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INDO-PAKISTANI NUCLEAR PROLIFERATION AND THE U.S. RESPONSE: A POLICY PROPOSAL

Mark Freeman

In 1947 India gained independence from Great Britain. As a condition of independence the nation of Pakistan was created in an effort to resolve a centuries-old religious and social conflict between India's Moslems and Hindus. Despite this effort, Moslem Pakistan and Hindu India have fought three separate wars since 1947, the most recent in 1971. Following the 1971 war, both nations embarked on the development of a nuclear weapons capability. Today, there is a general consensus that both nations are nuclear-capable. This consensus was voiced by Ashok Kapur of the University of Waterloo: "It must be recognized that the nuclearization of India and Pakistan has occurred; the capability to make one or more nuclear bombs exists, and has existed for some time" (Kapur in DeWitt 1987, 208). However, nuclear capability cannot be confused with deployment. States Kapur, "The nuclear posture and the nuclear activities of both countries are calculated to keep nuclear weapons options open, and yet not to develop and deploy nuclear arms. This adds up to the practice of nuclear ambiguity" (Kapur in DeWitt 1987, 208). Nuclear proliferation in South Asia is a serious problem. Even though India and Pakistan have probably neither developed nor deployed nuclear arsenals to date, there is no guarantee that the "practice of nuclear ambiguity" will persist indefinitely. If weapons are eventually deployed, the potential for nuclear holocaust in South Asia is frightening.

As a superpower and one of the leading nuclear weapons states, the United States has a responsibility to address the problem of Indo-
Pakistan nuclear proliferation. Indeed, as Douglas Makeig of the U.S. Department of Defense observes:

With the evolution of a quasi-alliance system that pits India and the Soviet Union against Pakistan, China, and the United States, and a regional arms race that could escalate to the nuclear level, the rivalry between India and Pakistan has taken on immense significance in the global security environment of the 1980s (1987, 271).

But in recent years, U.S. policy has either ignored or exacerbated the problem. American policy needs to be adjusted to better manage the problems of South Asian proliferation in the short term, with the goal of eliminating the threat of South Asian nuclear proliferation in the long term. Before an adjusted U.S. policy can be rationally proposed, it is necessary to discuss both the proliferation problem and past U.S. policy.

THE NUCLEAR CAPABILITIES OF INDIA AND PAKISTAN

Part of discussing the proliferation problem includes an analysis of the nuclear capabilities of India and Pakistan. As considered briefly above, both countries probably have the capability to develop and deploy nuclear weapons. It is important to describe these capabilities in more detail. Nuclear capability is a function of four different factors: access to fissile weapons material (either plutonium or enriched uranium), ability to produce and deploy a workable weapon, a capability to deliver the weapon (missiles, warplanes, or submarines), and the political will and power to exploit these capabilities.
India’s Nuclear Capabilities

India has significant access to fissile weapons material in its development of an extensive plutonium-extraction capability. Currently, there are four facilities capable of extracting weapons-grade plutonium from spent uranium fuel: one in Trombay, one in Tarapur, and two at Kalpakkam. Currently, these facilities have the capacity to reprocess 255 metric tons of spent fuel per year (Spector 1987, 97-8). More significant is that, since 1983, India’s Madras I reactor at Kalpakkam has provided a supply of spent fuel free from international regulation. This means that India can extract plutonium from Madras I spent fuel "without the risk of violating any international agreement" (Spector 1987, 85). Not including plutonium from the Madras I reactor, India has probably stockpiled approximately 300 kilograms of weapons grade plutonium since the inception of its nuclear program (Spector 1987, 85).

India clearly has the capability to produce and deploy a workable nuclear weapon. In 1974 India exploded what it called a "peaceful nuclear device." The bomb was similar to the U.S. atomic weapon dropped on Nagasaki in World War II. Since 1974, India’s nuclear production capabilities seem to have expanded. The Carnegie Endowment for International Peace concluded in 1984 that India "could make a thermonuclear device in three years" (Seth 1988, 718). The newest report from the Carnegie Endowment estimates that India has the available materials to produce twenty to fifty atom bombs of the type tested in 1974 (CSM 17 November 1988, 32). By 1991, India may be able to produce over 100 (Spector and Stahl 1888, 32). The 1984 Carnegie Endowment report predicts, "Expanded reprocessing capability, which is already
planned, and the introduction of heavy water power reactors in this decade and the next could give India a warhead potential of well over 1,000 by the turn of the century" (Seth 1988, 718). India has a broad array of delivery capabilities. There are a variety of Indian warplanes capable of delivering a nuclear bomb—the Canberra, the Jaguar/GR-1, the MiG 21, the MiG-23 BN, the Mirage 2000, and the SU-7BM. In all, India possesses over 270 of these aircraft (Spector 1987, 99). Although not intended for the delivery of nuclear weapons, India also possesses a nuclear powered submarine, which it leased from the Soviet Union in January 1987. In addition to the planes and submarine, India announced in March 1988 the development of a ballistic missile capable of delivering atomic weapons. Although India claims that the missile is only for conventional purposes, it is too inaccurate to be a useful conventional weapon. But armed "with a nuclear warhead it would be a serious weapon" (Economist 26 March 1988, 31-2).

Clearly, India has extensive technical capabilities to develop and deploy nuclear arms, but does it have the political will to exploit these capabilities? In 1980 former Indian Prime Minister Indira Ghandi said that India will "not hesitate from carrying out nuclear explosions...or whatever is necessary in the national interest (WP 14 March 1980, 1). Leonard Spector of the Carnegie Endowment for International Peace suggests that the reprocessing of unregulated Madras I spent fuel provides "strong evidence that, at a minimum, Rajiv Gandhi [India's current prime minister] is taking steps to ensure that India will have the option to [deploy nuclear weapons] rapidly if circumstances require" (1987, 86). Gandhi claimed in June 1985 that his country could deploy within "a few weeks or a few months (FBIS/SA 5 June 1985, E1). On August 8, 1985 the ruling Congress (I) party joined the right-wing opposition
in calling for a firm response to Pakistan's nuclear
program (FBIS/SA 8 August 1985, F2). K. Subrahmanyam, director of the Indian Institute for
Defence Studies and Analyses, argued in 1987 that
a nuclear Pakistan is inevitable, and so India should
move ahead with its own nuclear arsenal (Seth
1988, 720). Although the pressure to develop a
nuclear deterrent is strong, it has not yet had a
decisive effect on Indian nuclear policy. In fact,
S.P. Seth, director of the Strategic Planning,
Research, Information & Consultancy Service in
Australia, reminds that "it would be wrong to
assume that the nuclear hawks rule the roost in
India... India's anti-nuclear lobby is fairly strong and
articulate" (1988, 721).
While there is significant political will to maintain
a credible nuclear option in India, the full
exploitation of India's nuclear capability through
deployment will probably be forestalled, barring
significant changes in the South Asian security
environment. Probably the most significant influence
on this security environment for India is Pakistan's
nuclear ambitions.

Pakistan's Nuclear Capabilities

Pakistan's access to fissile weapon's material has
been more problematic. Because France terminated
assistance in the construction of the Chashma
reprocessing plant in 1978, Pakistan has generally
pursued a much more costly uranium enrichment
process to acquire weapons-grade material.
Furthermore, a de facto international nuclear
technology embargo has forced Pakistan to pursue
uranium enrichment technology covertly. In the past
decade Pakistan has been able to produce a
workable enrichment facility at Kahuta, East of
Islamabad (Spector 1987, 101). U.S. intelligence
sources claim that the Kahuta facility "has enriched
uranium to 90%, suitable for [atomic] weapons." There have also been reports of a second enrichment plant under construction at Golra (CSM 14 December 1987, 7). Overall, some estimates claim that the Kahuta facility could produce a maximum of forty-five kilograms of weapons grade uranium a year (Cranston 1984, S7901).

Even though most observers believe that Pakistan has produced weapons-grade uranium, some experts are skeptical. I.H. Usmani, the former chairman of Pakistan's Atomic Energy Commission, explains the basis for this skepticism:

It takes 7,000 centrifuges to work day and night for one year at velocity of 32,000 mph to produce 10 kg. of uranium-235 of 99.9% purity, required for producing one Hiroshima-type bomb. Even in Europe they have only been able to achieve enrichment of 2.7%... One day somebody is going to call our bluff (Seth 1988, 715).

Other experts concur. Dr. Raja Ramanna, former chairman of India's Atomic Energy Commission, does not "think Pakistan's existing nuclear infrastructure qualifies it to make an atom bomb." Dr. H.N. Sethna, Ramanna's predecessor, expressed a similar view in 1982 (Seth 1988, 715).

Nevertheless, even if Pakistan has failed to produce weapons-grade uranium, they may have recently developed a plutonium extraction capability. In 1980 Pakistan started construction of a clandestine reprocessing facility at Rawalpindi near the Pakistan Institute of Science and Technology. If the facility is operational, it could be producing approximately fifteen kilograms of weapons-grade plutonium a year (Seth 1988, 713).

Because Pakistan has never conducted a nuclear test, it is not entirely certain that it is able to use
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its weapons-grade uranium and plutonium in the production of a nuclear weapon. However, from 1982 to 1984 anonymous sources were quoted in the press claiming that China had provided Pakistan with nuclear design information, thus allowing Pakistan to develop a workable atomic weapon without testing (WP 28 February 1983, 1; U.S. Congress 1986, 17). But China has denied aiding the Pakistani atomic weapons program. Vice Premier Li Peng said in 1985 that nuclear cooperation with Pakistan "is and will be conducted for peaceful purposes only and not for not-peaceful purposes" (Porter in DeWitt 1987, 141). Meanwhile, a U.S. intelligence report in July 1985 indicated that Pakistan had successfully tested a triggering device necessary to the production of a workable atomic weapon (Spector 1987, 107).

Pakistani leaders seem to confirm these reports. Dr. A.Q. Khan, the head of Pakistan's nuclear program, was quoted in the March 1, 1987 Observer (London): "What the CIA has been saying about our possessing the bomb is correct and so is the speculation of some foreign newspapers." Dr. Khan and the Pakistani government later denied his statement (FEER 12 March 1987, 34). But in the same month, former Pakistani President Zia ul-Haq told Time, "You can virtually write today that Pakistan can build a bomb whenever it wishes. What is difficult about a bomb? Once you have acquired the technology, which Pakistan has, you can do whatever you like" (30 March 1987, 42). But these statements may simply be political posturing, not reality. Thus, a degree of uncertainty still surrounds Pakistani nuclear capability.

Notwithstanding this uncertainty, Spector concurs with most other experts that Pakistan "either possesses all of the components needed to manufacture one or several atom bombs or else remains just short of this goal" (Spector 1987, 101).
And the 1988 Carnegie Endowment report estimates that Pakistan currently possesses the "essentials for two to four atomic bombs" (CSM 17 November 1988, 32). Pakistan may be able to produce fifteen weapons by 1991 (Spector and Stahl 1988, 32). And according to a 1984 Center for Strategic and International Studies report, Pakistan's present estimated uranium enrichment capability could yield approximately thirty-six warheads by 2000 (Seth 1988, 714).

Unlike India's relatively diverse capabilities, Pakistan's current delivery capabilities are limited to warplanes. U.S.-supplied F-16s and French-supplied Mirage 5PA3s can both successfully carry nuclear bombs. Also, Pakistan's Mirage 3Es and Q-5As can be modified to carry nuclear weapons (Spector 1987, 123).

Until recently, the political will of Pakistan to exploit its nuclear capabilities has been rather uncertain. Pakistan refrained from significant public discussions concerning its nuclear intentions until late 1985. At a press-sponsored round-table discussion in November 1985 Mohammed Hanif Ranay, leader of Pakistan's opposition Musawat Party, stated, "India's expansionism will make it attack us sooner or later. The only way we can protect ourselves is by developing nuclear weapons" (Spector 1987, 107). The following month Tufail Mohammad, chief of Pakistan's fundamentalist Jamaat-i-Islami Party, called for the production of nuclear weapons (Spector 1987, 108). And in 1986 Dr. Khan published a paper that spoke favorably of a Pakistani nuclear deterrent (Khan 1986, 420-42). This is especially significant given Dr. Khan's position as the head of Pakistan's nuclear program.

Despite these statements, the late Prime Minister Junejo and the late President Zia ul-Haq both claimed that Pakistan did not intend to deploy nuclear weapons (WP 18 July 1986, 1).
But Junejo and Zia were both killed in an airplane explosion in August 1988. Since then, the center of political power in Pakistan has been obscured, complicating the analysis of Pakistani nuclear intentions. Following the assassination, Ghulam Ishaq Khan was appointed acting president. The seventy-three year old leader was once Zia’s finance minister and later the chairman of the Pakistani Senate. He has been involved in Pakistani politics for twenty years (Economist 20 August 1988, 27). Ishaq Khan seems to be rather powerful and experienced. It is not clear how he views the nuclear deployment issue, but his ties with Zia may indicate his preference for a continued policy of ambiguity.

Following general elections in November, Ishaq Khan appointed Benazir Bhutto to be Pakistan’s new Prime Minister on December 1, 1988. Bhutto’s nuclear intentions are equally unclear. Her father, Zulkiifar Ali Bhutto, initiated Pakistan’s nuclear weapons program in the early 1970s. He was later executed by the Zia regime, but Bhutto seemed to abandon her father’s political legacy following Zia’s death (CSM 18 November 1988, 36). This may indicate that she does not necessarily intend to further extend her father’s agenda, which included a strong commitment to nuclear weapons development. Furthermore, she stated in 1986 that Pakistan’s nuclear research program is infeasible and would have to be reassessed (Spector 1987, 110). Later the same year she told the Indian Express that if she was elected, she would abandon the policy of nuclear ambiguity, settling all doubts concerning the potential military use of Pakistan’s nuclear program (FBIS/SA 14 August 1986, F2). This may indicate her willingness to submit Pakistan’s nuclear facilities to IAEA regulation.

Even though the Pakistani political environment
has probably stabilized since Bhutto's appointment, there is still a strong potential for instability. Inside her Pakistani People's Party (PPP) Bhutto is confronted with a left-wing coalition that is "anti-American, anti-rich, and anti-army" (Economist 27 August 1988, 23). With significant pressures from the military to maintain good relations with the U.S. and their own positions of power, it will be difficult for Bhutto to satisfy the far left's agenda. At the same time her authority is challenged by the right-wing Islamic Democratic Alliance, who have vowed to challenge her appointment in the Pakistani courts (Economist 26 November 1988, 32). If Bhutto is unable to overcome these challenges, significant instability is not inconceivable as a broad array of interests remain unsatisfied. This instability may increase the role of the military in Pakistani political decisions. While the current military chief, Aslam Beg, is said "to be without political ambitions," observers suggest that "enough blood on the streets would bring the army in" (Economist 27 August 1988, 23). Surprisingly, a military takeover may decrease the political will of Pakistan to exploit its nuclear capabilities. Stephen Cohen of Berkeley University in his 1984 study of the Pakistani military has concluded that nuclear weapons are not generally attractive to Pakistan's military leadership (Cohen 1984, 155-60).

The nuclear capabilities of both India and Pakistan are cause for serious concern. Nevertheless, as previously discussed both nations are currently pursuing a policy of nuclear ambiguity where they remain at the nuclear threshold without actually deploying nuclear weapons. But it is clear that deployment cannot be forestalled indefinitely. Spector argues that "even if each side refrains from testing or assembling bombs, they will continue to build stocks of plutonium [or uranium], and internal pressure will grow with each new spat to move
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forward with delivery systems" (CSM 14 December 1987, 7). If deployment occurs, a nuclear South Asia will pose several serious problems. But even without deployment, there is still cause for concern.

THE IMPACT OF INDO-PAKISTANI NUCLEAR PROLIFERATION

There are basically three different effects of nuclear proliferation in South Asia: increased instability in the Indo-Pakistani rivalry, increased risk of nuclear proliferation beyond the region, and an increased pressure on the worldwide nuclear non-proliferation regime.

Impact on the Indo-Pakistani Rivalry

Nuclear proponents in Pakistan and India both argue that nuclear deployment would enhance military deterrence in South Asia, thus reducing the risk of war. Subrahmanyam, an Indian defense expert, argues, "History shows that the development of nuclear weapons capability among nations having an adversarial relationship has led to stability" (Seth 1988, 720). S.M. Zafar, secretary of former Prime Minister Junejo, added that the development of nuclear weapons will "stop all danger of war in this region just as the nuclear strength of the two superpowers has eliminated the danger of war between them since World War II" (Spector 1987, 107). But this historical argument for deterrence is invalid for several reasons.

Initially, there is a strategic problem. For nuclear deterrence to work, both sides must possess a credible retaliatory capability. If this capability exists, neither nation wants to launch nuclear weapons preemptively because there is little prospect of avoiding nuclear destruction from a retaliatory
strike. This condition is what Western strategists call MAD (Mutually Assured Destruction). Richard Haass of Harvard University has explained the absence of MAD in the Indo-Pakistani rivalry: "Although both India and Pakistan possess a number of advanced aircraft capable of traveling considerable range, and despite India's impressive strides in developing a space program, each country is far away from possessing a stable retaliatory capability" (Haass 1988, 115). The lack of MAD in South Asia is primarily due to the small size of the potential nuclear arsenals and the inability for either side to quickly detect a preemptive strike. In a crisis situation this strategic vulnerability would increase both Indian and Pakistani incentives to preemptively launch their nuclear arms because delaying a launch would risk utter destruction without any prospect for retaliation.

But even if MAD could be established in South Asia, there are still the problems of accidental launch and crisis miscalculation that the superpowers confront in their nuclear rivalry. Few would argue that spreading these problems to South Asia would be desirable. But beyond these common problems, the nature of the Indo-Pakistani rivalry significantly dilutes the utility of nuclear weapons in South Asia. First, the stakes in a typical Indo-Pakistani conflict are much higher than in a typical superpower conflict—national survival versus a particular regional concern. India or Pakistan might risk nuclear confrontation to maintain their national integrity. If the same interests were threatened in a superpower conflict, the Soviet Union or the United States might be expected to act similarly.

Second, India and Pakistan also share a common border. Consequently, "limited confrontations or low-level clashes could spill over quickly into vital national territory and threaten critical national interests, perhaps even survival (Dunn 1982, 70).
The pressure to use nuclear weapons would be great in this situation as Michael Brenner of the University of Pittsburgh explains: "In the atmosphere of a high stakes confrontation where ideology may be the driving force and where the nuclear balance is so easily tipped, there is a fair chance that the psychological balance will tilt towards use of nuclear weapons" (Brenner in DeWitt 1987, 60).

Finally, India and Pakistan share a legacy of direct conflict. They have fought three major wars since 1947. This legacy makes small crises more difficult to diffuse. And even though a major war has not been fought since 1971, India and Pakistan have not left the potential for armed conflict behind them. In January 1987 the two nations came precariously close to rekindling war. Haass chronicles this crisis:

A recent crisis occurred in early 1987, when a large Indian military exercise ("Operation Brass Tacks") in the border state of Rajasthan prompted a Pakistani mobilization. India may have sought to intimidate Pakistan for any number of reasons—to remind Islamabad of India’s regional primacy, to persuade Pakistan to terminate alleged support for Sikh terrorists, or simply to provide a foreign distraction for domestic political purposes. What is certain, though, is how events nearly slipped out of control, and a fourth South Asian war was narrowly avoided by last minute diplomacy in a mutual stand-down (Haass 1988, 112).

India and Pakistan clashed again in late September "at positions overlooking four mountain passes [in Northern Kashmir]." Observers called it "the biggest encounter since intermittent clashes began in 1984" (FEER 8 October 1987, 10). It may be only
a matter of time before one of these incidents develops into an all-out war. If nuclear weapons are available, a nuclear holocaust in South Asia is very possible.

Beyond traditional Indo-Pakistani rivalries, the very pursuit of nuclear capabilities might lead to war. As nuclear development proceeds, the two nations might be tempted to preemptively strike the other's nuclear facilities as Israel did in 1981 against Iraq. Some reports claim that Israel has approached India on three separate occasions to offer assistance in a joint attack against Pakistan's nuclear facilities (Bhatia 1988, 106). In late September 1985 rumors surfaced in Pakistan indicating that a preemptive strike had been considered by the Indian military during the administration of Indira Gandhi. However, the Indian government denied these rumors (FBIS/SA 6 November 1985, E1). In a 1984 interview with the International Herald Tribune, former Pakistani Foreign Minister Sahabzadeh Yaqub Khan warned that Islamabad "would have no alternative but to retaliate" if India attacked its nuclear facilities. Zalamay M. Khalizad of the Institute of War and Peace at Columbia University claimed that "an attack of this kind could set the stage for a larger Indo-Pakistani war" (Khalizad in Goldblat 1985a, 138). A 1985 verbal agreement between the two nations prohibiting preemptive strike against nuclear facilities might prevent this scenario. However, the agreement has not yet been formalized, so its usefulness is limited (Makeig 1987, 291). Clearly, the risk of war is high and probably increasing in South Asia.

If India and Pakistan again go to war, there is no guarantee that a nuclear conflict can be avoided. Probably most frightening is the potential for a broader nuclear war involving the superpowers. Haass suggests that "any nuclear conflict in South
Asia would bring not just devastation to the region but would raise the danger of a broader conflict involving the United States, the Soviet Union, and China" (Haass 1988, 116).

Impact on Extra-Regional Proliferation

Another problem with Indo-Pakistani nuclear proliferation is the potential spread of sensitive nuclear technology to other Third World nations. In general, an increasing number of emergent nuclear material or technology suppliers increases motives for countries pursuing nuclear capabilities to go ahead with weapons development. Stanley Ing of the Canadian Department of National Defense explains this general phenomenon:

Once a country has decided to develop a nuclear weapons programme, the increased number of exporters becomes an important factor. . . The availability of nuclear technology and fissile materials means that a country no longer has to spend years developing a nuclear technological infrastructure before proceeding with a nuclear weapons programme. . . Because the emergent suppliers do not export complete power reactors, and because the nuclear components they do export are easier to obtain, certain threshold countries may be persuaded to establish facilities dedicated solely to nuclear weapons development. Such a route could incur political costs, but this, too, may be acceptable in view of the financial savings and the perceived strategic importance of quickly acquiring nuclear capability (Ing in DeWitt 1987, 127-8).
This analysis may especially apply to the potential beneficiaries of Pakistani and Indian nuclear experience. Former President Zia declared in 1986, "It is [Pakistan's] right to obtain [nuclear] technology. And when we acquire this technology, the entire Islamic world will possess it with us" (FBIS/SA 19 March 1986, F1). But Seth argues that these types of statements from Pakistani officials are probably symbolic:

Whether or not Pakistan will make available its 'bomb' or nuclear technology to other Islamic countries is arguable, and even if Pakistan were willing to share the bomb, there are practical problems in terms of [political] divisions in the Islamic world in which Islamabad does not want to get involved (Seth 1988, 716).

While Seth's observation may be valid, Zia's statement nevertheless seems to fit well with Pakistan's 1986 nuclear cooperation agreements with Egypt and Iraq (FBIS/NA 9 December 1986, D4).

India could also be contributing to the further spread of nuclear weapons in the Middle East. Ing has documented India's status as an emergent nuclear supplier:

India is emerging as a potentially major nuclear supplier. As the first Third World country to invest significantly in nuclear energy, India is able to convert its experience in this area into an exportable commodity. India has gone on to conclude nuclear agreements with some Third World countries. Among these are countries which are in the midst of a war, or are located in a region of some instability. These include Iraq, Syria, and Libya (Ing in DeWitt 1987, 120-1).
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Given the increasing evidence of Israeli nuclear capabilities, the nuclear ambitions of these potential Middle Eastern beneficiaries are probably not entirely benign. If these nations were to obtain nuclear weapons capabilities, the risk of renewed Arab-Israeli conflict would increase drastically. If any of these nations were to deploy nuclear weapons, the result could be catastrophic given the volatile nature of the Arab-Israeli conflict. But the potential for the spread of nuclear capabilities from South Asia may extend beyond the Middle East.

Impact on the Overall Non-Proliferation Regime

Both India and Pakistan are non-signatories to the Nuclear Non-proliferation Treaty (NPT). This treaty established the first formal effort to regulate the spread of nuclear technology by creating the International Atomic Energy Agency (IAEA) to enforce the treaty's stipulations. Other efforts exist to regulate the spread of nuclear technology, including the Nuclear Suppliers Group (NSG). The NSG has formulated nuclear export guidelines adopted by the fifteen major nuclear supplier countries in 1977 (Council on Foreign Relations 1986, 18). While other near-nuclear countries such as Israel and South Africa contribute, India's and Pakistan's nonrecognition of the NPT and its potential disregard of the NSG contribute to the erosion of both nonproliferation measures.

Initially, their nonrecognition (as well as other nations' nonrecognition) of the NPT and continued pursuit of weapons capabilities could cause frustration among complying nations. If these conditions persist, frustrated NPT nations may eventually resign (Mohar in DeWitt 1987, 93-4). India's and Pakistan's status as emergent suppliers
may also undermine the NPT. Ing suggests:

It is still too early to predict whether the increased volume of nuclear transfers that is likely to remain beyond IAEA inspection will bring into question the legitimacy of the NPT/IAEA regime. However, one may begin to wonder about the relevance of a regime that is being partly circumvented by emergent suppliers which do not necessarily share the non-proliferation perspectives contained within the current regime (Ing in DeWitt 1987, 124).

If the NPT were significantly eroded, most would agree that the resulting global security environment would be less stable.

India's and Pakistan's status as emergent suppliers also undermines the NSG. Ing again explains:

Further increase in the market share of emergent suppliers also could have adverse effects on the policies and unity of the NSG. Co-ordination of policies within the NSG is already difficult, and the need to be more competitive as a result of more supplier alternatives could lead to a looser interpretation of suppliers' guidelines (1987, 125).

At the minimum, Ing argues that needed improvements of NSG guidelines could be postponed or abandoned (1987, 125).

Given these problems, it seems clear that nuclear proliferation in South Asia is a significant problem. What has the United States done to address the problem?
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U.S. NON-PROLIFERATION POLICIES IN SOUTH ASIA

Overall, U.S. policy has been ineffective in confronting the problem of South Asian proliferation. At times it has exacerbated the problem. The legacy of U.S. non-proliferation policy in South Asia can be analyzed in two different periods: pre-1979 policies and post-1979 policies.

Pre-1979 Policies

The problem of South Asian nuclear proliferation probably started in 1974 when India tested a nuclear device. Haass describes the U.S. response to this test as "perfunctory." And although U.S. naval presence in the Indian Ocean modestly expanded, most United States attention was focused on other problems, including "the final throes of war in Vietnam, detente in Europe, volatile conditions in the Middle East, and the impact of the oil price hike" (Haass 1988, 108). However, even if the United States had vigorously condemned the nuclear test in 1974, the influence on Indian policy probably would have been minor because of the Nixon administration's display of naval force during the 1971 Indo-Pakistani war. While the display was too insignificant to satisfy Pakistan, it was "enough to confirm American hostility for Indians" (Haass 1988, 108). The end result was a decreased ability to influence either India or Pakistan on any issue, including the pursuit of nuclear weapons.

Following the Indian nuclear test, Pakistan began seeking reprocessing technology from France. In 1976 President Gerald Ford's concern over Pakistan's nuclear intentions prompted him to send Secretary of State Henry Kissinger to Islamabad. Later, Secretary Kissinger went to Paris to convince the French to suspend reprocessing technology transfers
to Pakistan. In 1977 the French complied with the United State's request. To further underscore its concern, the Ford administration then cut off economic and military aid to Pakistan (Spector 1984, 74-81).

After Pakistan lost access to reprocessing technology, it started pursuing uranium enrichment technology. In 1979 the Carter administration publicly expressed concern over Pakistan's pursuit of enriched uranium. Assistant Secretary of State Thomas Pickering testified before a Senate committee that Pakistan's enrichment program was not consistent with its nuclear energy needs. He concluded, "We are concerned, therefore, that the Pakistani program is not peaceful but related to an effort to develop a nuclear-explosive capability" (U.S. Congress 1979, 10). The administration thereafter again suspended military and economic aid to Pakistan in compliance with the Symington Amendment of the 1978 Nuclear Non-proliferation Act.

It is difficult to assess the impact of U.S. policy on Pakistan's nuclear ambitions during this period. The aid suspensions may have had no effect. After the Ford administration's aid sanctions and France's suspension of technical aid for reprocessing technologies, Pakistan simply refocused its efforts into enrichment technologies. Pakistani political will to pursue nuclear capability also seemed to remain strong as Prime Minister Ali Bhutto said Pakistan would "eat grass" if necessary to equal India's nuclear capability (Haass 1988, 108-9). But on Christmas Day 1979 the Soviet Union invaded Afghanistan and the United States abandoned its hard line position against proliferation in South Asia. As a result, the aid sanctions approach was abandoned, making it unclear if the policy could have affected Pakistani decision-making given sufficient time. The Afghan invasion marked a
turning point in U.S. non-proliferation policy in South Asia.

Post-1979 Policies

Following the Afghan invasion, the Carter administration moved to restore aid to Pakistan. The administration's offer of $400 million was rejected by Zia, "suggesting that the United States had to offer much more to persuade him to provoke Moscow or rethink his nuclear weapons commitment" (Haass 1988, 109). Carter was later replaced by Reagan, who then sweetened the offer. In 1981 the Reagan administration extended a six-year $3.2 billion aid package in return for Pakistan's cooperation in U.S. security policy in Southwest Asia and the Persian Gulf. Pakistan was also granted a six-year exemption from the Symington Amendment (Spector 1987, 104).

But the situation in Afghanistan coupled with Pakistan's nuclear ambitions presented the United States with a policy dilemma. How could Soviet expansionism be checked without abandoning non-proliferation? Haass explains the Reagan administration's resolution of this dilemma:

The administration believed that denying aid to gain access to all nuclear facilities would prove futile. Moreover, the administration argued that a strong security relationship with the United States would provide Pakistan with an alternative means of gaining security while the United States, as the principal source of conventional weaponry, would gain leverage in the process. . . But nuclear non-proliferation competed with removing the Soviets from Afghanistan. And of the two, the latter was more important to the Reagan administration (Haass 1988, 109).

Even though less important, non-proliferation efforts did not cease entirely. In June 1984 U.S.
officials became aware that Pakistan was continuing to pursue nuclear capabilities, which included work on weapons design and covert acquisition of nuclear materials from abroad. However, resisting pressure from Congress, Reagan aides insisted that the renewal of aid sanctions was impossible given the Soviet presence in Afghanistan ("United States Security Interests in South Asia" 1984). Later the same month, three Pakistani nationals were indicted for trying to smuggle fifty high-speed nuclear weapons switches known as krytons. While the Pakistani government denied any complicity in the affair, it was later shown that the krytons were ordered by S.A. Butt, director of supply and procurement for the Pakistani Atomic Energy Commission (NYT 25 February 1985, 1). In response to rumors that China was aiding Pakistan’s nuclear program by offering weapon designs, the Reagan administration postponed for almost a year approval of a Sino-U.S. nuclear trade pact (NYT 22 June 1984, 1). And in September Reagan wrote a letter urging President Zia to abandon the pursuit of weapons capability. The letter suggested that U.S. aid would be terminated if weapons grade uranium was produced (WSJ 25 October 1984, 1). Foreign Minister Khan and President Zia both seemed willing to comply with the Reagan letter’s stipulations. Khan assured Reagan of this personally in a mid-November visit to Washington. And when Zia announced in early 1985 that enriched uranium had been produced at Kahuta, he was careful to stipulate that it was not weapons-grade (Spector 1987, 106).

Meanwhile, Congress began insisting that more efforts be made to dissuade Pakistan from pursuing weapons capability. In July 1985 Congress amended the aid package, requiring the President to certify that Pakistan did not possess a nuclear device before funds could be disbursed (Spector 1987, 106). But
Pakistan seemed to be undaunted. As described above, in the same month it was reported that Pakistan had tested a nuclear trigger. In August Pakistan reportedly attempted to buy flash X-ray cameras from the Hewlett-Packard company for use in non-explosive nuclear tests. The sale, however, was blocked by the U.S. government (Spector 1987, 107). Congress again tried to act in the summer of 1985 by passing the Solarz Amendment, which would terminate Pakistani aid if its covert efforts were not ceased. But the Reagan administration exercised discretion granted in another amendment, choosing not to apply the Solarz measure to the case of Pakistan (Spector 1987, 115).

Instead of applying the Solarz Amendment, the administration dispatched Undersecretary of State for Political Affairs Michael Armacost and National Security Council staff member Donald Fortier to South Asia. Their mission was to stall proliferation by encouraging an Indo-Pakistani regional initiative. But India spurned this effort, "claiming that Washington was attempting to avoid its responsibilities for halting the Pakistani nuclear program" (Spector 1987, 79).

Today, the United States seems to have abandoned these types of initiatives, depending on the aid incentives established in 1981 instead. In the spring of 1986 another aid package was negotiated with Pakistan on even more generous terms: $4.02 billion over six years to begin in October 1987. And in October 1986 the president certified the disbursement of the last installment of aid from the 1981 agreement. This seems to have been done in spite of intelligence reports that Pakistan had produced weapons-grade uranium (WP 4 November 1986, 1).

As the end of the 1981 aid package approached, the non-proliferation debate was again renewed on Capitol Hill in late 1987. And on July 10, 1987,
a Canadian citizen of Pakistani origin was arrested in Philadelphia for attempting to purchase and export twenty-five tons of maraging steel used in uranium enrichment processes. This seemed to alienate some members of Congress (Haass 1988, 114). Nevertheless, a new aid package was eventually approved by Congress in December. Before the aid was approved, Congress passed two nonbinding resolutions calling for Pakistan to submit its nuclear facilities to international regulation in order to qualify for further United States aid. These resolutions were never made law, however, and so they had no effect on U.S. policy. In the end, Congress approved the aid as negotiated by the administration in 1986. The Symington Amendment was once again waived for two and a half years, while a new stipulation was added providing for the automatic rescission of the waiver should India accept international regulation of its nuclear program (Haass 1988, 113). And the stipulation requiring presidential certification for aid disbursements was abandoned (FEER 24 December 1987, 24).

U.S. policy since 1981 has had little effect in curbing South Asian proliferation. As described above, Pakistan might currently be capable of assembling two to four nuclear weapons. India might be capable of assembling twenty to fifty. While possibly forestalling a Pakistani nuclear test, U.S. policy may have contributed to the further development of Pakistani capabilities. Spector explains:

U.S. law unambiguously specifies that aid will be terminated if Pakistan fabricates a complete nuclear weapon. Quite possibly, Pakistan will refrain from doing so, since the restriction would not, in any event, prevent Islamabad from obtaining a de facto nuclear deterrent by building all the necessary components and
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thereby remaining only "a screwdriver away" from nuclear arms. On the other hand, having seen the United States repeatedly back away from terminating assistance because of concerns over the Soviet presence in Afghanistan, Islamabad may reason that if it quietly violates this stricture, U.S. law will be amended to permit aid to continue just as the Symington Amendment was modified in 1981 for this purpose (Spector 1987 118).

While U.S. policy has failed to influence Pakistan's nuclear decisions, it has also increased insecurity among Indian decision-makers. India resents the extensive military aid given to Pakistan since 1981. Haass explains India's fear:

Indians resent U.S. military support for Pakistan even more. American explanations that the aid is provided in the context of Afghanistan and not the Indo-Pakistani rivalry carry little water in New Delhi; similar glosses in the past did not prevent U.S. arms from being used against Indian targets (Haass 1988, 111).

Among India's defense establishment, this resentment extends to insecurity. Indian Defense Minister K.C. Pant in an address before India's Parliament on April 27, 1987, denounced U.S. policy for ignoring Pakistan's search for nuclear capability. He further claimed that "linkages between the U.S., China, and Pakistan, with anti-Indian overtones, have become more and more pronounced" (Seth 1988, 712). These feelings of insecurity add to the pressures for an Indian bomb. Pant's address confirms this: "The emerging nuclear threat to us from Pakistan is forcing us to review our options. I am sure the House does not expect me to detail this option as
also our response which will be adequate to our perception of the threat" (Seth 1988, 712). Clearly, this statement is a thinly veiled reference to the nuclear option.

But even though India feels threatened over U.S. policy toward Pakistan, U.S.-Indo relations have still improved somewhat. After a long drought, the United States began to reevaluate India in 1985. Fred Ikle, then Undersecretary of Defense for Policy, stated that the emergence of India as a world power created an "exciting possibility that opens a new chapter in United States-Indian relations" (WP 4 May 1985, 1). Ikle seemed to be expressing the recognition of the National Security Council's 1984 National Security Decision Directive (NSDD) 147. NSDD 147 advised the U.S. foreign policy establishment to establish better relations with India. A year later a memorandum of understanding on technology transfer signed in 1984 was put into effect. Prime Minister Gandhi viewed the memorandum as an important indicator of improved U.S.-Indo relations (Mukerjee 1987, 601). In addition to the drastically increased industrial cooperation resulting from the memorandum, the United States and India have also pursued military cooperation.

While Gandhi told the U.S. press that American military supply was unreliable (WP 14 June 1985), New Delhi has nevertheless been receiving U.S. military sales since 1986, including its purchase of the GE 404 engine for its newly planned light combat aircraft (Haass 1988, 110). By early 1987 some Indian leaders had become more tolerant of the U.S.-Pakistani security arrangement. Writes Dilip Mukerjee, a long time observer of South Asian politics:

Though official Indian pronouncements continue to describe U.S. military commitments to
Pakistan as excessive, the tone has generally been less shrill... New Delhi may be ready to live with a U.S.-Pakistani security partnership provided Washington guards against destabilizing the regional military balance and extends help to India’s endeavor to keep up with advances in military technology (Mukerjee 1987, 609).

In October 1987 Gandhi visited Washington. This visit seemed to further allay Indian fears. Writes Seth, "Prime Minister Gandhi detected a distinct shift in the U.S. position on Pakistan's nuclear ambitions, and he reportedly was assured by President Reagan that the United States would take action against Pakistan if it went ahead with its nuclear weapons program" (Seth 1988, 725).

But these assurances seem to have been empty given the current United States aid agreement with Pakistan passed in 1987. The bill that authorizes the U.S.-Pakistani aid agreement also seems to discriminate against India. While exempting Pakistan from presidential certification as described above, it also includes a provision that "no country in South Asia may receive U.S. aid or buy sophisticated U.S. technology unless the president determines that is not producing weapons-grade material" (FEER 24 December 1987, 24). While exempting Pakistan from this stipulation, the bill is silent on India's status. To date, the law seems to have little effect on U.S. technical assistance to India. But reports indicated that "the move has angered Indian officials--including Prime Minister Rajiv Gandhi--as, for the first time, the bill would put the Indian and Pakistani nuclear programmes on a par and the onus on India to prevent nuclear proliferation in South Asia" (FEER 24 December 1987, 24). This renewed insensitivity seems to threaten improving U.S.-Indo relations. An April
1988 visit to New Delhi by U.S. Defense Secretary Frank Carlucci "gave little satisfaction to India on its concerns over Pakistan." In fact, Carlucci indicated that U.S. military assistance to Pakistan would continue unchanged despite the impending Soviet pull-out from Afghanistan (FEKR 21 April 1988, 36). This intention to continue providing military aid can probably be explained by skepticism over Soviet intentions in Afghanistan. But the continued emphasis on East-West security issues is undermining non-proliferation efforts in South Asia. The United States must recognize that there is little risk of Soviet expansion into the Persian Gulf and South Asia. Recognizing this should not be too difficult given the pullout of Soviet troops from Afghanistan in February 1989 following a peace agreement reached in Geneva on April 14, 1988. Also, the Soviets have given up any hope of maintaining the communist Najibullah regime after the pull-out, making the stability of this regime a non-issue in terms of the Geneva agreement (CSM 22 November 1988, 1). In fact, the Soviets have already begun building relations with the rebels. In October the Soviets extended $600 million of aid to help rebuild post-war Afghanistan (Economist 22 October 1988, 44). Also, prisoner exchange talks started in late November have broadened into wider talks on the post-pullout transfer of power (CSM 6 December 1988, 1). Clearly, the Soviets have accepted military defeat and do not intend to persist with the war. Hopefully, U.S. policymakers will be convinced that nuclear proliferation, not Soviet expansionism, is the real security problem in South Asia.
NUCLEAR PROLIFERATION NON-PROLIFERATION IN SOUTH ASIA: A NEW APPROACH FOR U.S. POLICY

As argued previously, the problems of South Asian proliferation are real and potentially severe. U.S. policy must be adjusted to more effectively address these problems. Initially, the policy needs to work toward preventing nuclear deployment. Next, the United States must work toward preventing proliferation beyond South Asia. Finally, regional arms control and disarmament should be promoted to prevent further development of Indo-Pakistani nuclear capabilities and the potential demise of the Non-Proliferation Treaty (NPT).

Preventing Nuclear Deployment

As highlighted frequently throughout this paper, neither India nor Pakistan have deployed nuclear weapons, even though both nations are probably weapons capable. Consequently, a reasonable short term goal for U.S. policy is to prevent deployment.

To achieve this goal, it is important to understand the motives as well as the disincentives for nuclear deployment in South Asia. The primary motives to deploy nuclear weapons in South Asia are security related: India's fears of Pakistani and Chinese hostility, and Pakistan's fears of Indian and Soviet hostility. The disincentives will be described below. To prevent nuclear deployment, U.S. policy must be designed to reduce the motives and enhance the disincentives of nuclear deployment in both India and Pakistan.

Reducing motives requires an improvement in the security environment of South Asia. The most direct way for the United States to enhance the security environment is through its military aid policies. The president should "exercise his discretionary authority to withhold from Pakistan at least selected advanced conventional weapons systems that are not essential for defending Pakistan's
Afghan border" (Haass 1988, 110). This would help to ease Indian fears of an overly armed Pakistan, thus reducing the risk for war. To a point, reductions in U.S. military aid to Pakistan may improve the security environment in South Asia. But these reductions would need to be balanced with Pakistani security perceptions. Pakistani fears must also be taken into account in U.S. military transfers to India. In general, all U.S. military aid and sales to South Asia should be evaluated to determine their effect on Indo-Pakistani security perceptions.

U.S. policy should also help India and Pakistan in their ongoing efforts to improve bilateral relations. After achieving a partial detente in the first half of the decade, Indo-Pakistani relations seem to again be souring. There have been no high-level talks between India and Pakistan since February 1987. Following the February meeting, Indian President Zail Singh referred to Pakistani support of Sikh terrorists in the Northeast Indian province of Punjab as a major obstacle to improved Indo-Pakistani relations (FEER 12 March 1987, 36). Since last year over two thousand people have been killed in stepped-up terrorist attacks following India's imposition of direct rule over Punjab. The Indian government also suspects Pakistan of supplying Sikh terrorists with sophisticated weaponry, including US machine guns and Stinger missiles intended for the Afghan resistance (FEER 14 April 1988, 36-7). These developments in Punjab seem to have soured Indo-Pakistani relations.

But India may be starting to recognize their own responsibility for the instability in Punjab. In September 1988 Gandhi visited Punjab in an unprecedented effort to reconcile differences with Punjabi Sikhs. During the trip he announced a new government investment package worth $500 million to Punjab. While the terrorists refuse to negotiate with the Indian government, Gandhi's visit may mark the beginning of a political settlement of
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Punjabi instability (Economist 24 September 1988, 41-2). Indeed, earlier in the year some factions of the Sikh terrorists seemed to indicate a willingness to reach a settlement with the Indian government (Economist 9 April 1988, 39). Progress in Punjab would undoubtedly have a positive effect on Indo-Pakistani relations. Besides Punjab, another recent development may serve to undermine Indo-Pakistani relations. On December 1, 1988, India expelled Pakistan's senior military attache, Z.I. Abasi, on charges of spying. This will undoubtedly hurt relations in the short term, but it may also have a more long term effect. One Western diplomat in Islamabad said, "This could stiffen resistance [to diplomatic overtures] within Pakistan's military. This will certainly not increase [Prime Minister Bhutto’s] range in dealing with the Army" (CSM 2 December 1988, 9). The newly appointed Bhutto could be effectively prevented from improving relations with India as she works to maintain support from the military.

Even though Indo-Pakistani relations seem to be souring, the United States can still use its influence to encourage the two nations to come to a better understanding. U.S. policy should also be designed to promote specific confidence building measures that enhance the Indo-Pakistani security environment. These might include agreements to "limit the size, number, and locale of military exercises, provide advance notification of exercises, and permit the exchange of observers. Demilitarized zones would also contribute to stability" (Haass 1988, 112). These types of measures would serve to avoid intermittent border clashes that threaten to ignite another Indo-Pakistani war. The promotion of confidence-building measures might also include encouraging the conclusion of a no-war pact and the signing of a nuclear non-aggression treaty agreed to in principle by Gandhi and Zia in 1985. A nuclear
non-aggression treaty would serve to decrease the risk of a military strike on nuclear facilities. All of these measures would have a significant influence in reducing the risk of war between India and Pakistan.

But Pakistan is not India's only security threat. India also feels threatened by China. The nations have been enemies since 1962, when they fought a war along the Tibetan border that India lost. But India and China have begun to improve their relations since 1980. John Garver of the Georgia Institute of Technology documents the "remarkable transformation" of Chinese policy toward India:

Beijing has explicitly acknowledged India's "big brother" role in South Asia, adopted a neutral position on the Kashmir issue, stopped supporting insurgencies within India, begun encouraging amity rather than enmity between India and its neighbors, and sought to expand bilateral Indian-Chinese relations while negotiating on the border question (Garver 1987, 1216).

India has also reevaluated its policy toward China. According to Nancy Jetly of the School of International Studies at Jawaharlal Nehru University, India is "exploring all avenues--political, diplomatic, and unofficial--to speed the border talks with China" (FEER 9 April 1987, 40). India also withheld public support for a Tibetan uprising in late 1987, resisting the temptation to encourage instability and create further problems for China (FEER 22 October 1987, 13). In November 1987 China and India met in New Delhi to discuss the border question and other issues, both sides agreeing "to avoid conflict and confrontation along their mutual border." In March 1988 they had laid the groundwork for a future settlement of the border issue. They also
agreed to meet again in late 1988 (FEER 9 June 1988, 31-2). Although the improvement in Sino-Indian relations is cause for great optimism, India's defense establishment remains skeptical. An April report to Parliament by the Indian Defense Ministry noted that "China was continuing to upgrade its logistics, communication network and military airfields in Tibet" (FEER 9 June 1988, 32).

In its bilateral relations with both nations, the United States should encourage China and India to continue their dialogue, also encouraging them to limit and eventually reduce military activities in the border region. To accomplish this, the United States must bolster its slipping influence with China. Over the past year, U.S. policy makers have expressed frustration over Chinese policy in Tibet and Chinese missile sales to North Korea and Iran. U.S. leaders are also nervous about growing Chinese ties with the Soviet Union (Economist 9 January 1988, 29). U.S. leaders need to be aware that pushing China on the Tibet and missile sales issues might decrease its influence on the Sino-Indian security equation, thus in the long term undermining its ability to enhance Indian security and reduce proliferation pressures in South Asia.

Just as Pakistan is not India's only security threat, India is not Pakistan's only security threat. Since the Afghan invasion, Pakistanis have feared Soviet expansionism into South Asia. While these fears have been drastically reduced since the Soviet pullout, Pakistan still feels uneasy. However, Soviet-Pakistani relations have improved somewhat over the past two years partly because of limited Soviet economic aid, which the Soviets have hinted will continue (Economist 16 April 1988, 39). Another concrete measure could be taken to allay Pakistani fears. This would be the establishment of a non-aggression pact between Russia and Pakistan.
Both the Soviet Union and Pakistan have expressed the desire for such an arrangement, but neither nation has taken action to formalize an agreement (Council on Foreign Relations 1986, 13). The United States could remind both nations of this option, encouraging the nations to sign a non-aggression pact. This measure would greatly reduce Pakistani fears, thus relieving a source of pressure to deploy nuclear weapons. The use of military aid and diplomatic influence described above is designed only to reduce the primary motive to deploy nuclear weapons: insecurity. U.S. policy also needs to be designed to emphasize disincentives to deployment. Fortunately, there are many strong disincentives. India realizes that deployment could lead to the chilling of Russian relations, the destruction of improving American relations, and the imposition of severe economic sanctions from the West (Spector 1987, 89). Pakistan realizes that they are incapable of competing with India in a nuclear arms race. They also fear a potentially adverse reaction from the Soviet Union. In June 1986 the Soviets warned Pakistan that its deployment of nuclear weapons would constitute a threat to Southern Russia to which Moscow "cannot be indifferent" (WP 15 July 1986, 1). Pakistan also fears the more definite prospect of an adverse American reaction translating into an elimination of military aid and an imposition of broader sanctions.

Again, the most direct way to enhance disincentives is through military aid. However, U.S. leaders should not consider renewing the pre-1979 aid sanctions approach to non-proliferation by applying the Symington or Solarz Amendments. Military aid needs to continue to be disbursed while a credible threat is established that sanctions will be applied if the pursuit of nuclear capabilities is not curtailed. Phillip Gummet of the University of Manchester explains how a country's military
bureaucracy can be influenced to forestall nuclear deployment:

Military forces are notorious for their reluctance to accept new technology, especially where this threatens existing missions or roles. There is also plenty of evidence from around the world of resistance by one branch of the armed forces to the acquisition by another of anything which may increase its relative status. Hence, military forces will not necessarily automatically and unanimously support a decision to acquire nuclear weapons... A continuous supply of advanced conventional arms could be offered, on condition that the recipient armed services played its part in delaying a decision to acquire [or deploy] nuclear weapons (Gummet in Simpson 1987, 145-6).

Today, this policy might have a significant effect on Pakistan’s nuclear ambitions, since the status of Pakistani armed forces has become increasingly tied to U.S. military aid and the military establishment has also become an important center of power in Pakistan.

Traditional aid embargoes are not the only way to institute aid sanctions. Fluctuating the amount of aid in relation to the pursuit of nuclear ambitions could offer a promising alternative to a complete aid embargo. Provision of aid does not need to be an either-or issue. For instance, with Pakistan a billion-dollar penalty could be levied for failure to halt uranium enrichment programs or a bonus could be offered for yielding the facilities to IAEA safeguards. Aid fluctuations could provide a way to exercise influence without sacrificing flexibility. These measures could have a decisive effect on Pakistan’s decision to deploy nuclear weapons.
Unfortunately, U.S. aid to India is too insignificant to have a decisive effect, but concerted multilateral efforts could prove to be quite effective. Initially, India has close ties with the Soviet Union, making superpower cooperation in South Asian non-proliferation policy quite attractive. Spector & Stahl suggest that the issue could be discussed at the next superpower summit (Spector and Stahl 1988, 33). A superpower agreement to combat proliferation in South Asia could consist of a division of labor where the United States would seek to influence its ally Pakistan, and the Soviets would seek to influence its ally India. The efforts could be coordinated to maximize influence, both sides agreeing to consistently apply sanctions and rewards. U.S.-Soviet cooperation could probably be a significant factor in managing proliferation in South Asia given that the deployment disincentives of both India and Pakistan include fear of superpower displeasure.

Multilateral cooperation to enhance deployment disincentives could also include efforts through the Nuclear Suppliers' Group (NSG). The United States should exercise its influence in the NSG to formulate a consensus concerning sanctions in the event India or Pakistan deploy weapons. This could be significant as the Council on Foreign Relations concludes, "The aggregate of all economic and military assistance provided to India by members of the NSG is significant enough to provide a potential multilateral disincentive to further proliferatory acts." (Council on Foreign Relations 1986, 18). NSG policy could also directly affect India's nuclear policies. Spector explains:

India remains dependent on external sources for one key commodity, heavy water, which is essential to the operation of most of its nuclear reactors, including the Dhrura and Madras plants that are central to India's
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nuclear-weapons capability... Tightened controls on nuclear supplies might have a greater impact on India's nuclear supplies than is generally believed (Spector 1987, 92-3).

Gummet suggests that "elements of the Indian bureaucratic and scientific elite have been prepared to promote 'Western' arguments in order to ensure a continuous supply of nuclear technology and materials" (Gummet in Simpson 1987, 145). Thus, just as the threat of U.S. aid sanctions could be used to influence the military bureaucracy in Pakistan, the threat of NSG sanctions might be used to influence the nuclear power bureaucracy in India as well as other centers of power. In the end, the influence generated by these two sanctions policies may be enough to forestall the decision to deploy nuclear weapons.

This influence might also be used to persuade India and Pakistan to pursue confidence-building measures specifically related to their nuclear programs. One of these measures is a near-nuclear weapons states' code of behavior. Suggested by M.J. Wilmhurst of the British delegation to the IAEA, it could consist of the following points:

1. All imported and indigenous nuclear plants and material would be placed under IAEA safeguards, with the exception of those specified plants and materials that are deemed essential to national security.
2. An undertaking would be given neither to manufacture nor to test a nuclear explosive device except under circumstances of a grave threat to national security.
3. A commitment would be made to adhere to the NPT as soon as obstacles based on questions of national security have been removed (Wilmhurst in Simpson and
If instituted, this agreement would preclude deployment while at the same time setting the basis for longer term solutions.

Of course, these policies might fail and India and Pakistan could deploy nuclear weapons anyway. If deployment does occur, U.S. policy should shift from prevention to management. Haass describes the appropriate measures of a management policy:

The United States would want to work with both Pakistan and India to promote arms control and to enhance their command and control systems to lessen the likelihood of accidental war. It could even selectively enhance nuclear capabilities to strengthen retaliatory potential and, thus, reinforce mutual deterrence (Haass 1988, 117).

But if the policies to prevent deployment are implemented by the United States, the management of an Indo-Pakistani nuclear deterrent can probably be avoided. But the prevention of deployment should not be the only goal of U.S. non-proliferation policy in South Asia. U.S. policy should also be designed to prevent extra-regional proliferation.

Preventing Proliferation
Beyond South Asia

The primary policy for preventing proliferation out of South Asia is broadening and improving the current NSG. Initially, as the Council on Foreign Relations concluded in 1986, the membership of the NSG needs to be broadened to include India and Pakistan (Council on Foreign Relations 1986, 18). As documented above, both India and Pakistan have
the potential to become significant nuclear suppliers. The United States needs to actively pursue expanding the membership of the present NSG. A new NSG should include all current and potential suppliers, including India and Pakistan. This should be a formal group that meets regularly to discuss nuclear export standards.

Besides expanding the NSG, its current export standards need to be reevaluated. To begin with, existing nuclear safeguards are not consistent among nuclear suppliers. While the United States' export standards are very strict, those of Canada and Western Europe are relatively lenient (Walker in Simpson and McGrew 1984, 97-9). These inconsistencies are complicated by a recession in the nuclear market that "places further pressures on supplier governments to relax their standards or at least to resist any upgrading thereof" (Moher in DeWitt 1987, 94). And the existing standards are not very restrictive to begin with. David Fischer and Paul Szasz of the Stockholm International Peace Research Institute describe the problems of current NSG guidelines, "They place no embargo on the export of the technologies that can be directly used to make nuclear explosives, enrichment and reprocessing. They do not require full scope IAEA safeguards in the importing country as a condition of supply" (Fischer and Szasz 1985, 103).

The United States should encourage the adoption of consistent standards within the NSG. These standards would include consistent criteria for the export of sensitive technologies and consistent criteria to assess when full scope safeguards are appropriate as a condition of export. At the United Nations the NSG should consult extensively with the IAEA and all members of the NPT through U.N. conferences and assemblies. All NPT states should have a chance to contribute to the formulation of NSG standards. This will help avoid perceptions that
NSG countries are formulating a nuclear technology monopoly. U.N. participation will also contribute to the access of relevant technologies for all nations seeking genuinely peaceful nuclear capabilities.

If the NSG is expanded to include Pakistan and India and strengthened to better limit the risk of weapons proliferation, the spread of nuclear weapons from South Asia will be a minor threat. But a complete South Asian non-proliferation policy must promote arms control and eventual disarmament in South Asia.

Promoting Arms Control and Disarmament in South Asia

Arms control in South Asia should be designed to maintain the nuclear status quo in South Asia. Spector & Stahl suggest three arms control measures designed to maintain the nuclear status quo:

1. A formal, reciprocal ban on nuclear tests, which could be renewed periodically.
2. Fixed duration, reciprocal inspections of key nuclear installations, to verify that nuclear materials are not being used for military purposes.

The first proposal seems particularly attractive to the South Asian situation. Pakistan has already proposed a regional test ban. It would be "highly advantageous to India since it would preserve India’s lead in this field while helping to constrain further Pakistani proliferation." The second measure could be open to periodic renewal, while preventing
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"additions to both countries’ de facto nuclear weapons stockpiles as long as it was in effect." The third measure could also freeze existing stockpiles "without necessitating on-site inspections, since whether a plant was shut down could probably be determined from satellite data or from agreed photoreconnaissance overflights or other cooperative measures" (Spector and Stahl 1988, 33).

These measures should be promoted by U.S. diplomats in New Delhi and Islamabad. The United States could also offer to help negotiate agreements, provide verification for the measures, or arrange for another more agreeable third party to assist India and Pakistan in their bilateral arms control efforts.

There are also multilateral efforts that would serve to freeze the nuclear status quo in South Asia. One of these efforts could be a multinational fuel cycle center (Fischer and Szasz 1985, 112). This would provide one spent fuel reprocessing plant for the region. And even though both Pakistan and India have built their own reprocessing and enrichment plants, the establishment and use of these facilities could still serve to freeze the stockpiling of plutonium and enriched uranium. In the long term the United States might increase the viability of this proposal by offering financial compensation for the Indian and Pakistani plants that would no longer be needed in the event of a viable regional reprocessing plan. Another multilateral approach might be a multinational spent fuel center. This would provide one facility for the region to store spent fuel (Fischer and Szasz 1985, 113). If established and used, this facility would eliminate the viability of plutonium reprocessing. Again, the United States could offer financial compensation to increase the proposal’s viability.

Beyond arms control is disarmament. One way to promote disarmament in South Asia is the establishment of a nuclear weapons free zone
(NWFZ). This would ban nuclear weapons from South Asia. So far, India has rejected Pakistan’s proposal for a NWFZ because it does not include China, who has intermediate range nuclear weapons stationed in Tibet (Jian in Goldblat 1985b, 97). To a large extent, a South Asian NWFZ depends on Sino-Indian relations. In addition to encouraging India and China to continue improving their relations, the United States could also encourage China to disarm along the Tibetan border. This would probably go far toward convincing India of the desirability of a NWFZ.

Probably the best disarmament measure in the long term is to integrate India and Pakistan into the international non-proliferation regime—the NPT and the IAEA. However, Pakistan will not join the NPT unless India does. And India has opposed the NPT since its inception. Ambassador Azim Husain presented India’s reasons for rejecting the NPT in his 1968 address to the United Nations following the treaty’s adoption. Rodney Jones of the Center for Strategic and International Studies provides a useful summary of the ambassador’s arguments (Jones in Goldblat 1985b, 104). First, India claimed that the treaty was discriminatory, justifying the possession of nuclear weapons for some states and condemning their possession for others. Second, the treaty does not establish mutual obligations between nuclear suppliers and consumers. Finally, China was not a party to the treaty, so India withheld its support to maintain its nuclear option against a potential nuclear-armed adversary. China also rejects the treaty on the grounds that it discriminates, justifying the possession of nuclear weapons by the superpowers while implicitly condemning the possession of weapons by other powers.

Given this reasoning, it seems that the onus of expanding the NPT into South Asia lies with superpower efforts at arms control and disarmament.
The U.S./Soviet agreement to eliminate intermediate-range nuclear forces (INF treaty) in December 1987 was a giant step toward legitimating the NPT for countries like India and China. Prime Minister Gandhi praised the INF treaty in the *Indian and Foreign Review*, calling it a "truly momentous development." Progress on Strategic Arms Reduction Talks (START) could also have a significant impact on South Asian non-proliferation. Gandhi indicated in October 1987 during his visit to Washington that "progress [towards NPT participation] might be possible in the context of superpower nuclear cutbacks" (*CSM* 14 December 1987, 7). START calls for a fifty percent reduction in the overall nuclear arsenals of the superpowers. In April 1988 the last difficulties were worked out in terms of weapons ceilings, making the agreement dependent on the signatures of president-elect George Bush and Soviet Premier Mikhail Gorbachev. The START agreement is virtually completed.

After the completion of START between the superpowers, its stipulations should be integrated into Article VI of the NPT. Also, a multilateral summit discussing the positive and negative points of the treaty could be held with all interested world nations. This internationalization of the START treaty could help further reduce perceptions that the NPT does not apply to the superpowers. These perceptions could be further reduced if subsequent superpower arms reductions were worked out in the context of the NPT. The end result of these measures could be an increased spirit of cooperation for world-wide disarmament.

U.S. policy must soon be adjusted to avoid further proliferation in South Asia. While some would say that the full nuclearization of South Asia is inevitable, there is reason to be optimistic that South Asian proliferation can be curbed. The Soviet pullout from Afghanistan, the appointment of Prime
Minister Bhutto in Pakistan and her desires for improved Indo-Pakistani relations, improved Sino-Indian relations, as well as giant steps being made toward superpower disarmament are all cause for hope that nuclear weapons will not be part of the Indo-Pakistani rivalry. But these developments will also require a proper U.S. response if their benefits are to be fully realized. If the United States allows military aid and sales to perpetuate insecurity in South Asia or somehow allows the disarmament process to be derailed, then the situation in South Asia could significantly deteriorate. And if this occurs, there are plenty of reasons to believe that the region will become the second victim of atomic holocaust in Asia.
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