

USAWC STRATEGY RESEARCH PROJECT

**EMERGING NUCLEAR POWERS: INDIA AND PAKISTAN SINCE 1998
AND THE UNITED STATES' IMPACT ON REGIONAL STABILITY**

by

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ABSTRACT

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A stable, peaceful, South Asia is essential to the security of the United States. In 1998 India and Pakistan conducted nuclear tests and became declared nuclear powers. Less than a year later, India and Pakistan were fighting a limited war and aggressively rattling their nuclear sabers. The sustained tensions between the two countries, threats, physical proximity, and power asymmetry result in an unstable situation. The U.S. should not, and likely cannot, prevent the introduction of Anti-Ballistic Missiles to the region. However, the U.S. should take steps to enhance stability including facilitation of dialogue, and technology and information sharing, all the while promoting confidence building measures. Any aid should be contingent on verifiable nonproliferation and counter terrorism efforts. Neither country is likely to roll back their nuclear programs, but they are at a plateau of nuclear weapons development that can be maintained with modest international effort. While there are thus a variety of actions that the U.S. can take, the most important quality in any course of action is consistency. India and Pakistan are very sensitive to the past fluctuations in U.S. interest. It is vital that the United States adopt a more sustained, high-level, and nuanced policy in South Asia.

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EMERGING NUCLEAR POWERS: INDIA AND PAKISTAN SINCE 1998 AND THE UNITED STATES' IMPACT ON REGIONAL STABILITY

The threat of major conflict between India and Pakistan will overshadow all other regional issues during the next 15 years.

—National Intelligence Council¹

The Indian subcontinent is the most likely place in the world for a nuclear war.

—M.V. Ramana and A.H. Nayyar²

INTRODUCTION

South Asia is a volatile region. In particular, India and Pakistan (Figure 1) have, since the end of the Cold War, been widely regarded as the two countries most likely to become involved in a nuclear war. The cultural, religious, and ideological tensions that underlie the state-to-state antagonism are very deep-seated. The long and contested border, frequent armed conflict and mutual distrust result in an inherently unstable situation between the two nuclear armed rivals. This study will summarize the nuclear history of India and Pakistan, illustrate the dangers of instability, and examine potential U.S. actions to enhance stability in this contentious region of significant security interest.

HISTORICAL BACKGROUND

For a thousand years, the Indus River valley has marked the border between the Hindu and Muslim world. The eastern side of the valley forms much of the India-Pakistan border today. Though Muslim rulers would in time rule more than half of the Indian sub-continent, conversion of the majority of the populace to the House of Islam generally stopped at the Indus valley.³ In the 20th century, two states were created by the British "Partition" of 1947. India was created as a secular democracy. Pakistan, including what is now Bangladesh, was created as a homeland for the region's Muslim population. Violent conflict has been the most consistent aspect of relations between India and Pakistan since their formation. In the summer of 1947 approximately 10 million people rushed in opposite directions, Hindus and Sikhs from Pakistan to India, and Muslims from India to Pakistan. As many as one million of these people were killed as communal hatred erupted.⁴ Since then, India and Pakistan have fought major wars in 1947-48, 1965, and 1971.

Not long after the last major war, 18 May 1974, India detonated a nuclear device at Pokhran, Rajasthan, in western India. The fission device had a 10 kiloton (kt) yield. It was as

tentative a step as could be taken if one was going to cross the nuclear threshold. India stated that the test was a “peaceful” explosion, and that it had no intention of producing nuclear weapons.⁵ Pakistan’s reaction to India’s 1974 test was rather subdued initially, perhaps because it had already begun its own nuclear weapons program in 1972, following the 1971 war with India in which it lost Eastern Pakistan - now Bangladesh.⁶ For twenty-four years there were no more official developments in India’s nuclear weapons program.⁷ Indian policy for this period was one of ambiguously “keeping the option open.”



FIGURE 1. THE SETTING OF INDIA AND PAKISTAN WITHIN ASIA.⁸

In 1990, tensions between India and Pakistan rose again over Kashmir. By this time the existence of a Pakistani nuclear program was widely suspected, though its stage of development was unknown.⁹ Both countries issued not-so-veiled threats to use nuclear weapons if needed, causing significant concern in the West.¹⁰

THE 1998 TESTS

On 11 May 1998, India became a declared nuclear power, claiming to have simultaneously detonated three nuclear devices, including fusion and boosted fission designs. Two more tests followed on the 13th of May. These tests caught the world, in particular the United States, by surprise.¹¹ In addition to the political whirlwind caused by the tests, a technical controversy developed over the explosive yields. Published scientific reports generally estimated the total yield of the largest explosions at 10-25 kt, significantly lower than India's claim of 40-70 kt.¹² Why does yield matter? The value of nuclear weapons is in deterrence. India claimed, in the first test, to have detonated a thermonuclear weapon that was deliberately scaled down in yield for environmental safety. Generally, thermonuclear (a.k.a. fusion or hydrogen) weapons have yields on the order of a Megaton (Mt), or about one to two orders of magnitude more than fission bombs. Technologically, fusion weapons are also considerably more difficult to build than fission weapons.¹³ Therefore, the potential deterrent effect of fusion weapons is much greater than that of fission weapons. But there is a paradox: If your opponent does not believe that you have a weapon, then even if you do, it has no deterrent value. As Henry Kissinger put it:

“In the Nuclear age a bluff taken seriously is useful; a serious threat taken as a bluff may prove disastrous.”¹⁴

Thus India faces two major credibility problems with its claim to possess fusion or hybrid boosted-fission weapons. First, the claimed yield is not accepted internationally. And second, even if the yields are believed, a large fission weapon rather than a fusion or boosted fission device is the more likely source. A secondary effect of the controversy is that it calls into question the reliability of India's weapon designs.¹⁵ This credibility problem exerts pressure on Indian leaders, in addition to the already strong pressure from the nuclear R&D bureaucracy, to conduct further tests.¹⁶

As soon as the news of India's tests broke, the West, with the U.S. in the lead, swung into high gear diplomatically with respect to Pakistan. There was a frenetic effort to dissuade Pakistan from following India down the nuclear road. Both penalties and incentives were

advanced, but to no avail.¹⁷ It was as if the firing circuit at the Indian site of Pokhran continued to the Pakistani site of Chagai, albeit with a fifteen-day delay.

On 28 May 1998, just over two weeks after India's tests, Pakistan claimed to have detonated 5 devices with a total yield of up to 45 kilotons. Two days later they claimed to have detonated a sixth device, thus "one-upping" India's total of five.¹⁸ Just as was the case with India, western scientists disputed the claimed yields, and estimated a total yield of about 10 kt for the first day.¹⁹ Pakistan was obviously engaging in a "tit-for-tat" effort with India. As the former Prime Minister, Zulfikar Ali Bhutto, stated in 1965, Pakistan's position was (and remains):

If India builds the bomb, we will eat grass or leaves; even go hungry, but we will get one of our own.²⁰

The international community's non-proliferation efforts with respect to India and Pakistan have focused mainly on treaties and control regimes, such as the Non-Proliferation Treaty (NPT) and Comprehensive Test Ban Treaty (CTBT), technology controls, and coercive sanctions. Whenever nuclear development gained momentum in either India or Pakistan, the U.S. conducted intense efforts to halt or turn back the nuclear clock. However, at times when the U.S. needed Pakistani help, such as to counter the USSR in Afghanistan, development was allowed to proceed largely unhindered.²¹ The U.S. Congress also intervened, passing laws requiring sanctions against proliferators. These laws can limit U.S. freedom of action on the political front at critical junctures.²²

At the most basic level, all these international non-proliferation efforts failed because both India and Pakistan are now declared nuclear weapons states. However, this should not be interpreted to mean that non-proliferation efforts were wasted. The fear of international sanctions and censure greatly retarded nuclear developments in both countries and have to date precluded further testing. After the 1974 Indian test, there was a gap of 24 years before India tested again, and for roughly half that time, Pakistan probably had a nuclear capacity too, but did not test. So why, in the end, did both countries "go nuclear"? A combination of security concerns, domestic politics and bureaucratic influence developed enough force to push past the resistance to nuclear development. Once India tested, the domestic pressure within Pakistan to follow suit was irresistible.²³ The lesson is that while non-proliferation efforts may not stop a determined state, they can have a significant effect. It is quite possible that more focused and consistent efforts on the part of the U.S. could have prevented the overt nuclearization of South Asia indefinitely.

THE KARGIL CONFLICT

In 1999, less than one year after declaring its nuclear power status, Pakistan launched an operation on the Indian side of the Line of Control (LoC), in Kashmir, near the town of Kargil (Figure 2). The LoC, the de facto border between the Pakistani and Indian controlled sections of Kashmir, was delineated by mutual agreement in 1972. Since then, with the exception of artillery and small arms exchanges and smuggling/insurgent infiltration, the LoC has generally been respected. It should be noted that the LoC stops short of the Chinese border, and demarcation between the sides in that remote and inhospitable region is debated. In particular, since 1984 both sides have fought for possession of the Siachen Glacier. This highest battlefield in the world (~18,000 ft) is expensive in terms of men and resources for both countries to maintain.²⁴ The international significance of the Kargil conflict is that it was “the first major *conventional* armed conflict to be fought in the nuclear age between two *nuclear-weapon-capable* states.”²⁵

Taking advantage of routine winter abandonment, by both sides, of high altitude positions along the LoC, Pakistan moved in late winter/early spring (February-April) to occupy the high ground on the Indian side of the LoC in several sectors. From here, Pakistan could interdict Indian supply lines running to northeastern Kashmir.²⁶ Once fully aware of the situation, in May, India brought in significant additional forces. From the beginning, India imposed and appeared to circumspectly limit its forces by staying on the Indian side of the LoC, despite the strong military disadvantages of doing so. Pakistan claimed that the forces involved were local “freedom fighters”, but India provided substantial evidence of Pakistan Army participation. Pakistan’s refusal to admit the obvious cost it dearly in terms of international opinion.²⁷ By July Pakistan was beleaguered internationally, and the United States had sided squarely with India – a development that appeared to stun Indian leadership.²⁸ Ultimately, Pakistani President Sharif had little choice but to withdraw his forces. By the end of July, India had reclaimed the lost territory, though at substantial cost to both sides.²⁹

During the Kargil conflict, both sides issued inflammatory statements relating to the possible use of nuclear weapons. These statements were in the long-standing tradition of South-Asian politics, where provocative hyperbole is often voiced, as much for domestic consumption as international. Immediately after becoming nuclear powers, India and Pakistan expressed great confidence in their ability to control any escalation. To western governments however, the Indian and Pakistani confidences were naïve. Coupled with the bellicose public statements, the rhetoric was alarming and damaged the responsible nuclear power image that India and Pakistan were fostering.³⁰ To their credit, both India and Pakistan appeared to set

tight limits on the military once the fighting started, apparently to prevent escalation. India's military restraint and diplomacy in particular earned respect internationally and to some degree offset the damage done by the saber rattling.



FIGURE 2. DETAIL OF THE KASHMIR REGION.³¹

The Kargil conflict was a severe blow to what had appeared to be a major thaw in relations between the two states. While there is much debate about Pakistan's reasons for the Kargil operation, there is general consensus that the quasi-democratic, military-dominated government of Pakistan did not adequately "what-if" the operation. In particular, they severely misjudged Indian and international reaction. It is likely that Pakistan counted on international pressure to halt fighting before any gains were lost. There was also apparently little thought

given to the possibility that the cover story of an insurgent operation without Pakistani support might not be believed.³²

Why did Pakistan proceed with the Kargil operation? Most likely, Pakistani leaders perceived that the Kashmir insurgency was faltering, and that the conventional power gap with India was growing. It was thought that with nuclear weapons backing them, Pakistan could successfully engage in low-level conventional operations with relative impunity. Pakistan, a non-status-quo state, had few options and limited leverage. Continued agitation in Kashmir, while costly and illogical to some outside points of view, might have been seen as the best of the available bad choices.³³ What then was the strategic objective? Pakistan probably sought to re-energize the Kashmir insurgency, bring international attention to Kashmir, and perhaps to create a bargaining chip for use against India. With the exception of getting international attention focused on Kashmir, Pakistan failed to attain, and perhaps even lost ground on, its objectives.³⁴ Even here, most of the international sentiment was in India's favor. As Robert Wirsing summarizes:

... there is no reason to quibble with the obvious fact that the Kargil operation, viewed from almost any angle, was ill timed...Given the frequency of international, especially American, warnings in the post-tests period about the nuclear dangers inherent in the volatile Kashmir dispute, the time was clearly unripe for premeditated exhibition of one's heedlessness in the face of those dangers.³⁵

Following the failure in Kargil, Pakistan President Nawaz Sharif and General Pervez Musharraf, the Chief of Army Staff, battled politically over responsibility for the failure. In October 1999 Musharraf deposed Sharif as head of state, effectively removing any remaining civilian input from Pakistani strategic decision-making.³⁶ The Kargil conflict thus vividly illustrates the instability that permeates the India-Pakistan rivalry and the need for U.S. action to lessen the danger.

TO THE PRESENT

Shortly after the 1998 tests, a select Indian committee published a draft nuclear doctrine for India. The main points included: no first use (with some exceptions), a secure second-strike capability, a triad of delivery systems, and a defined chain of command. Overall, the report reads like a roadmap to a mature, robust, Cold War era nuclear system, similar in scope but smaller in scale than those of the United States or Russia.³⁷ India indeed appears to be following the draft's plan. In the spring of 2002, four years after becoming a declared nuclear power, India began publicly establishing a formal nuclear command and control (C²) system.³⁸

The chain of command runs from the Nuclear Command Authority (NCA) through the Chairman, Chiefs of Staff Committee to the Strategic Nuclear Command.³⁹

Pakistan has not released anything equivalent to the Indian draft, but its nuclear doctrine appears to have solidified more quickly than India's, probably due to unfettered military control of the nuclear program.⁴⁰ The Pakistani NCA appears to consist of the President, Prime Minister, Foreign Minister, and senior military officers.⁴¹ However, the president and senior military commanders likely possess the real authority.

India intends to be recognized as a great power, and is pursuing a robust military capability to match. India is currently on a military buying spree, including small arms, heavy bombers, AWACS, aircraft carriers and nuclear capable submarines.⁴² India is also negotiating with Israel to purchase an Anti-Ballistic Missile (ABM) system.⁴³ Since this missile was developed with the help of United States funding, the U.S. holds approval rights for any sales of the system to other countries. The system's relatively short range, on the order of tens of kilometers, and reentry phase attack mode make it a point defense weapon, not a countrywide shield.⁴⁴ Whether intended or not, India's force improvement seriously exercises Pakistan's psychological need to keep up with India at all costs and consequently strains the Pakistan economy.

Pakistan is historically very sensitive to perceived closing windows of opportunity. Between 1947 and 1971, Pakistan repeatedly took risks when a closing window of opportunity was sensed.⁴⁵ This tendency has continued at least to the 1999 Kargil conflict, where a closing window of opportunity appeared to contribute to the decision to proceed with the operation.⁴⁶ Pakistan could be presented with another closing window by moving towards dependence on ballistic missiles as the sole reliable method of nuclear weapon delivery.⁴⁷ Pakistan is presumed to plan on a first strike due to its conventional inferiority and to its lack of strategic depth.⁴⁸ The reliability of Pakistan's first strike, let alone its second strike capability, is thus crucial to its feeling of security vis-à-vis India.⁴⁹ The development of a comprehensive Indian ABM system could shatter Pakistan's feeling of security. Indian leaders already publicly express confidence that India could survive any attack that Pakistan could deliver in a nuclear war.⁵⁰ While no ballistic missile defense is 100% effective, a sophisticated ABM system could greatly reduce penetrations by a modest force to a very small number. At the very least, an Indian ABM system might spur a "race" or counter on the Pakistani side, within the limits of their economy.

Concurrent with pursuing ABM's, India is also taking steps to close off other delivery options. India is purchasing advanced radars and new air-to-air fighters, thus keeping in check

Pakistan's ability to use either aircraft or, to a lesser extent, cruise missiles as an alternative to ballistic missiles.⁵¹ Some Pakistanis have gone so far as to state that they would use a bullock cart, if necessary, for nuclear weapon delivery.⁵² The coupling of Pakistan's historical sensitivity to closing windows of opportunity, with the perception of a decline in effectiveness of the Pakistani nuclear force, could result in a dangerous situation.

A major argument advanced by both India and Pakistan in favor of their being responsible nuclear powers is the behavior of the established nuclear powers. In the more than half-century since 1945, nuclear weapons have not been used. Hence the argument: just as the U.S. and USSR behaved responsibly, so will India and Pakistan. However as Peter Beckman states:

“...the historical record reveals that young nuclear nations are more likely to consider using such weapons. As states join the nuclear club, they will need to pass through a period of maturation in which there will be such temptation. 1998 marked only the beginning of India and Pakistan's nuclear youth.”⁵³

As more information comes to light about the first few decades of nuclear history, it has become evident that the nuclear peace of the Cold War was not nearly so robust as had been generally supposed, and that luck appears to have been too important a factor in the “long peace” to put much reliance on the Cold War as a model for peace between nuclear rivals.⁵⁴ Assuming that deterrence is not automatic, what action can the U.S. take to increase nuclear stability?

US GOALS AND OPTIONS

The National Security Strategy (NSS) of the United States is the capstone statement of policy of the U.S. with respect to security, and puts forth fundamental U.S. interests internationally. The NSS identifies eight priorities: human dignity, combating terrorism, diffusing regional conflicts, preventing Weapons of Mass Destruction (WMD) threats, global economic growth, promoting open democratic societies, working with other major powers, and transforming U.S. government security organizations. South Asia figures prominently in the first seven of these priorities. Thus it is clear that the U.S. will be involved in the region. The only questions are how and to what extent. The NSS goes on to state that the greatest danger to the U.S. is from the intersection of radicalism and technology.⁵⁵ The U.S. must ensure that this does not occur in Pakistan or elsewhere in South Asia. In this context, there is much less concern about the security of Indian WMD technology. Indian goals and actions in this vein, if not treaty commitments, are reassuring.

The NSS clearly treats India as an emerging regional and perhaps international force. The dominant themes with regard to US-India relations are recognition of shared interests and

the desire to strengthen the relationship. Pakistan is given less emphasis.⁵⁶ This is not to say that Pakistan should be discounted. It is in the U.S. and even Indian interest to ensure that Pakistan remains viable and does not become a failed state. Pakistan is a key to stability, regionally and beyond. While many analysts and U.S. government officials go to great lengths to show equal deference to India and Pakistan, there can be no hiding the fact that India is the dominant power in the region with more international influence and standing. Furthermore, this disparity between India and Pakistan will only grow in the foreseeable future.

Recognition of the power disparity between India and Pakistan is integral to any realistic strategy for the region. Beyond a realistic geopolitical view, the U.S. must be more consistently engaged at the highest levels. It is widely lamented by government officials and academics in the US, India and Pakistan, that the U.S. has lacked consistency in its dealings in the region since the end of WWII.⁵⁷ The volatile actions of India and Pakistan do not need an accompanying inconsistency and vacillation in U.S. policy and commitment.

Hand-in-hand with consistency is subtlety. The U.S. has demonstrated an increasingly sophisticated understanding of the region starting with the 1999 Kargil war, but the Global War On Terrorism appears to have temporarily retarded progress in this area. After September 11th, the U.S. came back into the region in a big way, with little subtlety or consideration of its impact on the local players. India and Pakistan are proud countries and neither the public nor political leaders take well to a traditionally blunt American approach. Throughout the Cold War, the U.S. tended to view South Asia as merely part of the US-USSR chessboard. This resulted in an inability to see, or a lack of interest in, second and third order effects of its policies. An example would be arms sales to Pakistan intended to counter the Soviet Union, which India saw as a direct threat.⁵⁸ India still has a lingering distrust of American motives based on the experiences of the Cold War, coupled with a strong anti-colonial streak that has evolved into an anti-Western/U.S. sentiment.⁵⁹ Thus, the U.S. should carefully avoid the appearance of running the show. For its part Pakistan also has bad memories of dealing with the United States, and perceives a pro-India tilt in recent U.S. actions.⁶⁰ On the other hand, Pakistan seeks outside help in resolving the issue of Kashmir, a desire that stems from the realization that alone, it is unlikely to change the status quo.

Thus, a consistent nuanced approach is foundational for any U.S. action in South Asia, but what course should the U.S. take? To synthesize the NSS, the two uppermost aims of the U.S. with respect to India and Pakistan are defeating terrorism and ensuring nuclear peace and stability. Within the overall heading of nuclear stability, there are several key issues for the U.S. which will be examined here: ABM's, Confidence Building Measures (CBM's), nuclear control

and security, non-proliferation, and arms limitations. These issues are all interrelated, but will be treated sequentially. Defeating terrorism also ties in with nuclear stability in a major way, but will only be addressed tangentially in this analysis.

Underlying everything relating to South Asia is the problem of Kashmir. The significant risk of Kashmir becoming the ignition source for a nuclear exchange between India and Pakistan has already been demonstrated. Besides the physical danger, the issue of Kashmir has been a significant anchor for both countries. In India's case it has retarded the drive towards internationally recognized great power status.⁶¹ For Pakistan the drain has been more dramatic, leaving it economically and politically weak.⁶² The United States has stated clearly that it will not mediate the Kashmir issue: "the decision-makers are India and Pakistan, so there will not be a third chair at the table."⁶³ However, the U.S. should be a facilitator and bring India and Pakistan to the bargaining table, but it should not propose any specific solution, because of the polarization that would result should only one side support it.⁶⁴ The bottom line is that the U.S. should work to improve relations between India and Pakistan to the point that they will negotiate in good faith with each other. One additional note deserves mention. Kashmir must be compartmentalized. Previously, progress on any issue was dependent on a solution to the Kashmir issue according to Pakistan. This "Kashmir first" position has been voiced repeatedly by Pakistan over the years.⁶⁵ Decoupling Kashmir is key to building a workable dialogue. For example, India and China were able to improve relations, despite an ongoing territorial dispute where the parties have "agreed to disagree." The counterpoint is that the level of distrust and animosity between India and China is not nearly as deep as that between India and Pakistan.

THE SALE OF ABM'S TO INDIA

The most immediate decision that the United States faces concerns the sale of ABM's to India. Analysts who otherwise agree on most South Asia issues are divided over the wisdom of selling ABM's to India.⁶⁶ Given two roughly equally matched nuclear states, an effective and comprehensive ABM system that puts in question one side's ability to inflict unacceptable damage on the other is potentially destabilizing. Limited non-comprehensive ABM's, such as the system under consideration, can be stabilizing - by protecting a second-strike capability or other limited high-value areas, and defeating small scale or rogue actor attacks.⁶⁷ However, when applied against relatively small arsenals, such as Pakistan's, even limited coverage ABM's could be fairly comprehensive in their protection. Thus the impact on stability of an Indian ABM is unclear.

The U.S. has several courses of action available with respect to the sale of ABM's. It can approve or disapprove the sale in isolation, or it can approve the sale and take additional actions to increase stability. One should note that Russia is "waiting in the wings" with its own ABM systems that require no U.S. approval.⁶⁸ In addition, any course of action concerns not only the U.S., Israel and India, but also Pakistan, the only Muslim nuclear power, and even China.

The international criticism that the U.S. has faced since withdrawing from the ABM treaty is also significant. Assuming that there is no nuclear war with Pakistan, allowing India to proceed bolsters the U.S. case that self-defense is paramount and not destabilizing. Approval would also enhance cooperation and understanding between the U.S. and India and complete the turn-around since India since first supported, then adopted a muted stance on the U.S. withdrawal from the ABM treaty.⁶⁹ On a moral level, the U.S. has already declared that it is pursuing an ABM shield, thus making it very difficult to deny publicly the same to other countries, especially the world's largest democracy. However with the U.S. and India pursuing ABM's, China could decide to do the same or increase the pace of improvement of its offensive arsenal. This in turn could cause a cascade of force increases throughout Asia. Denying the sale of ABM's to India would damage the U.S. internationally by strongly reinforcing the existing perception of a unilateralist U.S. applying a double standard even in terms of defensive weapons. Additionally, ABM's are a boom market in international arms sales. By trying to block this sale the U.S. would be "swimming upstream" against a very strong current for relatively little gain. Finally, the line between anti-aircraft systems, which are seen as a normal part of a country's arsenal, and ABM systems, which had been a gray area outside the "normal" range of weaponry, is blurring to the point of invisibility. For these reasons, the U.S. should approve the ABM sales. However, to the uncertain impact of ABM's on deterrence, it would be prudent for the U.S. to take additional measures to increase stability.

Along with approving the sale of ABM's, the U.S. could sell or give Pakistan stabilizing weapons or support systems such as ABM's of their own, C² systems, or hardening technology. Allowing Pakistan the advanced technology that it badly wants would demonstrate evenhandedness and reassure a very nervous Pakistan of long-term U.S. interest in its well-being. Alternatively, the U.S. could aid both sides. Since their formation, both India and Pakistan have repeatedly misjudged, or lacked good intelligence on, the intentions or actions of the other side. During the Kargil conflict it even appears that the President of Pakistan was not aware of the increased readiness state of his nuclear forces.⁷⁰ Information sharing by the U.S. could significantly reduce fog and friction, but carries some security risk for the U.S.

The conclusion is that the U.S. should approve the sale of an ABM system to India, but should also take steps to increase stability, particularly through aid to Pakistan and perhaps intelligence sharing with both countries. Tying back into the war on terrorism however, aid to Pakistan should be contingent on non-proliferation and elimination of support for terrorist organizations.

CONFIDENCE BUILDING MEASURES

The building of trust is fundamental to any course of action in the region. There has been little formal communication between the two countries since 1999. As the Council on Foreign Relations reports: "... especially in the absence of India-Pakistan nuclear discussions and CBMs, the threat of any major conflict going nuclear remains real."⁷¹ Communications started to improve in late 2003, with dialogue between the heads of state and the resumption of formal negotiations on a variety of issues. But there is a long way to go.⁷² U.S. support of continued dialogue is considered vital, and U.S. pressure on both parties is partially credited for the improved communications.⁷³ India and Pakistan have proposed a range of CBMs, of which the least controversial are resuming sports competitions and transportation links.⁷⁴ A cooperative venture that the U.S. could effectively sponsor would involve the two militaries working side-by-side in third country peacekeeping efforts.

NUCLEAR CONTROL AND SECURITY

The political turmoil in both countries is another significant factor in any U.S. action. The Indian ruling party, the BJP, is ostensibly a Hindu-Nationalist party. Its actions, and those of some smaller, more extreme parties that are partners in the coalition government, have kept Hindu-Muslim tensions high within India.⁷⁵ More disturbing is the obvious fragility of the Pakistani government. The United States must consider potential parallels to Iran in the 1970's, where considerable U.S. high technology fell into the hands of an anti-U.S. government. One of the most serious concerns with respect to Pakistan's nuclear arsenal is theft by radical Islamist elements within the military. These elements could then use the weapons directly, pass them on, or sell them to a third party who could use them. Pakistan has publicly announced steps to counter this possibility.⁷⁶ President Musharraf is moving to establish secular/personal control of the government and military, but this goal remains elusive - there have been at least three attempts on his life by Islamic fundamentalists in the past two years.⁷⁷

Pakistan has a dismal record of democratic government stability. The current President came to power in a coup, ousting a democratically elected President. Moreover, Pakistan does not exercise complete sovereignty over all its territory. The military is vying to establish control

over the tribal areas along the border with Afghanistan. In truly open elections in the future, it is entirely possible that a Taliban-like government could be elected. Fundamentalist parties have already won control of one province, share power in another, and have directly contested the central government's authority.⁷⁸ Another danger, based on a demonstrated readiness to sell weapons technology, is that cash-strapped Pakistan may sell complete weapons to a third party.⁷⁹

For these reasons, the surety and security of both nuclear arsenals is a major issue of vital interest to all, and it is an area where the U.S. can make a direct contribution. The U.S. has a wealth of experience and knowledge on the safety and control of nuclear weapons such as permissive action links, fail-safes, and command and control procedures. Sharing this knowledge would benefit all parties since each side would have increased confidence in, and less ambiguity about, the other side's arsenal, thereby decreasing the chances of miscalculation.

NON-PROLIFERATION

To date, India has shown no tendency to proliferate its technology. Pakistan, however, appears to present a problem. Persistent reports suggest that Pakistan has exported at least some key technology and expertise and perhaps complete weapons to Korea, Iran and others.⁸⁰ In early 2004, facing increasing evidence of proliferation, Pakistan admitted that government scientists were responsible, but denied any official government complicity.⁸¹

Non-proliferation is a key area where the United States needs to take a firm stand. The Council on Foreign Relations recommends closely linking any aid beyond a base level to Pakistan's performance on key issues, with non-proliferation being the highest priority.⁸² The U.S. should support revising international nonproliferation agreements in a way that engages countries like India and Pakistan. The current NonProliferation Treaty and U.S. law penalize "new" nuclear countries in an effort to turn the clock back – there are no structures that would accept irreversibly nuclear countries and motivate them to "close the door behind them." As Mohamed El Baradei, the Director-General of the International Atomic Energy Agency, stated, referring to India, Pakistan and Israel, "ultimately... the nonproliferation regime will not survive without them."⁸³

NUCLEAR ARMS LIMITATION

The United States must do its utmost to prevent the spread of nuclear weapons technology. But once proliferation has taken place, it should not tilt against windmills.⁸⁴

— Henry Kissinger

Closely related to non-proliferation is arms limitation. There have been notable successes persuading countries such as Ukraine, Brazil, and South Africa to give up nuclear weapons and weapons programs. But, as stated recently in a major policy study, "...the nuclearization of South Asia is a fact that cannot be reversed."⁸⁵ After about a decade of playing Don Quixote, the U.S. apparently realized the futility of seeking to rollback the programs of India and Pakistan. This does not mean that the U.S. and the international community should abandon all efforts at limiting weapon development.

India and Pakistan have often stated the desire to avoid an arms race, at least in terms of numbers, but what about warhead technology? The proven level of weapon development of both countries is at the gun-type fission warhead. This design is relatively simple and can thus be reasonably expected to work the first time, even if untested. Other higher-yield nuclear weapon designs are significantly more complicated and must be tested to verify functionality and prove capability to the world. It is quite possible that India and Pakistan possess workable, tested, higher-yield warhead designs, but there is no conclusive evidence.⁸⁶

India and Pakistan should be encouraged to remain on this comfortable plateau rather than risk the climb to a higher level of development. By proving their ability to construct nuclear weapons, India and Pakistan achieved their basic goal to become acknowledged nuclear powers. Given the lack of testing subsequent to the 1998 tests, pronouncements by both sides that they will not resume testing, and the high diplomatic and economic costs of resuming testing, India and Pakistan are on a plateau of development - a quasi-stable equilibrium. This is an under-appreciated aspect of South Asian stability, and an area where the U.S., leading the international community, can exert substantial leverage. A relatively modest set of inducements could keep both countries on the plateau of simple fission weapons arsenals.

CONCLUSION

The distrust and divisions between India and Pakistan are very deep-seated, but not insurmountable. The danger of nuclear conflict between the South Asian rivals demands a subtle, nuanced approach from the U.S. that appreciates the interconnectedness of the major issues. In its approach to India and Pakistan, the single most important quality for effective U.S.

action is consistency. Both countries are very sensitive to oscillations in U.S. policy. The U.S. should manage the introduction of ABM's to the region in such a way that is not destabilizing. The U.S. can and should undertake a range of actions to increase stability, including technical aid, intelligence sharing, and encouraging increased dialogue and building of trust between India and Pakistan. With international help, the U.S. could induce India and Pakistan to remain on their current plateau of nuclear development, thus forgoing at least one aspect of a South Asian arms race. All these actions would increase nuclear stability in the region and thus benefit U.S. national security.

WORD COUNT= 5,957

ENDNOTES

¹ National Intelligence Council, *Global Trends 2015: A Dialogue About the Future with Nongovernment Experts, NIC 2000-02* (Washington, D.C., Central Intelligence Agency, 2000), 66.

² M.V. Ramana and A.H. Nayyar, "India, Pakistan and the Bomb," *Scientific American* (December, 2001), 72.

³ John Keay, *India, A History* (New York: Atlantic Monthly Press, 2000), xxii.

⁴ Stanley Wolpert, *A New History of India*, 5th ed. (Oxford: Oxford University Press, 1997), 348.

⁵ George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (Berkeley, California: University of California Press, 1999), 178.

⁶ Perkovich, 165, 186.

⁷ Perkovich, 1-3.

⁸ Map modified from Asia Political Map, produced by the Central Intelligence Agency, downloaded from the University of Texas Map Library; available from <http://www.lib.utexas.edu/maps/middle_east_and_asia/asia_ref802643_99.jpg>; Internet; accessed 3 February, 2004.

⁹ Owen Bennett Jones, *Pakistan : Eye of the Storm* (New Haven, Connecticut, Yale University Press, 2002), 200-201.

¹⁰ Robert G. Wirsing, *Kashmir: In the Shadow of Nuclear War* (Armonk, N.Y., M.E. Sharpe, 2003), 51-52.

¹¹ Perkovich, 404.

¹² Perkovich, 425-426.

¹³ Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (New York: Touchstone, 1995). Rhodes details the different designs and technical difficulties throughout the book.

¹⁴ Henry Kissinger, *White House Years* (Boston, Little, Brown and Company, 1979), 67.

¹⁵ Perkovich, 428: This question is based on the gap between claimed and measured yield. If the claimed yield were interpreted as the expected yield, a large difference between expected and actual yield would then exist. This disparity would, in turn, imply that the Indian devices failed, to some degree, to function as expected.

¹⁶ Stephan P. Cohen, *India: Emerging Power* (Washington, D.C., The Brookings Institution, 2001), 305; and Perkovich, 433, 489.

¹⁷ Jones, 192-194.

¹⁸ Perkovich, 433-434.

¹⁹ William. R. Walter, A. J. Rodgers, K. Mayeda, S. Myers, M. Pasyanos, and M. Denny, *Preliminary Regional Seismic Analysis of Nuclear Explosions and Earthquakes in Southwest Asia* (Lawrence Livermore National Laboratory, Livermore, CA, 1998) UCRL-JC-130745; available from <<http://www.llnl.gov/tid/lof/documents/pdf/903991.pdf>>; Internet; accessed 23 February, 2004.

²⁰ Jones, 187.

²¹ Jones, 200.

²² Peter R. Beckman et al., *The Nuclear Predicament: Nuclear Weapons in the Twenty-First Century* (Upper Saddle River, New Jersey, Prentice Hall, 2000), 219.

²³ Perkovich; Ashley J. Tellis, *India's Emerging Nuclear Posture: Between Recessed Deterrent and Ready Arsenal* (Santa Monica, California, RAND, 2001); Cohen, 157-197; and Jones, 187-222. Perkovich, and Tellis provide extensive accounts of Indian nuclear development and tangentially cover Pakistan, while Cohen and Jones cover primarily India and Pakistan respectively in less detail.

²⁴ Sumit Ganguly, *Conflict Unending: India-Pakistan Tensions since 1947* (New York, Columbia University Press, 2001), 83-85.

²⁵ Wirsing, 51.

²⁶ Ganguly, 116; see also *Asymmetric Conflict in South Asia: The Cause and Consequences of the 1999 Limited War in Kargil* Monterey, CA, May 29 - June 1, 2002, Conference Report; available from <http://www.ccc.nps.navy.mil/events/recent/may02Kargil_rpt.asp>; Internet; accessed 21 February, 2004.

²⁷ Ibid.

²⁸ Cohen, 155; and *Asymmetric Conflict in South Asia: The Cause and Consequences of the 1999 Limited War in Kargil*.

²⁹ Ganguly, 114-129; and *Asymmetric Conflict in South Asia: The Cause and Consequences of the 1999 Limited War in Kargil*. The total number of killed and wounded from both sides is independently estimated at several thousand vice official estimates in the hundreds.

³⁰ Wirsing, 51.

³¹ Map modified from Kashmir Map, produced by the Central Intelligence Agency, downloaded from the University of Texas Map Library; available from <http://www.lib.utexas.edu/maps/middle_east_and_asia/kashmir_disputed_2003.jpg>; Internet; accessed 3 February, 2004.

³² Ganguly, 121-123; and Wirsing, 37, 48.

³³ Ashley J. Tellis, "The Changing Political-Military Environment: South Asia," in MR-1315-AF, *The United States and Asia: Toward a new U.S. Strategy and Force Posture* (Santa Monica, California, RAND, 2001), 218-224. The flaws in the Pakistani planning conform well to a small-group decision-making coupled with a strong mix of groupthink blinding the decision makers to reality. In other words, a small group of like-minded decision makers probably planned the operation, with no outsider points of view, and with no objective gaming of the courses of action. See Glenn P. Hastedt, *American Foreign Policy: Past, Present, Future* (Upper Saddle River, N.J., Prentice-Hall, 2000), 245-248, for more on political decision-making.

³⁴ Ganguly, 121-123.

³⁵ Wirsing, 39.

³⁶ Jones, 55.

³⁷ National Security Advisory Board, *Draft Report of the National Security Advisory Board on Indian Nuclear Doctrine*; available from <http://www.indianembassy.org/policy/CTBT/nuclear_doctrine_aug_17_1999.html>; Internet; accessed 23 November 2003.

³⁸ "Strategic n-command to be in place next month," *The Hindu*, 24 May 2002, National Section; available from <<http://www.hinduonnet.com/thehindu/2002/05/24/stories/2002052407671100.htm>>; Internet; accessed 23 February, 2004.

³⁹ "Strategic command to decide on use of nukes," *The Tribune* (of India), 17 January 2003; available from <<http://www.tribuneindia.com/2003/20030117/main2.htm>>; Internet; accessed 23 February, 2004.

⁴⁰ "India and Pakistan: Nuclear Rivals," *Jane's Intelligence Digest* (September 12, 2003); available from <<http://www4.janes.com/>>; Internet; accessed 15 September 2003.

⁴¹ "Musharraf-Jamali review Pak nuke programme," *The Times of India*; available from <<http://timesofindia.indiatimes.com/cms.dll/articleshow?msid=45688900>>; Internet; accessed 1 September 2003.

⁴² Shishir Gupta, "When Sharon takes the stage, in the wings will be defense deals," *The Sunday Express* (India), 7 September 2003, A1.

⁴³ *Ibid.* The system under consideration is the Arrow 2 theater missile defense missile system.

⁴⁴ "Arrow TMD," *Federation of American Scientist* website; available from <<http://www.fas.org/spp/starwars/program/arrow.htm>>; Internet; accessed 15 October 2003.

⁴⁵ Julian Schofield, "Arms Races and War in the Indo-Pakistan Rivalry," 1947-1971, *Journal of South Asian and Middle Eastern Studies* Vol. XXVI, No. 3 (Spring 2003), 37.

⁴⁶ Ganguly, 121-123.

⁴⁷ John Pike, "Pakistan Missile Special Weapons Delivery Systems," *GlobalSecurity.org* website; available from <<http://www.globalsecurity.org/wmd/world/pakistan/missile.htm>>; Internet; accessed 12 October 2003.

⁴⁸ Zafar Iqbal Cheema, "Pakistan's Nuclear Use Doctrine and Command and Control," in *Planning the Unthinkable: How New Powers will use Nuclear, Biological, and Chemical Weapons* ed. Peter R. Lavoy, Scott D. Sagan, and James J. Wirtz, (Ithaca, New York, Cornell University Press, 2000), 180.

⁴⁹ Jones, 203-207.

⁵⁰ M.R. Srinivasan, "Indo-Pak nuclear asymmetry," *The Hindu*, 1 August 2001; available from <<http://www.hinduonnet.com/thehindu/2001/08/01/stories/05012524.htm>>; Internet; accessed 13 September 2003.

⁵¹ Gupta, A1.

⁵² Jones, 205.

⁵³ Beckman et al., 50.

⁵⁴ Beckman et al., 36-39.; and Paul Bracken, *Fire in the East: The Rise of Asian Military Power and the Second Nuclear Age* (New York, Perennial, An Imprint of HarperCollins, 1999), 157-158; Kissinger, *White House Years* 183-185; and Fred Kaplan, *The Wizards of Armageddon* (New York, Simon & Schuster, 1983), 134-139. For example: we now know that at different times during China's development of nuclear weapons, the U.S. and USSR both considered preemptive strikes on China. In addition to such potential state-to-state crises, it has also come to light that Command and Control were not nearly as strong as had been widely assumed.

⁵⁵ George W. Bush, *The National Security Strategy of the United States* (Washington, D.C.: The White House, September 2002), preface, 1-2.

⁵⁶ *Ibid*, 10, 27.

⁵⁷ Council on Foreign Relations and the Asia Society, *New Priorities in South Asia, U.S. Policy Toward India, Pakistan, and Afghanistan* October 2003; available from <<http://www.cfr.org/pdf/India-Southasia.pdf>>; Internet; accessed 22 November 2003, 1; Wirsing, 238-239; Cohen, 281-283; Jones, xiv; and Narottam Gaan and Sudhansubala Das, "Indo-US Relations: Towards a rapprochement: from post Cold War to post September 11," *India Quarterly* Vol LVIII, 3 & 4, (July-December 2002): 177-180. It should be noted that the equally wild oscillations on the parts of India and Pakistan are often overlooked.

⁵⁸ Gaan and Das, 179-180.

⁵⁹ Gaan and Das 177-180; Karnad, 724p.; and Rahul Bedi, "Deep-seated distrust mars US relations with India," *Jane's Intelligence Digest* (April 1, 2003); available from <<http://www4.janes.com/>>; Internet; accessed 15 September 2003; and Mohan Malik, "High Hopes: India's Response to U.S. Security Policies," *Asian Affairs: an American Review* (Summer, 2003), 105.

⁶⁰ J.C.K. Daly, "Pakistan – Musharraf rides the tiger," *Jane's Terrorism and Security Monitor* (May 01, 2003); available from <<http://www4.janes.com/>>; Internet; accessed 15 September 2003.

⁶¹ Council on Foreign Relations and the Asia Society, 15, 59.

⁶² Council on Foreign Relations and the Asia Society, 53.

⁶³ U.S. rejects call for mediation on Kashmir," *The Hindu*, 29 June 2003; available from <<http://www.thehindu.com/thehindu/2003/06/29/stories/2003062904590800.htm>>; Internet; accessed 1 September 2003.

⁶⁴ Teresta C. Schaffer, "Finding a Kashmir Settlement: The Burden of Leadership," *Strategic Forum* No. 199, June 2003 (Institute for National Strategic Studies, National Defense University, 2003) 1-4; Council on Foreign Relations and the Asia Society, 68; and "U.S. rejects call for mediation on Kashmir," *The Hindu*, 29 June 2003; available from <<http://www.thehindu.com/thehindu/2003/06/29/stories/2003062904590800.htm>>, Internet; accessed 1 September 2003.

⁶⁵ Council on Foreign Relations and the Asia Society, 59-63.

⁶⁶ Council on Foreign Relations and the Asia Society, 25.

⁶⁷ Beckman, 150-152.

⁶⁸ National Intelligence Council, *Transformations in Defense Markets and Industries; Russia, 2000*; available from <<http://www.cia.gov/nic/graphics/battilega/russia.pdf>>; Internet; accessed 18 Oct 2003.

⁶⁹ "India backs Bush's missile defense shield," *CNN.com*; available from <<http://www.cnn.com/2001/WORLD/asiapcf/south/05/11/india.armitage.pakistan.zhu>>; Internet; accessed 17 October 2003; and Vladimir Radyuhin, "Russia 'sways' India on ABM Treaty," *The Hindu*, 7 June 2001; available from <<http://www.hinduonnet.com/thehindu/2001/06/07/stories/0107000a.htm>>, Internet; accessed 1 October 2003; and Mohan Malik, 105.

⁷⁰ Bruce Riedel, "American Diplomacy and the 1999 Kargil Summit at Blair House," *Policy Paper Series 2002* (Philadelphia, Center for the Advanced study of India (CASI) website); available from <<http://www.sas.upenn.edu/casi/reports/RiedelPaper051302.pdf>>; Internet; accessed 7 Oct 2003.

⁷¹ Council on Foreign Relations and the Asia Society, 27.

⁷² John Lancaster, "India-Pakistan Pact Reflects a New Mood," *The Washington Post* Thursday, January 8, 2004, A17; and Juliette Terzieff, "Peace Finally shaping up as a possibility for Kashmir, Pakistan walks a fine line with concessions," *San Francisco Chronicle* Friday, January 23, 2004; available from <<http://www.sfgate.com/article.cgi?file=/chronicle/archive/2004/01/23/MNGLQ4GDCS1.DTL>>; Internet; accessed 30 January 2004.

⁷³ Lancaster, A17.

⁷⁴ B. Muralidhar Reddy, "Confused Response," *Frontline* Vol. 20, no. 23, November 08-21, 2003; available from <http://flonnet.com/fl2023/stories/20031121004602600.htm>; Internet; accessed 21 November 2003.

⁷⁵ N.J. Demerath III, "The Pitfalls of Pluralism, Talibanization and Saffronization in India," *Harvard International Review* (Winter): 2004, 16-19.

⁷⁶ Ayesha Siddiqa-Agha, "Pakistan tightens security of its nuclear arsenal," *Jane's Defense Weekly* (February 05, 2003); available from <http://www4.janes.com>; Internet; accessed 23 February 2004.

⁷⁷ Syed Saleem Shahzad, "Musharraf's army breaking ranks," *Asia Times Online*, 30 Aug 2003; available from http://www.atimes.com/atimes/South_Asia/EH30Df01.html; Internet; accessed 16 September 2003.

⁷⁸ Daly, 1.

⁷⁹ John Lancaster and Kamran Khan, "Pakistani Scientist Is Pardoned," *Washington Post* Friday, February 6, 2004, A1; and David E. Sanger and William J. Broad, "From Rogue Nuclear Programs, Web of Trails Leads to Pakistan," *New York Times* January 4, 2004; available from <http://www.nytimes.com/2004/01/04/international/04NUKE.html>; Internet: accessed 4 January, 2004; and Warrick, A17.

⁸⁰ Joby Warrick, A17.

⁸¹ Lancaster and Khan, A1.

⁸² Council on Foreign Relations and the Asia Society, 37.

⁸³ Arms Control Association, "Curbing Nuclear Proliferation, An Interview with Mohamed ElBaradei," November 2003; available from http://www.armscontrol.org/act/2003_11/ElBaradei_11.asp; Internet; accessed 19 November 2003.

⁸⁴ Henry A. Kissinger, *Does America Need a Foreign Policy?* (New York, N.Y.: Touchstone, 2001) 160.

⁸⁵ Council on Foreign Relations and the Asia Society, 9.

⁸⁶ Tellis, *India's Emerging Nuclear Posture*, 519-522.

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