperiling Enron's Dabhol power station investment in Maharashtra. India had failed until September 11 to provide many "deliverables" for the United States, disappointing the pro-India enthusiasts within the Bush administration who hoped for faster signs of reciprocal attention from India to justify a new strategic relationship.

## **SOUTH ASIA DYNAMICS POST-SEPTEMBER 11**

### **India and Pakistan**

Immediately after September 11, both India and Pakistan sought to maximize their benefits. Pakistan's leader, General Pervez Musharraf, opted to reverse gears and cooperate with the United States-led war against the Taliban regime protecting al Qaeda and other terrorist groups. As in 1979, Pakistan saw an opportunity to leverage its position vis-à-vis Afghanistan into new largess and strategic significance. A "make-hay-while-the-sun-shines" mentality drove Pakistani requests—and the results were gratifying. New balance of payments support from the international financial institutions and bilateral sources, notably Japan, rewarded Musharraf for his choice. Humanitarian aid, trading concessions, and military sales further compensated Pakistan.

India's moves after September 11 make for an interesting contrast. In particular, India was caught unprepared for General Musharraf's about-face opportunism over the Taliban. Pakistan's willingness to step aside and watch the destruction of its Taliban ally—installed in Afghanistan after years of the Pakistani military's patient work and overt backing on the battlefield—showed strategic pragmatism at its best and worst. By contrast, the BJP-led government in India assumed too much about the U.S. commitment to fighting terrorism in all its forms. India automatically identified "terrorism" with Pakistan's support for terrorist-type insurgent activities in Kashmir.

Based on these calculations, India promptly made public but unsolicited offers of onward facilitation of American forces—a move that Washington perceived as imperiling Musharraf's

domestic position in Pakistan. A sharp response by Washington toned down some of the enthusiasm, leaving Foreign Minister Jaswant Singh politically exposed in India. In the immediate aftermath of Pakistan's support for the United States, India's lobbyists in Washington sought to block removal of some residual U.S. sanctions on Pakistan. This deeply angered U.S. policymakers at a time when the requirement of the day was placating Pakistani political opinion. Washington wondered if the Indian senior policymakers had lost their sense of the longer-term game, a game in which U.S. strategic attention had already tilted toward India in ways that Delhi had argued for years—including taking into account Indian perspectives on China.

### **The Political Future of Afghanistan**

In the post-September 11 diplomacy circling the Afghan war's outcome, India's principal interest lies in severing future affinity between Pakistan and a compliant regime in Kabul. Indian and Russian support for the Northern Alliance forces resisting the Taliban rested, until September 11, on scant hope. But it shared, with Iran and the Central Asian states, a detestation of the Taliban government reinforced by the ruling BJP's visceral dislike of what it sees as Islamic fundamentalism. Minimally, India seeks an Afghan regime no longer answerable to Islamabad.

For Pakistan, nominal participation in the American-led counterterrorism strategy delivers the preservation of its voice in deliberations after the defeat of the Taliban regime. Minimally, Pakistan must have a nonhostile country to its west. Beyond that, Pakistan may have to settle for a regime in Kabul that falls well short of the Taliban's recent utility, not least as a facilitator of irregular recruits for the anti-Indian insurgency in Kashmir. In particular, Islamabad will discover that it must now contend with firm views over the future disposition of Afghanistan from Beijing, Pakistan's most reliable friend. Growing more anxious about the vacuum of authority in both Afghanistan and Pakistan, China has been for some time reassessing its posture toward Central Asia. Eventually this concern may lead to firmer advice for Islamabad about the wisdom of using foreign Islamist ideologues to bleed India in Kashmir. The Chinese now know too well the spillover consequences for this activism in their own domains, especially in vulnerable areas of Chinese Central Asia.

## **THE SHAPE OF THINGS TO COME**

### **Basic Elements**

Fast-moving events pointed to an impending Afghan successor regime. To achieve lasting acquiescence from an Afghan population brutalized by two decades of often random war, this must at least include all major groups and factions. Fortunately, few students of Afghan history expect anything other than a very limited central authority to “take power,” relying instead on the usual degree of local autonomy prevailing in earlier eras.

The elements are as follows: Traditionally, a father-figure monarch came from the ethnic Pashtun community. Whether or not exiled King Zahir Shah or another member of the former royal family steps into the position matters less than the sense that a supervening and symbolic Afghan identity has stepped into the power vacuum in Kabul. This has more appeal than a “government of national unity” cobbled together and imposed by outsiders. Collective or temporary leadership offers a short-term solution but also a sure recipe for future problems. No matter how well intentioned, imposed

regimes lack credibility and pretend a consensus where none exists. Worst of all, these bogus entities rapidly come down to just one aim: self-survival.

Beyond the basic rule against imposition (and the portable “transitional” UN model could also fall into this category), any new Afghan government must reflect and be acceptable to Afghan diversity. All during November, as the Taliban positions disintegrated and traditional opportunism re-exerted itself even among previously compliant Pashtun tribal leaders, the political stage saw bargaining tactics worthy of a Mughul court drama, in which contenders for the throne stake out their position in extremis, everyone well aware that all players will have to be content with second best.

Beyond that, a new Afghan regime will have to be minimally acceptable to its neighbors. Iranian diplomacy will have to settle (as it probably could) for a compliant governor and repudiation of anti-Shi’ah policies by Kabul. For Pakistan on the east, the resulting compromise will be very much second best—even third best, although the generals are seasoned opportunists and will bide their time and ceaselessly seek to increase (compliant) Pashtun participation in a new dispensation.

However, the close-in arc of states legitimately concerned with a post-Taliban Afghan outcome only begins with physical contiguity. Beyond Iran and Pakistan, China, Turkmenistan, and Tajikistan also have policy borders with Afghanistan. Yet the true core states reach farther afield to Russia, India, and the United States—frontline players in all but propinquity, though Russia’s influence finds leverage (and vice versa) with Delhi’s goals. Europe’s major states—notably Great Britain, France, and Germany—also have an interest. So does Japan as aid donor and sharer of U.S. strategic views.

Beyond them lie wider support networks in Saudi Arabia and other Gulf States; Saudi irresponsibility in leaving Wahhabi and other networks that treat Central Asia and parts of the Islamic *umma*’ farther afield as proselytizing playgrounds must end—and this could not come at a more difficult time for the Saudi royal family.

Who plays the broker? Whether the United States likes it or not, it “owns” the problem. Should recent UN experience in places such as East Timor, Kosovo, or Bosnia determine the operational mode? What about regional Islamic activism—as in multilaterally supervised aid from the Organization of the Islamic Conference or the Islamic Development Bank? The risk is that the pace of events after November 9 has enabled the UN road show to move into the vacuum, a second-best outcome if the process is mismanaged. A strong UN role was enabled by default of U.S. diplomacy as well as by exiled King Zahir Shah’s slow-motion gamesmanship.

More to the immediate point, what will India and Pakistan do in the fevered diplomacy over a transitional and longer-term authority in Kabul? If China plays for longer stakes and sees a chance for reorientation of its South and Central Asia policy (as suggested above), Pakistan could find itself with very few options—just as domestic recrimination over the Taliban policy failure reaches high pitch.

If there is any major switch in Taliban roles internally and externally, then the only option lies in sending them to Indian-occupied Kashmir. This option the Indians will fiercely resist, having determined that Pakistan’s state failure is now irreversible. This prospect points to potentially greater low-intensity conflict in South Asia—driven, as usual, by the Kashmir dispute.

India, by contrast, sees significant gains from the reversal of fortune in Afghanistan, assuming that Taliban guerilla resistance does not impede Afghan reunification. Together with Russia, India’s roots in the Northern Alliance run deep. Its friends rule most of the Central Asian states. Vajpayee knows

that China holds the key to a significant permanent diminution of Pakistan's ability to play the spoiler in South Asian affairs. Judging by the prime minister's past strategic sense, we should not be surprised to see India seeking a broader understanding with China to accelerate the process of Beijing's distancing itself from Islamabad, a process that began in the mid-1990s.

### U.S. POLICY CHOICES: STRATEGIES FOR THE SHORT AND LONG TERM

Given this strategic flux, what might U.S. policymakers wish to focus upon in South and Central Asia during the coming weeks and months? The first point is to remember our war aims—and these do not include front-row participation in every detail of an Afghan reconstruction and regeneration. We aim (lest we have forgotten) to dismantle terrorist networks and to target states that offer haven for those networks. Even states opting not to pursue measures that aim at eradicating terrorist network will also incur American wrath. President Bush is very clear about this.

Beyond that, the tired subcontinental agenda between India and Pakistan seems set to obtrude more often than the United States would wish. Despite efforts to convince us otherwise, Delhi's strategic vision remains hostage to the rivalry with Pakistan. India has not, therefore, shown that it really can "think outside the (subcontinental) box." Meanwhile, whoever rules Islamabad will do whatever possible to seek legitimacy via ongoing support for insurgency in Kashmir, an insurgency in which terrorism has become routine.

This enduring feature carries more problems for U.S. policy than might first appear. Does this require (as Pakistan might hope) the United States's active engagement in the Kashmir problem? More than Islamabad (or Delhi) might realize, the events of September 11 amounted to a new U.S. comprehension of Pakistan's use of terrorism. Few senior policymakers have any illusion about Islamabad's influence among the most radicalized of Islamist fighters; despite Pakistani patronage, many such fighters could very well turn on the United States in future terrorist acts. The upshot is that, like it or not, the United States must take an interest in Kashmir quite soon—if only because not doing so will enable the Islamist terrorist cycle to begin anew, and with Pakistani patronage as before.

Given that India will seek to invite American policy to consider a second front against Islamist terrorism in Kashmir (and one can hardly blame Delhi for this), what options await the United States? To walk away from Kashmir invites continuation of Pakistani support for very disreputable groups and continuation of disreputable lines of credit to them from Saudi and other donors in the Gulf.

The one new point of pressure lies in China's options. As noted above, China has been reassessing its policy toward Pakistan for some time. Its policy of marginalizing U.S. influence in East, South, and Central Asia lies in shambles after September 11. The critical variable will be the degree to which India can enable China to back away from its fulsome embrace of Pakistan. If India seems too opportunistic in pressing home its advantage over Pakistan in the immediate post-Afghan war environment, China will have less room to jettison its residual promises of support for Pakistan. But a longer-term view has some promise—a view in which gradually the Sino-Indian border conflict inches toward settlement, and in which China's perspective on great power politics in Asia is shared with India to some extent (as in its distrust of a too-prominent American role in the region).

Using China constructively in this fashion carries great risks of getting the timing and the pace wrong. The positive outcome could be, however, a world in which Pakistan is finally “put in its place.” This has a literal as well as metaphorical sense: Pakistan has resisted subordinate status to India ever since 1947, at increasing cost and, over time, with fewer cards to play. Indian restraint—which comes down to accepting Pakistan’s right to exist (no easy task for the BJP leadership, to be sure)—must also come into play. But the prospect of a bigger strategic game with the United States and China holds immense appeal to an Indian strategic elite tirelessly telling us, for the last 25 years, that their country deserves a bigger place in the sun.

Enlightened post-Afghan war diplomacy for South and Central Asia must therefore amount to the following:

- Encouraging China to reassess its basic posture of support for Islamabad with the aim of bolstering Pakistan’s basic survival, coupled with an acceptance of a solution of the Kashmir dispute, probably by a partition of the disputed territory mostly along the line of actual control.
- Toward this end, engaging India and China to work toward this objective by making plain to Delhi that short-term opportunism in the immediate aftermath of the Afghan war will only enable Pakistani efforts to block this game. The United States must also appeal to Beijing’s sense that India must not press home its strategic advantage against Pakistan.
- Working with Iran and Russia to buttress the fragile foundation of a newly neutral Afghanistan by showing restraint—i.e., encouraging Pakistan to accept the Afghan outcome and its “place” in South Asia through avoiding opportunism from the North (too favorable a dispensation for the Uzbeks and Tajiks) as well as from the West.

## CONCLUSION

The strange outcome of the post–September 11 U.S. war effort may lie in an unexpected chance to get down to fundamentals over Kashmir. The chance thus offered has not been evident since the early 1960s when, in the aftermath of the Sino-Indian war, but before the misadventure in Vietnam, the United States put in its last serious attempt to bring Pakistan and India to accept what was then second best for each over Kashmir. This time, Pakistan will have fewer cards to play.



## Balancing Nuclear Security and Nonproliferation in South Asia

*Lewis A. Dunn*

The September 11 attacks on the World Trade Center and the Pentagon—and the start of what could well be a prolonged campaign to root out al Qaeda, the wider Osama bin Laden terrorist network, and their supporters—have created yet another turning point in U.S. relations with South Asia. Even before those attacks, the Bush administration was changing the U.S. stance toward India. All signs pointed to a full lifting of the economic sanctions imposed after the May 1998 nuclear tests, increased technology exchange, and renewed actions to establish a longer-term strategic relationship with India. Such changes are now being pursued with greater vigor and can be expected to meet considerably less political opposition within the United States. Indeed, the Glenn Amendment sanctions that were levied in response to Indian nuclear tests in May 1998 have been fully lifted.

Similarly, prior to the attacks, plans were underway to lift the nuclear-related sanctions on Pakistan. The attacks have accelerated this process and led to a more extensive transformation of U.S. political, economic, military, and other relations with Pakistan. As part of U.S. effort to gain and sustain Islamabad's support for a prolonged campaign against Osama bin Laden and his al Qaeda organization, President Bush has waived the full array of nuclear nonproliferation sanctions and also the sanctions imposed after military ruler Pervez Musharraf's coup to take over the government of Pakistan in 1999. Missile proliferation-related sanctions are still in place and are expected to remain unaltered. Otherwise the United States is making a major effort to stabilize Pakistan's domestic and international security situation through concerted economic, diplomatic, and military aid.

This paper focuses on the nuclear dimension of the U.S. relationship with South Asia. As already noted, the Bush administration has made one key choice: lifting sanctions. In the months and years ahead, it will confront still other choices. Among the choices on the nuclear agenda are:

- Whether, and if so how, to seek to buttress security over nuclear weapons and nuclear materials in Pakistan and India.
- To what extent, and in what manner, the United States should emphasize the need for nuclear restraint in dealings with both countries.
- How to lessen the risk of a nuclear conflict in South Asia and what steps the United States should be prepared to take “on the brink.”
- What next after waiving sanctions—in granting both countries access to technology, economic assistance, and military cooperation.
- How to keep the global nonproliferation coalition from “losing faith and losing heart.”
- What, if anything, to do about Pakistani nuclear weapons if radical Islamic forces are on the brink of gaining power in that country.

## ENHANCING SECURITY AND CONTROL OVER NUCLEAR WEAPONS AND MATERIALS<sup>1</sup>

There is a clear U.S. interest in effective security and control of nuclear weapons and nuclear weapons materials in Pakistan and India.<sup>2</sup> This was so even before al Qaeda's the attack on the United States. A security breakdown or loss of control by Pakistan or India over their nuclear weapons was, and remains, one potential trigger of a wider nuclear confrontation between India and Pakistan.

However, the post-September 11 security environment has clearly made the issue of Indian and Pakistani control of nuclear infrastructure, materials, and weapons more salient than ever. Pre-September 11 debates focused almost exclusively on how Pakistan and India would handle their small nuclear arsenals during a crisis that mandated full or partial nuclear deployments. In contrast, the new debate encompasses the need for tight security over fissile material stocks as well as assembled and unassembled weapons in both countries. Nuclear weapons and stockpiles of fissile materials in both Pakistan and India could comprise an enticing target for al Qaeda. Possession of even a single bomb could be seen as a valuable political force-multiplier—a means to shape U.S. actions, influence wavering U.S. supporters, and further claim legitimacy in some Muslim quarters. September 11 demonstrates as well that they would have no compunction against using a stolen nuclear weapon to kill innocent civilians.

Setting aside for the moment its acceptability to Washington, Islamabad or Delhi, at least in principle, could offer a variety of assistance officially, semi-officially, or unofficially to help enhance security and control over the new nuclear arsenals in both countries.<sup>3</sup> Such assistance might range across a spectrum from “software” to “hardware,” from greater to less sensitivity in terms of direct entanglement in either country's nuclear weapons posture. Specifically:

- Transfer of U.S. organizational best practices; e.g., procedures related to personnel reliability programs, the storage and transport of nuclear weapons, access restrictions, overall site security, and response procedures to thwart an attempted nuclear security incident while in progress or to recover a stolen weapon.
- Tabletop exercises, making use of an “illustrative” nuclear weapons storage site designed to assist both countries to move ahead on their own to identify potential vulnerabilities and requirements as well as to develop and implement appropriate fixes.
- Transfer of lessons learned, surprises, and unexpected security- and control-related problems, and just plain mistakes from the early years of the U.S. nuclear weapons program—in effect, identifying questions and issues that both Pakistan and India should address on their own.
- Discussion of the types of steps that might be implemented to make a nuclear weapon unusable were it to be subject to an attempted or successful theft but stopping short of direct support to implementation of the principles at work.
- Provision of “generic” nonsensitive, dual-use technology and equipment that would enhance nuclear security and control at storage sites (and which could be used in effect to enhance security over any highly valuable assets; e.g., monitoring equipment for nuclear weapon and material vaults, tracking equipment for nuclear warheads, and communications equipment).
- Provision of nuclear weapons design not directly related to technologies and equipment for the secure transport of nuclear weapons and materials; e.g., related to shipping containers, vehicles, communications, and other protective measures.

- Transfer of permissive action link and other control technologies to guard against unauthorized access or use of a nuclear weapon.

## **CONSTRAINTS ON NEW U.S. POLICIES TO SECURE NUCLEAR WEAPONS AND MATERIALS**

In practice, crafting any package of nuclear security assistance must reflect at least three constraints: U.S. obligations under the Nuclear Non-Proliferation Treaty (NPT), possible acceptability issues in both Pakistan and India, and the U.S. interest in nuclear restraint. It also would have to take into account the possibility that were such assistance to fall into the wrong hands, it could give useful information to individuals seeking to gain unauthorized access to nuclear materials or weapons.

### **U.S. Obligations under the NPT Regime**

Article I of the NPT obliges the United States and the other nuclear weapon states “. . .not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices. . . .” What this means will clearly be subject to legal analysis and debate within the U.S. government—and for that matter, in other governments. A number of questions stand out. Since Pakistan and India have already acquired nuclear weapons, would assistance in helping to ensure safety and security be banned? Or would such assistance have the effect of encouraging both Islamabad and Delhi to manufacture additional nuclear weapons by easing their concerns about loss of control? What difference would it make if any such assistance were provided by outside organizations rather than the government? How important would it be if such assistance covered only openly available information and not classified data?

These are important questions and U.S. NPT obligations are not trivial. The United States was one of the moving forces behind creation of the NPT and has been a leader over the years in supporting that treaty. Despite its limitations, a strong NPT remains an important element of overall global effort to contain future proliferation. More broadly, the United States also has a strong interest in the global rule of law. For all of these reasons, it will be important to avoid another repeat of the 1980s debate over the Anti-Ballistic Missile Treaty in which U.S. officials put forward—and ultimately had to withdraw—a questionable interpretation of that treaty’s limits.

However, a legally sustainable case probably can be made that some types of assistance do fall outside the purview of the NPT’s ban on assistance. It is no longer a question of assisting, encouraging, or inducing either country to manufacture or acquire nuclear weapons. Perhaps more important, a great deal may depend ultimately on the “what” and the “how” of any such assistance. Suffice it to suggest that there likely is room under the NPT’s obligations at least for provision of unclassified, publicly available knowledge related to nuclear security and control—particularly if it is not provided on an official basis by the U.S. government.

### **Political and Military Constraints on South Asian Acceptance of U.S. Assistance**

The acceptability of U.S. assistance to either Pakistan or India likely will raise other issues and again set limits on what can be done. Though Pakistan’s foreign minister, as well as some other civilian and military officials, have raised the issue of assistance for security and control, there certainly will be limits

on what types of activities that country would welcome. In particular, Pakistan's military and technical establishment can be expected to be reluctant to reveal information about nuclear weapons designs, detailed security and storage procedures and locations, and other detailed nuclear posture information. For its part, even if such assistance were offered to Delhi, it could well simply refuse to accept it. Pride, a belief that it has matters well enough in hand, concern about loss of sensitive information, and reluctance to get the military more involved in the nuclear weapons arena all could lead to that refusal.

***The Long-Term U.S. Interest: Encouraging Nuclear Restraint.*** There are also U.S. interests in both encouraging nuclear restraint and in lessening the risk of a nuclear conflict in South Asia. To some degree, whatever action the United States takes to assist Islamabad and Delhi in making nuclear weapons and materials more secure will increase the relative "nuclear comfort level" in either country. As a result, they could be more ready to expand their nuclear arsenals or to deploy available weapons in time of crisis. Moreover, even if both countries accept some assistance, suspicion that the other side really was benefiting more could itself create pressures for arms racing. To be weighed against these concerns is the likelihood that one possible trigger to a nuclear clash between these two countries could be a breakdown of nuclear security and control in a conventional conflict. Furthermore, should leaders in Delhi and Islamabad believe that their country's security demanded nuclear deployments in the midst of a future crisis, concerns about security and control would not prevent that action.

***"Leakage" of U.S. Nuclear Advice?*** To some degree, there also could be a risk that information about nuclear security and control procedures could be compromised. Knowledge of such procedures could make it easier for either al Qaeda sympathizers or, in the case of Pakistan, internal forces to defeat security systems. At the same time, the very purpose of some of the types of assistance that could be provided, e.g., on personnel reliability programs, would help to weed out such threats. Besides, this threat may already exist and would not be made worse, but could be reduced by some types of assistance.

***Finding the Right Policy Balance.*** What balance should be struck among these considerations? Given the dangers that al Qaeda's access to nuclear weapons would directly pose to the security of the United States as well as that of many other countries, steps must be taken to assist both Pakistan and India in ensuring the security and control of their nuclear weapons and materials.<sup>4</sup> In so doing, however, two possible rules of thumb emerge in light of the preceding constraints. To the extent possible, first, U.S. assistance should be focused more on "software" than on "hardware" and more on securing the front end of the nuclear weapons production-to-storage-to-deployment cycle; second, the means of providing such assistance should entail greater reliance on knowledgeable retired officials and retired military personnel than on official government-to-government or laboratory-to-laboratory activities.

### **Encouraging Nuclear Restraint in South Asia**

Both India and Pakistan have become nuclear "powers," at least in the sense of being publicly reported to have some nuclear weapons and to be able to deploy them militarily on short notice. For

the foreseeable future, moreover, leaders in both countries will continue to believe that nuclear weapons are essential to their security—and in India's case, its claim to global status and prestige. The United States cannot turn back this nuclear clock.

Nonetheless, both countries' nuclear weapons capabilities still are limited in size, scope, sophistication, and integration into military planning and activities. There is, moreover, considerable uncertainty and internal assessments in both Delhi and Islamabad concerning nuclear next steps—how many weapons to produce, whether advanced later-generation nuclear weapons are essential, what sort of delivery means to pursue, what doctrine to adopt, how far to go toward day-to-day nuclear deployments and operations, what provisions for command and control, and the many other choices that come with possession of nuclear weaponry. Moreover, following the first flush of pride and success after the tests, there also are signs of recognition that they are riding a nuclear tiger. So viewed, it may yet be possible to encourage nuclear restraint. For the United States, this would somewhat dampen any proliferation chain effect, buttress the wider nonproliferation regime, strengthen global and regional stability, and be consistent with broader U.S. interests in avoiding another use of nuclear weapons.<sup>5</sup>

Nonetheless, with priority on sustaining support from Islamabad and Delhi for the campaign against al Qaeda, the Bush administration may be tempted to shunt aside the issue of nuclear restraint rather than to raise a potentially divisive matter. This would be a mistake. Within both countries' leadership, as noted, the question of future nuclear weapons posture and requirements remains open—and potentially subject to outside influence. Moreover, given the preceding discussion, smaller, nondeployed Pakistani and Indian nuclear forces would be easier to protect against unauthorized access or theft. Furthermore, nuclear restraint would help to lessen the potential adverse nonproliferation spillovers beyond the region.

Therefore, Bush administration officials should keep the issue of nuclear restraint by India and Pakistan on the overall U.S. agenda with both countries. As a start, U.S. officials should continue to make the case for why restraint is in the self-interest of both India and Pakistan. This would be consistent with both countries' claim to be seeking only a minimum deterrent capability. As for specifics, both countries could be encouraged to continue their post-1998 nuclear testing moratorium and to reaffirm it. In turn, U.S. officials could urge both countries not to deploy nuclear weapons in the field; to stop short of integrating nuclear weapons into day-to-day military planning by creating a dedicated "strategic nuclear organization;"<sup>6</sup> not to engage in public and provocative nuclear exercises, training, or other steps; and to continue to explore jointly other steps such as limits on the production of nuclear weapons materials.

Perhaps equally important, continued semi-official and nonofficial actions to encourage nuclear restraint might be supported. A number of former cabinet-level U.S. officials have already visited both Delhi and Islamabad to describe some of the difficulties that lie ahead for both countries as nuclear weapons possessors. These types of visits should be continued and supported by the Bush administration. "Lower-level Track 1" discussions involving a mix of serving officials, senior retired officials and military personnel, and experts from the United States, India, and Pakistan, also warrant continuation. In both instances, these contacts could suggest various restraint steps, but in the final analysis would leave officials in Delhi and Islamabad to draw their own conclusions about what nuclear risks they choose to accept.

*Lessening the Risk of Nuclear Confrontation in South Asia.* Though Indian and Pakistani “insiders” are less inclined today than in 1998–1999 to adopt an “I’m all right, Jack” approach toward their new nuclear status, both Indians and Pakistanis still publicly deny that the 1999 Kargil clash—or earlier crises in 1987 and 1990—had a nuclear dimension. By contrast, “outsiders” are more inclined to speculate that nuclear readiness was increased on both sides of the border during the Kargil crisis. Both U.S. officials and outside experts also believe that the risk is too high for comfort that a future clash in Kashmir could escalate first to a limited conventional war and then to a nuclear confrontation (if not outright conflict). On this latter point, at least some, but not all, insiders in both Delhi and Islamabad appear to be coming to a comparable conclusion. Even limited use of nuclear weapons, however, could result in major loss of life in both countries if not the virtual destruction of Pakistan as a state. It also would shatter the five-decade nuclear taboo with unforeseeable ramifications for further proliferation and use of nuclear weapons.

The primary burden for holding in check the risk of nuclear confrontation or conflict in South Asia necessarily rests with the leaders in both countries. For its part, the United States (and other countries) can and should take a number of actions to reinforce and support that national responsibility. As a start, for instance, both Delhi and Islamabad could be urged to begin a process of dialogue on nuclear risk reduction measures. The Lahore Declaration envisaged such a dialogue, but it was then put on hold after the Kargil crisis.

Realistically, however, neither country may now be prepared to take this step. At most, it may be possible to extend and transform ongoing “Track 1” exchanges into a more regular and institutionalized process of nuclear dialogue. In either case, the very process of a continuing dialogue on nuclear risk reduction may well be as important as specific topics covered or agreements reached. U.S. support could include a readiness to offer official or semi-official input on specific topics, including, as above, lessons learned and questions to address.

Regarding agenda, an official or semi-official dialogue could usefully begin with exchanges on what each side means by such oft-used concepts as minimum deterrence, stability, nuclear weapons deployment, and others. These concepts appear variously interpreted between the two countries. Possible pathways to nuclear use—deliberate, unintended, nonauthorized, and hybrids of each—could also be considered, along with ways to avoid them. In turn, the agenda could cover possible measures to reduce the likelihood of the types of physical, human, or organizational accidents that could trigger a nuclear confrontation or conflict. Further topics for an extended dialogue could include how to enhance nuclear decision making as well as to avoid escalation in crisis or conflict. Possible restraint regimes to stabilize deterrence would be another suitable topic for discussion.<sup>7</sup>

Aside from encouraging discussions between Delhi and Islamabad on nuclear risk reduction, what other actions might be pursued by the Bush administration? The types of measures discussed above to enhance nuclear weapons security and control would also contribute to lessening the risk of a nuclear conflict. Perhaps even more so, measures to lessen the danger of nuclear weapons–related accidents could pay off here. This is especially so since one of the more plausible routes to a nuclear confrontation would entail a mix of an escalating low-level conventional clash, steps to enhance nuclear readiness and nuclear deployment, and a resulting nuclear weapons accident that could be misinterpreted—by both sides.<sup>8</sup>

Again, as above, a spectrum of steps from “software” to “hardware,” from official to nonofficial involvement can be identified as potential means to lessen the risk of a nuclear accident. The same

considerations regarding NPT obligations, acceptability to Pakistan and India, and implications for overall nuclear restraint also would apply in balancing the interests at stake and crafting a U.S. approach.

***Addressing the Roots of Conflict.*** None of the preceding actions would address the underlying problem of low-level violence in Kashmir. As long as that violence persists, it will continue to provide the most likely trigger to a widening clash between Delhi and Islamabad, conventional conflict, and ensuing escalation to the nuclear brink. The difficulties confronting any outside attempt to mediate a resolution of the Kashmir conflict are well known and have made American officials reluctant to become too deeply engaged. That assessment seems unlikely to change.

Nonetheless, U.S. diplomacy should explore what steps may be possible to neutralize the Kashmir conflict for now. This may well include convincing the Pakistani leadership that now is not the time to step up its support for Kashmiri *jihadis*. (However, Pakistan's support for the United States and the internal violence that has resulted could make it more difficult or politically costly for President Musharaff to control Pakistani-supported *jihadis* inside Kashmir.)

Should violence in Kashmir bring India and Pakistan to the nuclear brink, nonetheless, U.S. officials—with the support of other outsiders—would have to be prepared to use political capital to restrain both countries. As has occurred in previous crises, U.S. good offices and intelligence also could be used to avoid misinterpretations by either side of the other's activities and intentions.

### **What Next after Lifting Sanctions?**

As the decision of the Bush administration to provide an initial \$50 million in economic assistance to Pakistan indicates, the lifting of economic sanctions is likely the first, not the last, step in redefining the broader economic, technological, and military relationship between the United States and Pakistan. In turn, the administration is moving as well to resume earlier U.S. efforts to forge a new strategic relationship with India. As this process proceeds, many questions will need to be addressed, such as:

- How much access should we allow either country to U.S. nonmilitary high technology?
- What sort of limits should be continued on military technology exports and sales?
- How much additional economic assistance should be given to Pakistan?
- How should we respond to possible renewed Indian interest in technical cooperation in the nuclear safety field?
- Should we seek to restore military education assistance to Pakistan?
- What sort of overall military-to-military contacts should we permit?

In thinking about “what next” after lifting sanctions, the importance of solidifying support in both Islamabad and Delhi for a successful long-term campaign against al Qaeda provides a compelling argument to lean toward greater cooperation and engagement. The U.S. stake in avoiding spiraling internal instability in Pakistan, if not its collapse as a failed state, reinforces that interest.

Similarly, enhanced economic and technological dealings with India would be consistent with underlying U.S. interests in greater strategic cooperation with that country.

Nonetheless, there are several countervailing considerations. First, U.S. actions that were widely seen to be inconsistent with existing international export controls, e.g., the Nuclear Suppliers Group Guidelines, would undercut an overall regime that the United States played a key part in creating. Second, officials in some other nuclear-supplier states may seize upon U.S. easing of economic and high-technology controls to justify their dealings with countries of proliferation concern. This could make it even harder to slow proliferation programs in Iran, Iraq, and elsewhere. Third, for some countries, a perceived U.S. readiness to come to terms with the nuclear weapons status of Pakistan and India could weaken their own national commitment to nonnuclear status. Indeed, since the May 1998 nuclear tests, Japanese officials in semi-public meetings, for instance, have been uncharacteristically blunt in stating that Japan's decision to adhere to the NPT presupposed that no additional countries would join the nuclear club.

In balancing these considerations, certain limits suggest themselves. In effect, the test would be one of, "How would we react if China did it?" In turn, the United States should avoid policy actions that would facilitate more extensive nuclear deployments, including possibly deployments geared toward nuclear first-strikes. The principle here would be "do no harm." But in practice this may be subject to differing interpretations. For instance, technology transfers that assisted India to develop more effective space reconnaissance capabilities could provide needed assurance that Pakistan was not moving toward a decapitating first strike in a future crisis—or it could provide valuable targeting data.

### **Avoiding Nonproliferation Demoralization**

Support for global nonproliferation norms, institutions, and procedures has long been a U.S. interest. Demonstrating that support, more than a belief that sanctions would result in a rollback of Indian and Pakistani nuclear advancement, provided a rationale for imposing sanctions after the 1998 nuclear tests. Though the time for sanctions has passed, how the United States proceeds in its dealings with both Delhi and Islamabad still can have an important effect on overall global nonproliferation efforts.

Particularly before the September 11 attacks, many countries would have viewed the lifting of sanctions and a process of economic, military, and technological re-engagement with Pakistan and India as "coming to terms with proliferation." One result could well have been a loss of heart—nonproliferation demoralization—among some strong nonproliferation supporters. Other countries' leaders could have questioned how much to pay in terms of national self-restraint to support specific nonproliferation objectives or to implement particular nonproliferation commitments. The perception that nonproliferation still matters and that a world of dozens of nuclear powers is avoidable could have been eroded.

It is more difficult to gauge since September 11 how this overall set of U.S. policy changes will be viewed and what effect it will have both on broader and more country-specific attitudes on nonproliferation questions. In some, if not many, capitals, U.S. reengagement and even steps to provide assistance on nuclear security may well be viewed as a necessary, if not fully satisfactory, adaptation to the "needs of war." Among traditional nongovernmental nonproliferation organizations, by contrast, it is likely to be considerably more subject to criticism than support. How

the United States explains these coming shifts—and how the governments of India and Pakistan act in the months ahead—may be especially important to containing possible broader erosion of nonproliferation morale and support.

Publicly, U.S. officials could make clear that the United States, India, and Pakistan have basically “agreed to disagree” on nuclear issues. This public posture would include statements to the effect that nuclear restraint is in both India’s and Pakistan’s political, security, and economic interest. More practically, this would mean continued U.S. opposition to India’s becoming a permanent member of the UN Security Council. In turn, U.S. officials should quietly but clearly point out to officials in both Pakistan and India that greater cooperation would be facilitated by some action or statement indicating their own commitment to nuclear restraint. In that regard, one possibility would be for them to announce the start of mid-level talks to implement the nuclear restraint provisions of the Lahore Declaration. At the least, they should avoid any “major hiccups,” e.g., new nuclear tests, highly publicized deployments, or ratcheting upward of existing nuclear capabilities or posture.

### **What if a Radical Islamic Regime Takes Power in Pakistan?**

Like so many dimensions of the South Asian nuclear conundrum, the possibility that more radical Islamic forces could take power in Islamabad existed before the September 11 attacks. But, there were different judgments concerning the likelihood of that development.

In the new environment, that risk appears at first glance to be greater. Opposition groups and public demonstrations have already condemned President Musharaff’s decision to support the United States. In the event of a prolonged conflict between U.S. military forces and both al Qaeda and the Taliban, public violence, unrest among the military, and widening instability could pose a growing threat to the regime. Here, too, how much of a threat is a matter of differing judgment—though few, if any, experts appear prepared to discount it altogether.

Different scenarios are conceivable for how Pakistan’s nuclear weapons could figure in a situation of growing internal instability. Those weapons could become a prize to be seized, whether as a source of internal bargaining power for internal opposition groups or of legitimacy for coup makers.<sup>9</sup> Clashes between security forces and hostile groups at nuclear storage sites might result in the release of nuclear material or even conceivably a partial nuclear detonation. (The latter would depend in large part on the technical characteristics of Pakistan’s nuclear weapons, their storage and assembly status, and what protective measures might already exist.) Should the Musharaff government be toppled, Pakistani nuclear weapons would come under the control of the new regime.

Assuming that the Musharaff government remains in power, the types of U.S. safety and security assistance discussed earlier would be one step that might lessen these internal risks. Were a specific threat to arise, more direct action—again in support of the existing government—might be warranted. For instance, emergency military support could disrupt or defeat attempted seizure of nuclear weapons or materials by internal opponents. Comparable support could be provided to recover stolen weapons or materials. If available, intelligence on imminent threats could be exchanged.

In the event that a takeover of power by more radical Islamic elements appeared imminent, very different issues and options would arise—for the United States, for India, but also for other countries. At least in theory, direct military action could be on the table as an option to block access

to nuclear weapons or materials by a radical successor government.<sup>10</sup> But many issues would have to be addressed: military feasibility, potential risk of loss of life among innocent civilians, risk of wider conflict, and regional as well as global consequences. Just as both the United States and the former Soviet Union ultimately had little realistic choice in the 1960s but to come to terms with China as a nuclear power, much the same could be the case for a radical Islamic Pakistani successor regime.<sup>11</sup> If so, this serves to underline the importance of a more comprehensive U.S. political, economic, technological, and social engagement with more moderate elements in Pakistan to avoid that outcome in the first place.

## CONCLUSION

Though all but certain to be overshadowed by the demands of war, important nuclear choices still remain to be made in South Asia. In some instances these choices bear directly on foreclosing potential options open to America's terrorist enemies; e.g., regarding nuclear security and control. In other cases, these choices bear directly on the type of regional and global environment that will exist after this war is won, e.g., regarding actions to enhance the prospects for nuclear restraint and lessen the risk of nuclear conflict as well as to contain adverse nonproliferation spillovers. For both reasons, nuclear issues must be an essential part of an overall post-September 11 strategy for dealing with South Asia.

## NOTES

1. After gaining support for the campaign against al Qaeda, enhanced security and control over nuclear weapons and materials in Pakistan and India may well be the top priority among post-September 11 U.S. regional interests. For that reason, and given the complex choices raised, this paper devotes somewhat greater attention to this matter.
2. If news reports are accurate, U.S. officials may already understand and be thinking about how to pursue this interest. See Douglas Frantz, "US and Pakistan Discuss Nuclear Security," *The New York Times*, October 1, 2001.
3. For an earlier discussion of these issues, see Lewis A. Dunn, "Containing Nuclear Proliferation," *The International Institute for Strategic Studies, Adelphi Paper # 263*, winter 1991.
4. This concern also reinforces the importance of continued strong funding and political support for those elements of the Cooperative Threat Reduction and Material Protection Control and Accounting programs aimed at reducing the risk of diversion of nuclear materials or weapons from Russia.
5. For its part, the Clinton administration made a major effort to convince both countries to exercise nuclear restraint. In so doing, it set out a series of possible benchmarks that could lead to lifting sanctions and improved relations. These included no testing of nuclear weapons, signature of the Comprehensive Test Ban Treaty, limits on production of fissile material, export controls, and no deployments of nuclear weapons.
6. The model to avoid would be U.S. creation of the Strategic Air Command in the late 1940s.
7. This dialogue might be extended to include "gaming" both possible pathways to nuclear conflict as well as actions that might be taken by India and Pakistan, separately or jointly, to avoid those pathways.
8. An accidental detonation, for instance, of a Pakistani nuclear weapon could be interpreted by Pakistan as part of an Indian first strike, while India could interpret it as signaling the imminence of Pakistani nuclear use—or the converse in the event of an accident on Indian territory.
9. Two precedents for nuclear weapons becoming a consideration in internal violence are: first, during the 1961 "Revolt of the Generals" in Algiers, French forces on short notice tested a nuclear device at their test site to ensure that it would not fall into the control of coup makers; second, during the Cultural Revolution in 1966, there was concern about the security of nuclear devices at China's test site in Sinkiang.
10. As South Vietnam collapsed militarily in 1975, the United States removed highly enriched nuclear fuel stored at the Dalat nuclear research reactor.
11. In both countries, at different times in the 1960s, preventive, or then preemptive, military action was debated.

# Securing Pakistan's Nuclear Infrastructure

*David Albright*

During times of relative political and social normalcy, the security of Pakistan's nuclear arsenal is probably adequate and could be expected to improve consistent with other nuclear programs worldwide. However, fallout from Pakistan's decision to cooperate with the United States following the September 11 terrorist attacks may severely test Pakistan's security system throughout its nuclear weapons complex. Instability in Pakistan could make its nuclear weapons and stocks of nuclear explosive material dangerously vulnerable to theft. If domestic instability leads to the downfall of the current Pakistani government, nuclear weapons and the means to produce them could fall into the hands of a government hostile to the United States and its allies.

The precise threat to Pakistan's stability or its nuclear weapons complex is difficult to judge. Pakistan's foreign ministry says, "Our [nuclear] assets are 100 percent secure, under multiple custody."<sup>1</sup> President General Pervez Musharraf said, "There is no question of [Pakistan's nuclear assets] falling into the hands of any fundamentalists."<sup>2</sup> However, these statements are untested and spark skepticism, particularly in the changed security environment following September 11.

Pakistan is believed to maintain tight control over its nuclear assets, and it may have instituted special steps to deal with the current situation. Nonetheless, the U.S. government and the international community should work to improve security over Pakistan's nuclear assets, both in the short and long term.

The war on terrorism is expected to be long and drawn out. The Pakistani military and intelligence services may retain strong ties to Taliban officials in Afghanistan. Like the Pakistani population, many among the Pakistani military or the nuclear establishment could be sympathetic to fundamentalist causes or hostile to the United States. These sympathies could grow, depending on the course of the war in Afghanistan or elsewhere. Such insider threats could pose one of the most vexing problems in the current crisis.

But even before the current crisis, Pakistan likely would have benefited from improved physical protection of its military and civilian nuclear facilities. According to a former Clinton administration Energy Department official, before September 11 Pakistan had requested some kind of assistance to improve its physical security capabilities.<sup>3</sup> In addition, significant security lapses and weaknesses have occurred in many nuclear weapons programs.

A frequently quoted rule of thumb is that security must constantly improve in order to stay one step ahead of would-be thieves. The United States struggled through much of the 1970s and 1980s to develop a security system to adequately protect its nuclear weapons and weapons components. Yet it still encounters difficulty in allocating enough resources to protect its nuclear weapons complex adequately.

The former Soviet Union experienced a severe drop in the effectiveness of its nuclear security systems in the early 1990s. Russia, with the help of the United States and other countries, is now engaged in a massive effort to improve the security of its nuclear materials and weapons. Providing assistance to Pakistan, however, is not as straightforward as aiding the former Soviet Union. Direct, substantial assistance could embarrass the Pakistani government and give ammunition to the

government's political opponents that the United States is attempting to gain direct control over Pakistan's nuclear weapons. In addition, Pakistan treats the location of its nuclear weapons as highly classified and apparently depends on this secrecy to increase the survivability of its nuclear weapons. Pakistan is unlikely to welcome U.S. assistance that could reveal its nuclear weapons storage sites.

In addition, the United States faces a series of constraints that complicate the provision of assistance to Pakistan. Such assistance should not violate U.S. commitments or objectives under the Nuclear Non-Proliferation Treaty (NPT), harm U.S. relations with India, inadvertently encourage nuclear testing or otherwise contribute to advances in Pakistan's nuclear arsenal, or increase the threat of a nuclear exchange between India and Pakistan.

### PAKISTAN'S NUCLEAR WEAPONS COMPLEX

During the last 25 years, Pakistan has developed an extensive nuclear weapons complex. Before its nuclear tests in May 1998, successive Pakistani governments tried to hide many aspects of its nuclear weapons program while simultaneously revealing enough to convince India and the rest of the world that it had workable nuclear weapons.

A result of this opaqueness is that Pakistan has released little information to the public about its complex of nuclear weapons-making facilities. Typically, these activities include research, development, and testing of nuclear weapons; the production of plutonium and highly enriched uranium (HEU); the manufacture of nuclear weapons; and facilities for mating nuclear weapons to delivery systems, including aircraft and ballistic missiles.

Despite the shortage of official information, we can draw a rough sketch of Pakistan's nuclear weapons complex.<sup>4</sup> The following partial summary focuses on facilities with sensitive material. These facilities would be expected to be the major focus of any attempt to improve Pakistan's security over its nuclear weapons. However, an important missing piece of this sketch is reliable information that could give insight into the adequacy of security at critical nuclear sites, including sites containing fissile materials and nuclear weapons.

#### Quick Tour

All nuclear weapons complexes are composed of a myriad of facilities. They are linked together to function as a unit through transport of materials and manufactured items, personnel, and communication systems. A central, competent leadership is critical to maintaining adequate security over the complex and ensuring adequate control over the nuclear weapons themselves.

***Production of Fissile Material.*** Pakistan has the capability to make both plutonium and HEU, or "fissile materials," for nuclear weapons. Its main uranium-enrichment facilities are at the A.Q. Khan Research Laboratories at Kahuta. Pakistan also has another, newer, enrichment facility near Wah, which the U.S. government calls the Gadwal uranium-enrichment plant. It may have other production-scale facilities. Pakistan also operates smaller enrichment facilities, including the Sihala and Golra ultracentrifuge plants.

Most of these sites would be expected to have HEU and low-enriched uranium stocks. The physical security arrangements at these facilities are unknown, although they would be expected to be rigorous.

Pakistan can make weapons-grade plutonium for nuclear weapons. Pakistan operates the Khushab reactor, which is estimated to generate about 50 megawatts of power, large enough to produce plutonium for a few nuclear weapons per year. Separation of the plutonium is reported to occur at New Labs at Rawalpindi, near Islamabad. This plant, next to the Pakistan Institute of Nuclear Science and Technology (PINSTECH), is large enough to handle all the irradiated fuel from the Khushab reactor. The storage arrangements for the separated plutonium are unknown, although they would likely include vaults and other security procedures.

As of the end of 1999, the Institute for Science and International Security assesses that Pakistan possessed 585 to 800 kilograms of weapons-grade HEU and 1.7 to 13 kilograms of separated plutonium; these quantities are sufficient for 30 to 50 nuclear bombs or warheads.<sup>5</sup>

***Nuclear Weapons Manufacturing Sites.*** Pakistan maintains facilities to produce metallic fissile material and shape the metal into nuclear weapons components. Such facilities would have fissile material in liquid, powder, and solid forms. Other facilities produce the nonnuclear components and at least partially assemble the nuclear weapons. The location of these facilities has not been reported extensively, although at least some of these facilities are near Wah.

Whether or not all of Pakistan's nuclear explosive material has been converted to nuclear weapons is unknown. One would expect that relatively large quantities of HEU are not in the form of partially assembled nuclear weapons and would be in-process in nuclear fuel cycle facilities. This amount translated into nuclear weapon equivalents must be subtracted from the estimate of 30 to 50 nuclear weapons.

***Nuclear Weapons Storage and Deployment Sites.*** Pakistan is widely reported not to have deployed its nuclear weapons. What that means exactly is difficult to determine from the available literature. For example, a definition of deployment is that the weapons have been transferred to military units for storage and rapid mating with delivery systems at military bases. Under this definition, South Africa did not deploy its nuclear weapons. However, the situation in Pakistan may be murky and may in fact best be described as partial deployment.

Reportedly Pakistan has several nuclear weapons storage facilities, the exact locations of which are unknown. Reports and interviews with knowledgeable individuals allege that storage sites are on military bases. However, other storage locations, such as tunnels or mines, would be expected.

According to a variety of media reports, Pakistan's nuclear weapons are implosion-type designs and are stored with their fissile core separated from the nonnuclear components.<sup>6</sup> This arrangement may reflect safety limitations in the weapons, rather than a fundamental method to better control access, as in the case of South Africa. Pretoria designed its weapons to have front and back sections that were stored separately.

The simplest interpretation of the available information is that the fissile core and the rest of the device are stored separately in vaults. However, it is also possible that the weapon minus the fissile core is mounted on a delivery vehicle, and the fissile core is stored separately. This arrangement would potentially allow more rapid deployment of the nuclear arsenal in time of crisis with India.

Pakistan's nuclear weapons are not thought to be "one-point safe" or equipped with permissive action links (PALs), at least as defined by the United States.<sup>7</sup> PALs are often viewed broadly as devices to prevent the unauthorized use of a nuclear weapon. The more effective ones, however, are integral to the warhead, and arming and firing the weapon requires the entry of a code. A box and a lock could under some definitions be called a PAL. The problem, however, is that such a system is not integral to the weapon, and should be more appropriately considered a physical protection device rather than a PAL. Similarly, a system applied after the weapon is built, such as a control over the electronic firing systems, could also be by-passed in a straightforward manner. Here, PALs are defined narrowly as a system incorporated in the design of the weapon that prevents unauthorized access.

It is unknown whether Pakistan has coded switch devices integral to its delivery systems (as opposed to the actual warheads). Such switches would act as hardware "gatekeepers" for ballistic missiles or aircraft. The need for a special code to arm and fire the missile or drop a gravity bomb would impede unauthorized personnel from carrying out a nuclear strike. Such devices may be easier to master than PALs.

Pakistan appears to emphasize the need to keep its storage locations secret. This strategy is different from the situation in the United States and Russia, where nuclear storage sites are relatively distinctive because of extensive security arrangements—including fences, towers, guards, and bunkers—that are visible in overhead surveillance.

***Development and Testing of Nuclear Weapons.*** Pakistan has a range of facilities involved in the development and testing of nuclear weapons. Pakistan has repeatedly stressed its need to be a nuclear equal to India to maintain its security. Nuclear parity has been implicitly adopted by much of the Pakistani leadership as a litmus test for the credibility of its arsenal. Therefore, Pakistan may keep nuclear devices ready for rapid testing in response to any future Indian tests. Toward this end, facilities associated with development and testing of nuclear weapons may hold nuclear explosive devices or significant quantities of fissile material.

***Transportation of Fissile Material and Weapons.*** Little is known of the transportation arrangements for sensitive nuclear items in Pakistan. The type of transport containers or vehicles, or the extent of armed escorts, is unknown. Pakistan's transportation vehicles are unlikely to be of the caliber of the Department of Energy's safe-secure transport vehicles.

***Command and Control.*** Much has been written on the subject of command and control, warranting only a very brief summary here. The Pakistani military controls the nuclear weapons themselves and has instituted a range of measures to tighten controls over the nuclear weapons complex. According to a wide variety of South Asian specialists, the military is the least corrupt and most professional part of Pakistani society.

## Threats

A nuclear weapons complex engenders multiple vulnerabilities. Transportation of sensitive items is often viewed as one of the weakest links. Accordingly, many countries involved in transporting fissile material or nuclear weapons have invested heavily in better securing their transports. Insider threats are a recurring problem. The situation in the former Soviet Union highlights this threat.

Groups or individuals may violate security rules for a variety of reasons, including profit, settling a grudge, or religious or ideological motives. Violators may try to gain control over sensitive items for their own use or to transfer these items to another state or to other non-state actors. A special concern is that Pakistan will suffer another coup. A new leadership can be expected to place high priority on seizing the country's nuclear assets.

The threat of theft or diversion of fissile material or nuclear weapons falls into three general areas:

- Outsider threat—the possibility that armed individuals or groups from outside a facility gain access and steal weapons, weapons components, or fissile material.
- Insider threat—the possibility that individuals who work at a facility will remove weapons, weapons components, or fissile material without proper authorization.
- Insider and outsider threat—the possibility that insiders and outsiders conspire together to obtain weapons, weapons components, or fissile materials.

If Pakistan suffers extreme instability or civil war, additional threats to its strategic nuclear assets are possible:

- Loss of central control of storage facilities—clear lines of communication and control over weapons, weapons components, and fissile material may be broken or lost entirely.
- Coup—in the most extreme case, a coup takes place and the new regime attempts to gain control of the nuclear complex. Foreign governments may intervene to prevent hostile forces from seizing the strategic nuclear assets.

In the current situation, Pakistan must also increasingly worry that experts from the nuclear complex could steal sensitive information or assist nuclear weapons programs of other countries or terrorist groups. The information could include classified nuclear weapons manufacturing data, exact storage locations of weapons or fissile material, security and access control arrangements, or operational details about the weapons.

## CRITERIA FOR PROVIDING ASSISTANCE TO PAKISTAN

On the surface, it makes sense to provide a wide variety of assistance to increase the security of Pakistan's nuclear weapons complex. However, many types of assistance could undermine other U.S. objectives such as bolstering nonproliferation norms or reducing the chance of nuclear war between India and Pakistan. In particular, some of the equipment the United States might provide for the purpose of nuclear security may in fact be “dual purpose,” meaning that such materials or technologies could conceivably improve Pakistan's ability to deploy nuclear weapons operationally. This would be an unintended and unwanted consequence of U.S. efforts to secure Pakistan's existing fissile material stockpiles and nuclear weapons.

Bruce Blair, president of the Center for Defense Information, relates that a senior Russian official in St. Petersburg told him that a group of Indian nuclear officials had asked for aid in making PALs for their nuclear weapons. If they could make PALs, the Indians said they could put nuclear weapons on a higher level of readiness and assure the political leadership that the weapons were safe. Thus a PAL could provide both greater assurance against unauthorized use of nuclear weapons and increased ability to deploy nuclear weapons. In South Asia, deployed nuclear weapons would increase the chance that a military conflict between these two states could escalate into a nuclear exchange.

Criteria the United States should consider in providing assistance include, but are not limited to, the following:

- Is the assistance consistent with U.S. obligations under the NPT? Under Article I of the NPT, each nuclear weapon state “undertakes . . . not in any way to assist, encourage, or induce any nonnuclear weapon state to manufacture, or acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.” The administration needs to judge, both as a matter of policy and on a case-by-case basis, whether providing particular types of assistance to Pakistan—which under the NPT is a nonnuclear weapon state—constitutes a violation of this obligation or otherwise undermines the NPT. For example, assisting Pakistan to improve the security of its nuclear weapons storage facilities may be permissible. However, assistance that improves the safety and security of a nuclear warhead itself may also significantly improve Pakistan’s ability to deploy a warhead on a ballistic missile, and may be prohibited under the NPT.
- Will the assistance encourage nuclear testing by Pakistan? The type of assistance given to Pakistan could inadvertently spark Pakistan to test a nuclear device to further improve the weapons design or operational capabilities.
- Does the assistance increase the chances for nuclear war in South Asia? U.S. assistance should not permit the more rapid deployment of nuclear weapons, or make the weapons more reliable. The United States should also ensure that assistance does not allow Pakistan to store its warheads intact. The nuclear balance between India and Pakistan is not stable, and well-intentioned but short-sighted efforts to improve the safety and security of Pakistan’s nuclear arsenal could end up increasing the risk of nuclear war between India and Pakistan.
- Does the assistance negatively affect U.S. relations with India or other states? Some assistance may lead India to demand similar assistance or stimulate it to take countermeasures that may increase regional insecurity and complicate its relation with the United States.

Pakistan also faces constraints in accepting assistance:

- Does the assistance undermine the regime politically? The Pakistani government must resist assistance that could lead to charges that the United States is somehow gaining control over Pakistani nuclear weapons.
- Does the assistance reveal the location of sensitive nuclear weapons storage sites? Secrecy of the nuclear weapons storage sites is likely a key aspect of Pakistan’s nuclear strategy. Finding a proper balance between security and secrecy may be challenging. Although extensive physical security is desirable, it may also reveal the site to an enemy. Sophisticated communications equipment, designed to allow more effective control, may also be an indicator of the true

purpose of the site. If the equipment came from overseas, Pakistan may also worry that it is “bugged,” revealing the location of the site to a foreign power when it is operated.

### **Types of Assistance**

The above constraints appear to severely limit the type of assistance that can be offered to Pakistan. However, in practice, a great deal of critical assistance can be provided. Most of the assistance can be provided quickly in response to short-term needs defined by the Pakistani government. Additional assistance can be provided as part of a long-term strategy to improve security over nuclear weapons in both India and Pakistan. U.S. assistance should be based on the guiding principle that Pakistan will continue to store its nuclear weapons in a disassembled state. This guiding principle would permit a variety of assistance that could significantly improve controls against unauthorized use of nuclear weapons.

Given the posited threats, Pakistan should be encouraged to reassess the security of its nuclear complex and make improvements where necessary. Although official statements that security is airtight may serve a necessary political purpose, they should not delude the authorities themselves into believing that the current crisis will not increase the risk of theft or diversion.

An optimal mix of assistance will necessarily rest on the extensive body of publicly available information about physical security and control of nuclear sites and nuclear weapons. This assistance can be supplemented by the provision of training and hardware. Examples of allowable assistance include:

- 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.

Assistance could also include descriptions of security procedures and methods used by states that store nuclear weapons in ways similar to Pakistan, or that face similar constraints in storing nuclear weapons. The early experience of the Soviet Union and the practices of South Africa in the 1980s may be particularly relevant.<sup>8</sup>

Excluded assistance would include PALs; nuclear weapons design information aimed at making more secure, reliable, or safer nuclear weapons or devices; coded launch control devices; and environmental sensing devices. In addition, because of Pakistani sensitivities, the U.S. government probably could not provide assistance that required U.S. access to Pakistan's nuclear weapons sites or unsafeguarded nuclear sites. Therefore, "lab-to-lab" programs would be discouraged because, to be effective, these arrangements typically would require U.S. national laboratory officials to have access to sensitive Pakistani sites.

Much of the assistance could be provided relatively rapidly. However, Robert Einhorn, former assistant secretary at the U.S. State Department, points out that the U.S. provision of certain types of equipment may require an export license. This type of assistance could also represent a change in U.S. policy. If the equipment is nuclear "dual-use" equipment, such as may be true for certain materials control and accounting items, U.S. policy is to provide such items only to nonnuclear weapon states that subject all nuclear facilities to the safeguards system of the International Atomic Energy Agency (IAEA). Pakistan is clearly not in that category.

### **Cooperation: First Thoughts**

The provision of any assistance requires the United States to carry on a sustained dialogue with Pakistan. Whether this dialogue is occurring is unclear.

Secretary of State Colin Powell told reporters on his mid-October flight to Pakistan that he expected to talk with President Musharraf about nuclear weapons safety.<sup>9</sup> The *Washington Times* reported after Powell's visit that Pakistan had rejected a U.S. proposal to provide security for its nuclear arsenal.<sup>10</sup> The stated reason was Pakistani fear that U.S. personnel could block Pakistan's deployment of its nuclear weapons. Before Powell's trip to South Asia, the *New York Times* reported that U.S. and Pakistani officials had discussed assistance.<sup>11</sup> However, the State Department subsequently denied this report.

### **Longer-Term Assistance**

Assuming that the United States and Pakistan will cooperate on the provision of assistance, a formula for furnishing the assistance discussed above is straightforward, and certain types of assistance can be given quickly. Meetings, briefings, and conferences could be held either inside or outside Pakistan. The sponsors could include the U.S. government, other interested governments, or nongovernmental organizations. The IAEA may be able to participate constructively in the discussion over generic physical protection guidelines and practices.

The United States and Pakistan could draw up a list of security and materials control and accounting equipment that the United States would provide. The United States would have to invest in the effort of obtaining the necessary export licenses for any dual-use equipment.

Nongovernmental groups or experts can play a role in providing certain types of assistance. Case studies based on open information or unclassified information about nuclear weapons security may be appropriate subjects. These subjects may be difficult for the U.S. government to broach because of internal classification or policy constraints.

## Emergencies

In the event of an emergency involving Pakistan's nuclear assets, and if President Musharraf asks for assistance, the United States should be prepared to act quickly. Toward that end, the United States should decide now what type of assistance it is willing to provide and under what circumstances.

The United States should evaluate various scenarios that may lead Pakistan to ask for assistance. Scenarios include attempts to steal fissile material or nuclear weapons, the theft of sensitive items, or the realization of dramatic weaknesses in material accounting, control, and protection systems at particular facilities. Certain types of insider threats may also lead Pakistan to ask for assistance. The U.S. government should prepare contingency plans for assisting Pakistan under these various worst-case scenarios.

If the U.S. government anticipates providing Pakistan with dual-use equipment under these scenarios, it should take steps now to ensure that the process of obtaining export licenses does not unnecessarily slow the assistance. If Pakistan asked for assistance in recovering nuclear assets, the United States should decide the type of assistance it could provide. It should also plan and practice how to provide such assistance.

## A FINAL NOTE: WHAT ABOUT A MILITARY COUP?

Several observers have suggested that if Pakistan suffers a coup by forces hostile to the United States, the U.S. military should be ready to provide security over the nuclear weapons (or even to take the weapons out of Pakistan entirely) without the permission of Pakistani authorities.<sup>12</sup> Others have raised the possibility of asking President Musharraf to allow the United States or China to take possession of Pakistan's nuclear weapons during a coup.

Although such responses appear possible in theory, their implementation could be extremely difficult and dangerous. A U.S. military action to seize or cripple Pakistan's strategic nuclear assets may encourage India to take similar action, in essence to finish the job. Even if India does nothing, a new Pakistani government may launch any remaining nuclear weapons at U.S. forces or against India.

In addition, removing the nuclear weapons would not be enough. The new government would inherit the facilities to make nuclear weapons. Extensive bombing would thus be required at several nuclear sites, including the relatively large Khushab reactor and New Labs reprocessing plant. These types of attacks risk the release of a large amount of radiation if they are to ensure that the facility is not relatively quickly restored to operation. For example, bombing the facility so as to bring the roof down on the reactor core or hot cells is unlikely to be sufficient.

Considering such harsh contingencies may be important to protect the vital interests of the United States and its allies. A better strategy, however, is to take appropriate steps to minimize the likelihood that such catastrophic scenarios materialize.

### NOTES

A shorter, less comprehensive discussion of principles to provide assistance to Pakistan to secure its nuclear weapons and fissile materials is presented in David Albright, Kevin O'Neill, and Corey Hinderstein, "Securing Pakistan's Nuclear Arsenal: Principles for Assistance," ISIS Issue Brief, October 4, 2001.

1. "Pakistani Nuclear Assets are Safe: Spokesman Says," *Kyodo News Service*, October 2, 2001.
2. Interview on *Larry King Live*, CNN, October 22, 2001. Transcript available at <[www.cnn.com](http://www.cnn.com)>.
3. "Pakistan's Nuclear Dilemma," Carnegie Endowment for International Peace, Non-Proliferation Project Roundtable, October 2, 2001. Transcript available at <[www.ceip.org/files/events/Paktranscript.asp](http://www.ceip.org/files/events/Paktranscript.asp)>.
4. ISIS assessments of the Pakistani nuclear weapons program can be found at <[www.isis-online.org/publications/southasia/index.html](http://www.isis-online.org/publications/southasia/index.html)>.
5. David Albright, "India's and Pakistan's Fissile Material and Nuclear Weapons Inventories, End of 1999," October 11, 2000 <[www.isis-online.org/publications/southasia/stocks1000.html](http://www.isis-online.org/publications/southasia/stocks1000.html)>.
6. A set of partially assembled components is considered a nuclear weapon here.
7. One-point safe describes the degree of safety in a nuclear weapon. In the United States, it is a characteristic of a nuclear weapon that, upon undergoing one-point detonation initiated anywhere in the high explosive system, has a probability of no greater than one in a million of producing a nuclear yield in excess of 4 pounds of TNT equivalent.
8. For more information about South Africa's nuclear weapons storage practices, see David Albright and Corey Hinderstein, "South Africa's Nuclear Weapons Storage Vault," ISIS Issue Brief, October 4, 2001 <[www.isis-online.org/publications/terrorism/sastoragevault.html](http://www.isis-online.org/publications/terrorism/sastoragevault.html)>.
9. Secretary Powell, "Press Briefing on Board Plane En Route to Pakistan," October 16, 2001.
10. "Pakistan Rejects Help," *Washington Times*, October 19, 2001.
11. Douglas Frantz, "U.S. and Pakistan Discuss Nuclear Security," *New York Times*, October 1, 2001.
12. See, for example, Bruce Blair, "The Ultimate Hatred Is Nuclear," *New York Times*, October 21, 2001.





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