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India-Pakistan Nuclear Tests and U.S. Response

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ABSTRACT

This report, which will be updated periodically, presents background and analysis of the nuclear tests conducted by India on May 11 and 13, 1998, and by Pakistan on May 28 and 30, 1998. The report explores the regional context of the tests, including the long-standing India-Pakistan rivalry and domestic considerations that may have contributed to the two nations' decisions to test, as well as ongoing U.S. nuclear nonproliferation efforts in South Asia. The report also examines the technical aspects of the tests and their effect on the global nuclear nonproliferation regime particularly the Comprehensive Test Ban Treaty. The final sections identify applicable U.S. sanctions under the Arms Export Control Act and other U.S. legislation, assess the implications for U.S. interests, and posit three broad policy options for the Administration and Congress, and take note of legislation relating to nuclear sanctions.

India-Pakistan Nuclear Tests and U.S. Response

Summary

On May 11 and 13, 1998, India conducted a total of five underground nuclear tests, breaking a 24-year self-imposed moratorium on nuclear testing. Pakistan followed claiming 5 tests on May 28, 1998, and an additional test on May 30. The Indian tests, which appear to have completely surprised the U.S. intelligence and policy community set off a world-wide storm of criticism. President Clinton announced, on May 13, 1998, that he was imposing economic and military sanctions mandated by Sec. 102 of the Arms Export Control Act (AECA.) The Administration applied the same sanctions to Pakistan on May 30.

Although the Indian government claimed concern about the "deteriorating security [and] nuclear environment," as its reason for testing, many observers believe that domestic political factors may have been responsible for at least the timing of the tests. The current Bharatiya Janata Party (BJP) government is a weak coalition of 13 disparate parties, in power only since late March, 1998. Many analysts judged that, by conducting nuclear tests, the BJP hoped to consolidate its power by rallying strong national pro-nuclear sentiment.

The claimed size and type of weapons tested by India may hold significant implications for its future intentions as well as for future actions of Pakistan and China. Many experts judge that the five Indian tests are unlikely to satisfy technical requirements for weapon development, while others think that India may have gathered enough data to preclude the necessity for further testing. Pakistan's tests of apparently simple fission devices appear more aimed at demonstrating the possession of a capability based on a weapon design that it reportedly acquired from China a decade or more ago. Both countries' nuclear tests appear to further complicate prospects for ratification of the Comprehensive Test Ban Treaty by the U.S. Senate.

The U.S. response to the nuclear tests thus far has centered on the imposition of mandatory sanctions under the AECA and other legislation. Specific sanctions include: termination of U.S. development assistance; termination of U.S. Government sales of defense articles and services; termination of foreign military financing; denial of credit, credit guarantees, or other financial assistance by the U.S. Government; opposition to loans or assistance by international financial institutions; prohibition on U.S. bank loans or credit to Indian and Pakistan; and prohibition on exports of "specific goods and technology."

U.S. options are limited by the evident determination of India and Pakistan to preserve and develop nuclear weapons capabilities. Policy options include: maintaining or broadening sanctions; providing the President with authority to waive current sanctions, in return for specific actions of restraint by India and Pakistan; and providing momentum to the nonproliferation process by concentrating on getting Pakistan to sign the CTBT first. The latter two approaches require legislation. P.L. 105-94, signed into law on July 14, 1998, exempts for one year AECA restrictions on financing for food and agricultural exports. In November, President Clinton eased some economic sanctions using one-year waiver authority given him by the Congress in October under the Omnibus Appropriations Act.

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Introduction

In May 1998, both India and Pakistan conducted unannounced nuclear tests, setting off a global storm of protest and criticism, and negating more than two decades of effort by the United States to prevent nuclear proliferation in South Asia. India's five tests — on May 11 and 13 — broke its self-imposed 24-year moratorium on nuclear testing and set the stage for Pakistan's tests. In the two-week interval between India and Pakistan's tests, the United States and other countries launched a vigorous — but ultimately unsuccessful — campaign to convince Pakistan not to follow India's lead. On May 28, Pakistan announced that it had conducted five nuclear tests, which it followed up with a single test on May 30.

Countries around the world joined the United States in expressing dismay and condemnation of India and Pakistan's nuclear tests, although the strength of their concrete actions has varied greatly. On May 13, President Clinton imposed wide-ranging sanctions on India, remarking that its surprise nuclear testing "recalls the very worst events of the 20th century." Noting that 149 nations have already signed the Comprehensive Test Ban Treaty (CTBT), the President called on India to define its greatness "in 21st-century terms, not in terms that everybody else has already decided to reject." On May 13, the U.S. Senate Subcommittee on Near Eastern and South Asian Affairs held hearings on India that had been originally intended to focus on growing ties and economic cooperation between the United States and India but instead became a forum for bipartisan condemnation of India's nuclear tests. (See CRS Issue Brief 93097, *U.S.-India Relations.)*

A number of nations joined the United States in imposing economic sanctions on India. On May 14, 1998, Japan announced it was suspending aid loans, reportedly worth nearly $1 billion, in addition to suspending $26 million in grant aid. Germany, Australia, the Netherlands, Sweden, and Denmark also announced economic sanctions on India of varying degrees of severity. The Europeans and Japanese also supported the United States in postponing consideration of pending World Bank loans for India

Amid fears by nonproliferation experts that India's tests would prompt testing by Pakistan and other countries, President Clinton dispatched a high-level team, headed by Deputy Secretary of State Strobe Talbott, to Pakistan to try to dissuade Islamabad from responding in kind. Acknowledging the pressures on the Pakistan government to test, President Clinton stated that refraining from testing, "would be a great act of statesmanship and restraint on their part." It was not clear what incentives the U.S. Officials intended to offer Pakistan, but settlement of the longstanding dispute over the nondelivery of F-16 fighter planes as a result of the cutoff of aid to Pakistan in 1990 was widely cited as one possibility. (See CRS Issue Brief 94041, *U.S.-Pakistan Relations*). In any event, what ever incentives the Administration may have offered, Pakistan tested on May 28.

Background

Both countries have long possessed the technology and materials to build nuclear weapons. India conducted its first, and only, previous nuclear test in May 1974 and since then has maintained ambiguity about the status of its nuclear program. Pakistan probably gained a nuclear weapons capability sometime in the 1980s. Prime Minister Nawaz Sharif declared that Pakistan could have tested years ago had it chosen to do so. India has consistently rejected as discriminatory the Nuclear Non-Proliferation Treaty (NPT) and the Comprehensive Test Ban Treaty (CTBT), calling instead for a global nuclear disarmament regime. Pakistan traditionally has maintained that it will only sign the CTBT and NPT when India does so.

Motivations and Timing

India. The original impetus for New Delhi's development of its nuclear option appears to have been its sense of strategic rivalry with China dramatized by India's 1962 defeat in a short border war, followed by China's first nuclear explosion in 1964. Three decades of chilly relations across a disputed border and China's expanding nuclear and missile capability reportedly served to confirm India's perception of a Chinese threat. Yet until the mid-1990s, India showed no urgency of intent to follow up on its 1974 explosion of a plutonium device underground. India's concerns about China have been further fueled by China's longtime support for Pakistan, including the supply of arms and nuclear and missile technology. India and Pakistan have fought three wars in the half-century since their independence. (See CRS Report 97-23, *India-Pakistan Nuclear and Missile Proliferation: Background, Status, and Issues for U.S. Policy.)*

In a May 12, 1998, letter to President Clinton and other world leaders, Indian Prime Minister Atal Behari Vajpayee listed concerns about the "deteriorating security [and] nuclear environment" — with oblique references to China and Pakistan — as the impetus for India's conducting the May 1998 nuclear tests.[1] Since 1993, India-China relations had been improving as a result of an agreement that called for a reduction of troops along their common border, talks on border demarcation, and an expansion of economic and cultural ties. In late April 1998, however, Indian Defense Minister George Fernandes made several statements in which he referred to China as "India's greatest threat." Fernandes alleged, among other things, that China had supplied Pakistan with technology for a medium-range missile tested by Pakistan in early April and that China had extended its military airfields in Tibet and established a "massive electronic surveillance system" in Burma's Coco Islands.

India's emphasis on the China threat as a rationale for its nuclear tests became diluted somewhat after Pakistan's blasts. Prime Minister Vajpayee told reporters on May 28, that rather than India forcing Pakistan's hand, it was Pakistan that "forced us to take the path of nuclear deterrence."[2] In his letter to Clinton, Vajpayee also alleged Pakistan's sponsorship of insurgencies in India's Punjab and Jammu and Kashmir

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[1] "Indian's Letter to Clinton on the Nuclear Testing," *New York Times,* May 13, 1998: A12.

[2] *Reuters,* May 28, 1998.

states over the past decade, saying "we have been the victim of unremitting terrorism and militancy." Pakistan claims only to provide moral and political support for the Kashmir rebellion.

Despite the rationale offered by Indian government officials for testing at this time, many analysts point to domestic political factors as a more likely immediate impetus. Prime Minister Vajpayee leads an unwieldy minority coalition government — comprising his own Bharatiya Janata Party (BJP), 12 smaller parties, and numerous independents — that came to power following the February-March 1998 parliamentary elections. Most of the coalition partners do not share the BJP's Hindu nationalist outlook and have their own locally-driven agendas. Since the election, Vajpayee has appeared to have had his hands full placating various powerful regional leaders and keeping the coalition intact. A previous BJP government (also headed by Vajpayee), which came to power following the 1996 parliamentary elections, fell after just 13 days when it was unable to attract sufficient coalition partners in order to pass a confidence vote. (See CRS Report 98-324, *India's 1998 Parliamentary Election Results.)*

The BJP has consistently pushed for India to test nuclear weapons and develop its nuclear and ballistic missile capability. The BJP coalition government's *National Agenda for Governance* (April 18, 1998), states: "To ensure the security, territorial integrity and unity of India we will take all necessary steps and exercise all available options. Towards that end we will re-evaluate the nuclear policy and exercise the option to induct nuclear weapons." (Indian government leaders, however, reportedly had assured U.S. officials, including Ambassador to the United Nations, Bill Richardson, during an April 1998 visit to India, that no changes in its nuclear policy were imminent.)[3]

In conducting nuclear tests, the BJP government clearly played the popular national prestige card — longstanding aspirations for major power status, which to many Indians means acceptance into the elite club of nations with recognized nuclear programs. Former Indian foreign secretary, Muchkund Dubey, stated the Indian case in 1994: "The bomb option is a currency of power that is critical to our survival as a strong nation."[4] In recent years, public opinion polls have shown a solid majority of Indians to favor nuclear testing, as further indicated by the euphoric atmosphere that swept India following its nuclear tests. The Congress Party (which ruled India for 45 of the past 50 years), as well as most other Indian political parties, soon backed the BJP decision to conduct nuclear tests. According to the *Indian Express*, the Congress Party appeared to back away from its original concerns — "why the tests now, what was the change in the country's threat perception, whether this marks the beginning of a weaponizing process in the country, and whether the BJP-led government had done its homework on the possible fallout on the nation's economy"

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[3] Steven Mufson, "Pakistan Weighs Response to India," *New York Times*, May 15, 1998: A29, A33.

[4] Raj Chengappa, "Nuclear Dilemma," *India Today* (New Delhi), April 30, 1994: 51.

— in order to provide an image of national solidarity.[5] These concerns, however, have resurfaced in the following weeks and months.

Pakistan. Pakistan's motivations were largely self-evident. In announcing the May 28 series of tests Prime Minister Nawaz Sharif described his decision as "inevitable," and declared "We have settled the account of the nuclear blasts by India."[6] At the same time, the quickness of Pakistan's rejoinder and the claimed number of tests suggest that preparations had long been under way. Pakistan has lived with a demonstrated Indian nuclear capability for more than twenty years, and has been aware since at least late 1995 that India's nuclear establishment was prepared to test within a short time after receiving the political go-ahead. Apart from concerns about the political costs of not testing, Pakistan may have been anxious to test in order to reassure itself that its weapons worked and to impress upon India (and others) the reality of Pakistan's nuclear capability.

In fact, the sequencing of the blasts suggests that both countries' scientists had only been waiting for a favorable political decision, while the political leaders of each country waited for their counterparts in the other to make the first move. Pakistan's leaders knew that they had the most to lose from going first, in terms of the international response. India had always shown little concern about international opinion, but previous Congress and coalition governments had nonetheless found reasons not to go forward. In this context, the reported decision by the Narasimha Rao government to back away from a test in late 1995, following strong U.S. diplomatic intervention tends to underscore the likely role of domestic political change as the balance-tipper. The decision of the BJP leadership in New Delhi created an overwhelming political compulsion in Pakistan to respond in kind, but also may have created the hope in Islamabad that its action would meet with a more sympathetic international reaction than otherwise would have been the case.

Post-Nuclear Tests Developments

U.S.-India-Pakistan Relations

Clinton Administration Initiatives. In late 1997, the Clinton Administration had begun a "strategic dialogue" with India and Pakistan on a range of issues — particularly nuclear and economic. President Clinton met with both Pakistan Prime Minister Nawaz Sharif and India's then-Prime Minister I.K. Gujral at the United Nations in New York. The meetings were followed by a series of visits to the subcontinent by U.S. cabinet and other high-level officials, including Secretary of State Madeleine Albright, who visited India and Pakistan in November 1997. In the aftermath of the nuclear tests, Deputy Secretary of State Strobe Talbott began a series of meetings with high-level Indian and Pakistani officials between July and November 1998. The closely-held — and ongoing — discussions reportedly cover nuclear

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[5]Vijay Simha, "Cong too sings patriotic tune on nuke tests," *Indian Express*, May 15, 1998.

[6] Televised address to the nation, May 28, 1998.

proliferation, the Comprehensive Test Ban Treaty (CTBT), the Fissile Material Cut-off Treaty (FMCT), confidence-building measures, Kashmir, and sanctions resulting from the Indian and Pakistani nuclear tests.

Sanctions imposed on both India and Pakistan are a major issue in the U.S. talks with both countries. On June 18, 1998, the State Department released a fact sheet outlining U.S. sanctions on India and Pakistan, as well as the goals of the sanctions, stating: "In imposing these sanctions, we seek: to send a strong message to would-be nuclear testers; to have maximum influence on Indian and Pakistani behavior; to target the governments, rather than the people; and to minimize the damage to other U.S. interests. Our goals are that India and Pakistan: halt further nuclear testing; sign the Comprehensive Test Ban Treaty (CTBT) immediately and without conditions; not deploy or test missiles or nuclear weapons; cooperate in fissile material cut-off treaty (FMCT) negotiations in Geneva; maintain and formalize restraints on sharing sensitive goods and technologies with other countries; and reduce bilateral tensions, including Kashmir."[7]

There have been indications of progress toward realization of some of these goals, including cooperation on the FMCT and the CTBT. Both India and Pakistan agreed in late July to participate in negotiations on the FMCT. Pakistan's decision reportedly was tied to a Clinton Administration announcement, on July 21, that it would abstain from blocking aid to Pakistan by the International Monetary Fund (IMF).[8] On August 11, the Conference on Disarmament in Geneva announced that it had reached a consensus on establishment of an ad hoc committee to negotiate the final form of the treaty to ban production of fissile materials — highly-enriched uranium and plutonium — for military purposes. Although Pakistan has agreed to take part in the FMCT negotiations, it will likely be reluctant to sign a treaty that freezes the size of fissile material stockpiles at current levels. Pakistan's stockpile is estimated at about one-eighth the size of India's.

U.S. efforts to mobilize international pressure following the South Asian nuclear tests resulted in strong resolutions by the UN Security Council and the Group of Eight (G-8) urging India and Pakistan to sign the CTBT. Also, in a joint statement on July 23, the Russian and Chinese foreign ministers agreed to press India and Pakistan to sign the CTBT and the NPT.[9] Although Japan announced on August 6 that it will vote to ease economic sanctions against Pakistan by the IMF — in return for assurances not to transfer nuclear technology or material to any other country — Tokyo reportedly will require Islamabad's signature on the CTBT as a precondition for resuming aid.[10] Although Pakistani cabinet and defense leaders stated that the country would not sign the CTBT "under coercion," the Pakistan parliament debated

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[7] "Fact Sheet: India and Pakistan Sanctions," *USIS Washington File*, June 18, 1998.

[8] "India's decision to talk on FMCT hailed by U.S.,"*Indian Express*, July 22, 1998; "Banning fissile material output: Pakistan agrees to hold talks on treaty," *Dawn* (Karachi), July 31, 1998.

[9] "China and Russia underscore pact on South Asia,"*Dawn*, July 24, 1998.

[10] "Japan to back Pakistan at IMF," *Dawn*, August 7, 1998.

the issue in mid-September.[11] Many observers believe that Pakistan will likely sign the CTBT if sanctions are eased and they are able to reach an agreement with the International Monetary Fund (IMF) on a loan package to address their precarious financial situation, which includes $32 billion in foreign debt.

That India is rethinking its former objections to the CTBT became apparent in a Parliamentary debate on foreign policy in early August 1998. Prime Minister Vajpayee stated in the debate: "We can maintain the credibility of our nuclear deterrent in the future without testing. India remains committed to this dialogue with a view to arriving at a decision regarding adherence to the CTBT."[12]

In speeches before the September meeting of the UN General Assembly, India and Pakistan announced that they intend to sign the Comprehensive Test Ban Treaty (CTBT) before September 1999. Pakistani Prime Minister Nawaz Sharif stated, on September 23, that Pakistan "will adhere to the CTBT," but noted that he expected that sanctions and other economic restrictions imposed after the nuclear tests would be removed. Indian Prime Minister Atal Behari Vajpayee told the General Assembly on September 24 that India was prepared to bring the CTBT "discussions to a successful conclusion" and sign the treaty. Vajpayee also noted that, following India's nuclear tests, it had announced a voluntary moratorium on testing, and that in doing so, "India has already accepted the basic obligation of the CTBT."[13]

On November 7, 1998, the White House announced that President Clinton had decided to ease sanctions against India and Pakistan "in response to positive steps both countries have taken to address our nonproliferation concerns following their nuclear tests in May." Congress gave the President authority to waive some nuclear sanctions on India and Pakistan under the Brownback amendment (sponsored by Senator Sam Brownback), which was signed into law on October 21, as part of the Omnibus Appropriations Act. The President's action restored the Export-Import Bank, Overseas Private Investment Corporation (OPIC), and Trade and Development Agency (TDA) programs in India and Pakistan, and lifted restrictions on the activities of U.S. banks in India and Pakistan. Also restored were International Military Education and Training (IMET) programs with both countries. Taking note of the precarious state of the Pakistan economy the President also "decided that the United States will work closely with our allies to permit lending from the multilateral development banks as necessary to support an agreement between Pakistan and the IMF," contingent on Pakistan reaching agreement on a credible reform program.[14] Pakistan Prime Minister Nawaz Sharif has been invited to the White House in early December for further bilateral discussions.

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[11] Andrew Hill, "Pakistan parliament to debate nuke test ban treaty," *Reuters,* September 9, 1998.

[12] Sanjeev Miglani, *Reuters,* "India says committed to N-test ban talks," August 4, 1998.

[13] Judy Aita, "U.S. Praises steps by India, Pakistan toward signing CTBT," *USIS Washington File,* September 24, 1998; John M. Goshko, "India ready to sign nuclear treaty ban," *Washington Post,* September 25, 1998.

[14] "Text: President Clinton eases sanctions on India and Pakistan," *USIS Washington File,* November 10, 1998.

Ongoing U.S.-India-Pakistan Talks. In a speech at the Brookings Institution on November 12, 1998, Deputy Secretary of State Strobe Talbott gave a progress report on the half-dozen rounds of talks he has held since July both with India's Deputy Chairman of the Planning Commission Jaswant Singh and with Pakistan's Foreign Secretary Shamshad Ahmad. Talbott stated that the three goals of these talks were: "1) preventing an escalation of nuclear and missile competition in the region; 2) strengthening the global nonproliferation regime; and 3) promoting a dialogue between India and Pakistan on the long-term improvement of their relations, including on the subject of Kashmir."[15]

Talbott further noted the continuing U.S. commitment to the long-range goal of universal adherence to the Nuclear Nonproliferation Treaty, stating: "We do not, and will not, concede, even by implication, that India and Pakistan have established themselves as nuclear weapons states under the NPT." He noted, however, the U.S. recognition that progress toward that goal "must be based on India's and Pakistan's conceptions of their own national interests." Talbott outlined five steps the United States is urging India and Pakistan to take to avoid "a destabilizing nuclear and missile competition" and reduce tensions in South Asia:

- Sign and ratify the CTBT.
- Halt all production of fissile material.
- Adopt a package of constraints on development, flight testing, and storage of missiles, and basing of nuclear-capable aircraft.
- "Tighten export controls on sensitive materials and technologies that could be used in the development of weapons of mass destruction."
- Conduct "direct, high-level, frequent and, above all, productive" bilateral dialogue.

Talbott stated the strong U.S. interest in returning to the task of "developing the kind of broad-gauge, forward-looking bilateral relationships with these two countries" that had been underway prior to the May nuclear tests.

Regional Developments

India-Pakistan Talks. Caught in the glare of the nuclear proliferation spotlight, India and Pakistan have come under strong international pressure to patch up their half-century-old quarrel over Kashmir and refocus their energy on the economic and social progress of their countries. Unfortunately, the new nuclear realities have not made the task any easier. On July 29, Prime Minister Vajpayee and Prime Minister Sharif met on the sidelines of the South Asian Association for Regional Cooperation (SAARC) summit in Colombo. The brief talks reportedly were cool; and subsequent discussions at Colombo by the two countries' foreign secretaries — intended to establish modalities for future talks — deteriorated rapidly into rhetoric and posturing. India reportedly described Islamabad's "obsessive focus" on Kashmir as "neurotic," while Pakistan stated that New Delhi's "rigid and inflexible" stand on Kashmir was at the "heart of the problem."[16] Despite this inauspicious

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[15] "U.S. Diplomacy in South Asia: A Progress Report," Speech given by Deputy Secretary of State Strobe Talbott at the Brookings Institution, November 12, 1998.

[16] Nirupama Subramanian, "Three rounds later, it's back to square one," *Indian Express,* (continued...)

beginning, Indian and Pakistani diplomats met in Durban at the Nonaligned Movement summit in late August to discuss restarting foreign secretary talks.

Following a meeting betweenVajpayee and Sharif at the United Nations on September 24, the two prime ministers announced that India and Pakistan would resume stalled foreign secretary talks in Islamabad from October 15-18. Vajpayee and Sharif also agreed to stop the firing along the line of control (LOC) in Kashmir; begin bus service between New Delhi and Lahore; relax rules governing issuance of visas; and build a new road/rail link between the two countries. In the October talks, the foreign secretaries reportedly discussed the major issues of peace and security, including confidence-building measures, and Jammu and Kashmir. No substantive agreements were reached other than to continue foreign secretary talks in New Delhi in early February 1999.[17]

Other key issues were taken up in a series of talks held between senior-level Indian and Pakistani officials in New Delhi in early November. The week-long discussions covered longstanding bilateral issues, including: the Siachen Glacier military standoff; the Sir Creek maritime boundary dispute; the Wuller Barrage/Tulbul Navigation Project dispute over sharing of the Jhelum River waters; terrorism and drug trafficking; economic and commercial cooperation; and promotion of friendly exchanges in various fields. Most of the discussions concluded with a joint statement to the effect that talks had been held in a frank and cordial atmosphere in which the two sides stated their respective positions and that the only agreement reached was to continue discussions during the next round of the dialogue process. Among the few glimmers of hope to come out of the recent India-Pakistan dialogues are the release by each side of about 150 detained fisherman and progress toward launching bus service between New Delhi and Lahore.[18]

Kashmir Developments. In late July and early August 1998, immediately following the SAARC talks in Colombo, cross-border firing by Indian and Pakistan troops, who face each other along the 500-mile line of control (LOC) that divides Kashmir, increased significantly. Although small arms and artillery fire are common along the LOC, about 100 people — mostly civilians — were killed by sniper fire and mortar rounds between July 28 and August 5. Homes and villages on both sides of the line were destroyed, and thousands of people were forced to flee the border area and move to refugee camps.[19] Although cross-border firing along the LOC is a near-

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August 1, 1998.

[17] "'New chapter' opened in Indo-Pak ties: Vajpayee," *Indian Express*, September 24, 1998; "Text of joint press statement," *Dawn*, October 19, 1998.

[18] "Sir Creek talks fail, Pak for arbitration," *Indian Express*, November 10, 1998; "No headway in Delhi talks over militancy," *Dawn*, November 13, 1998; Sanjeev Miglani, "India, Pakistan draw blank in boundary talks," *Reuters*, November 9, 1998; Kamal Siddiqi, "Bus to Lahore meets a dead-end on border," *Indian Express*, November 9, 1998; Sunil Kataria,"India, Pakistan discuss culture to improve ties, *Reuters*, November 13, 1998.

[19] Ben Barber, "Sparking the fuse of nuclear war?" *Washington Times*, August 5, 1998:A1, (continued...)

daily occurrence that reaches its peak in the summer, the recent barrage was considered to be unusually intense and viewed by many observers as related to increased tension in the aftermath of the India-Pakistan nuclear tests. Moreover, heavy firing across the LOC continued into November, despite reported verbal agreements by the Indian and Pakistani prime ministers to call a halt to it.[20]

There also has been an increase in attacks on the Hindu pandit community, reportedly by Muslim separatists, in India's Jammu and Kashmir state and neighboring Himachal Pradesh state. On July 28, 18 Hindu civilians were killed in two villages in Jammu and Kashmir, reportedly in retaliation for the shooting of alleged Muslim militants by Indian soldiers. On August 3, 34 Hindu construction workers were killed in two remote camps in Himachal Pradesh near the border with Jammu and Kashmir. The following day, 19 Muslim villagers were killed in Jammu and Kashmir in what appeared to be an internal clash between militant groups.[21] Fighting between militants and Indian security forces also continued apace.

Domestic Economic-Political Developments.

India. Although less affected than Pakistan by the economic sanctions resulting from its nuclear tests, India has suffered a serious loss of investor confidence as well as a precipitous decline in the value of the rupee. Other factors in India's economic decline include the Asian financial crisis and the lack of commitment to economic reform by the eight-month-old Bharatiya Janata Party (BJP) government. On the political front, the BJP continues to limp along from crisis to crisis, brought on mostly by problems within the ruling coalition. Leaders of several coalition parties have threatened to withdraw support for the BJP government over particular issues of interest to the regionally-based parties. So far, the Congress Party has resisted the temptation to bring a no-confidence vote against the BJP government for fear of landing in the same precarious situation as the BJP.

Pakistan. A much smaller economy and already suffering the effects of years of financial mismanagement, Pakistan is more vulnerable than India to economic sanctions. Serious concern that Pakistan might default on its $32 billion in foreign debt prompted the United States to announce, on July 21, that it would not oppose any IMF loans for Pakistan. Between August and November, IMF teams and Pakistani officials reportedly have worked to hammer out the details and requirements for an economic rescue package. Some observers question, however, whether the Nawaz Sharif government will have the political will to commit to the economic reforms or nuclear nonproliferation agreements on which the IMF package will likely be conditioned. Sharif's strong position following his landslide victory in the February 1997 parliamentary elections appears to have weakened somewhat with the

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A3.

[20] "Heavy shelling by Indians on LoC: 12 hurt," *Dawn*, November 3, 1998; "India reports heavy Pakistani shelling in Kashmir," *Reuters*, November 13, 1998.

[21] "18 Hindus shot dead in held Kashmir," *Dawn*, July 29, 1998; John F. Burns, "India Reports 34 killed by rebels over Kashmir," *New York Times*, August 4, 1998: A6; Hari Ramachandran, "Kashmir guerrillas kill 19 in fresh attack," *Reuters*, August 4, 1998..

country's economic decline and the growing problems of sectarian and political violence.[22]

Technical Aspects of India's Nuclear Testing

The Indian government described the first three May tests at the Pokharan test site, in the western desert near the Pakistan border, as heralding India's status as a full-scale nuclear weapons power. In the words of a government statement, "The tests conducted today were with a fission device, a low yield device and a thermonuclear device.... These tests have established that India has a proven capability for a weaponised nuclear programme. They also provide a valuable database which is useful in the design of nuclear weapons of different yields for different applications and for different delivery systems...." India announced on May 13 that it had conducted two additional nuclear tests on that day, each with a yield of less than one kiloton, and that these were the last tests in its planned series. India, according to reports, had planned to conduct a third test on May 13, but largely for political reasons canceled that test, recovered the device, and put it into "safekeeping."[23]

P.K. Iyengar, a former chairman of India's Atomic Energy Commission, provided more detail on the May 11 tests in an interview with Reuters. He indicated that the smallest device, with a yield of 1,000 metric tons [1 kiloton] of TNT, "was the size that might be fired as an artillery shell or dropped from a combat support aircraft"; the mid-yield explosion "was from a standard fission device equivalent to about 12,000 metric tons [12 kilotons] of TNT — the size that might be dropped from a bomber plane"; and the largest test "was not a full hydrogen bomb. Most of its 50,000 to 100,000 metric ton [50-100 kiloton] explosive force came from a fission device — the A-bomb which serves as a trigger for the H-bomb's big fusion explosion." He indicated that that device contained only a small amount of fusion fuel. "It showed that India's thermonuclear technology worked, but did not produce the megaton explosion typical of a full H-bomb."[24]

An Indian statement by the Department of Atomic Energy and the Defense Research and Development Organization, released May 17, provided more precise details. According to this statement, as reported by Dow Jones, the May 11 tests were of a fission device with a yield of about 12 kilotons, a thermonuclear device with a yield of about 43 kilotons, and a third test with a yield of 0.2 kilotons. The two May 13 tests were said to have yields of 0.5 and 0.2 kilotons. Dow Jones reported that "... R. Chidambaram, chairman of the Atomic Energy Commission (AEC) ... clarified the [largest] explosion was indeed a thermonuclear one and not a boosted

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[22] Ahmed Rashid and Sadanand Dhume, "Will it? Won't it?" *Far Eastern Economic Review,* August 6, 1998: 20-22; "Talks with IMF begin: Pakistan says no to hard terms for bailout," *Dawn,* November 12, 1998; "The crumbling of Pakistan," *Economist,* October 17, 1998.

[23] Krishnan Guruswamy, "India to Nuclear Powers: Quit Preaching, Get Rid of Your Atomic Arms,: Associated Press newswire, June 2, 1998, 3:38 P.M. Eastern Time.

[24] Narayanan Madhavan, "India defiant over tests but says aims for nuclear-free world," *Reuters* (newswire), May 12, 1998, 7:07 PM ET.

fission device as speculated by experts earlier. 'We used a fission trigger and a secondary fusion device. A boosted fusion [sic] device does not have a secondary stage,' Chidambaram said."[25]

The size and type of weapons tested hold significant implications for India's future intentions, including the likelihood of additional tests, and for threat perceptions by China and Pakistan.

- The smallest device tested on May 11 was presumably a simple fission-only weapon. As such, a single test might provide sufficient confidence in the design to enable production. The combat uses specified by Iyengar are of short range, i.e., a type that could be used for delivery by artillery or tactical aircraft against Pakistani targets.

- The mid-size device tested on May 11 would seem to require delivery by aircraft or short-range missiles; it would take extraordinary accuracy for a ballistic missile to destroy targets at long ranges with that yield. As such, it might also be a counter-Pakistan device or have application as a tactical weapon in some possible conflicts with China.

- If, as Iyengar states, the largest device derived most of its yield from fission, then that device without the thermonuclear stage could presumably be used as a stand-alone weapon of greater yield than the mid-sized device — making a total of three fission devices tested and perhaps usable (excluding the May 13 explosions, which may have been experimental devices for gathering data). Iyengar's statement implies that India could have increased the yield of the largest device greatly by simply adding more thermonuclear fuel. A high-yield thermonuclear warhead would be a critical addition to India's arsenal as a counter to China; the development of the Agni ballistic missile, with an anticipated range of 2,500 km, makes little strategic sense without a warhead of this sort.[26] China could thus perceive a threat from a thermonuclear-armed Agni; Defense Minister George Fernandes's statement of May 4 that China, not Pakistan, is "potential threat No. 1" for India underscores the most logical rationale for the Agni missile.

- The likely main value of the two sub-kiloton tests of May 13 would appear be the provision of scientific data, e.g., for future computer simulation efforts, given their low yields.

A program to enable these tests had clearly been underway for years. (1) Indian projects contributing to a nuclear weapons program include lithium separation; production of uranium, plutonium, and tritium; and an inertial confinement fusion

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[25] "Indian scientists provide details of nuclear tests," Dow Jones, May 17, 1998.

[26] Inaccuracies at that range would render a missile armed with a conventional explosive warhead most unlikely to destroy point targets (missiles, bridges), and able to destroy only a small fraction of an area target (rail yards, ports, cities). The Agni, with an anticipated range adequate to strike China's major cities, would scarcely be able to deter China unless armed with a nuclear weapon.

facility that could help develop computer codes critical to developing thermonuclear weapons.[27] (2) India has a robust missile development program.[28] (3) India's diplomacy helped to preserve the nuclear option by providing a rationale to avoid signing the Nuclear Nonproliferation Treaty (NPT) and the CTBT.

It is possible that the five tests did not satisfy technical requirements for weapon development. The historical experience of the five declared nuclear weapon states strongly implies that several tests are needed to develop a single weapon type and turn it into a deployable weapon, and India said it is developing several weapon types. Thermonuclear weapons have much more explosive force per unit weight than fission-only bombs, and so would be of much greater value in arming missiles, but they also are much more complex, requiring more tests to validate and improve the design. Ensuring that a missile warhead can survive the stresses of launch, the cold of space, and the heat and vibration of reentry takes added work. Finally, conducting the tests over such a brief period would preclude using data from one test in designing a device to be tested later, so that the tests probably had less value than if they had been conducted several months apart.

There are, moreover, questions as to the success of India's tests. Regarding the alleged thermonuclear test, "a U.S. official" commented in May 1998, "'Either it was not really a thermonuclear weapon or it was a thermonuclear weapon that did not go off' as planned due to some error ... 'The general view is that the Indian tests were not fully successful.'"[29] Seismic data cast doubt on the claimed yield and number of tests. Terry Wallace, a seismologist, in an article of September 1998, found on the basis of seismic data that the May 11 explosion had a yield of 10-15 kt (vs. an announced yield of some 43 kilotons for the largest weapon), that there was no evidence of multiple explosions on May 11 (vs. a claim of three tests for that date), and no evidence of any

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[27] For information on lithium deuteride and plutonium, see testimony of William Webster, Director of Central Intelligence, in U.S. Congress. Senate. Committee on Governmental Affairs. *Nuclear and Missile Proliferation.* Senate Hearing 101-562, held May 18, 1989. Washington, U.S. Govt. Print. Off., 1989, p. 16-17. Regarding uranium, see Tim Weiner, "Nuclear Programs Built on Deceit and Fear," *New York Times,* May 17, 1998: 10. For information on tritium, see T.S. Gopi Rethinaraj, "Tritium breakthrough brings India closer to an H-bomb arsenal," *Jane's Defence Review,* January 1998: 29-31. For a discussion of the value of inertial confinement fusion for thermonuclear weapons development, see Ray Kidder, "The International Inertial Confinement Fusion (ICF) Program and Its Relation to the Development and Proliferation of Nuclear Weapons," unpublished paper, Livermore, CA, May 5, 1995, p. 2; and U.S. Department of Energy. Office of Arms Control and Nonproliferation (NN-40). *The National Ignition Facility (NIF) and the Issue of Nonproliferation.* Final study, December 19, 1995, p. 3. See U.S. Library of Congress. Congressional Research Service. *Indian and Pakistani Nuclear Tests? Potential Test Ban Risks and Technical Benefits,* report 96-631 F, July 17, 1996, 6 p., by Jonathan Medalia.

[28] "The Agni is one of five missiles that form the tri-service Integrated Guided Missile Development Programme (IGMDP). Begun in 1983, the programme is intended to lead to Indian self-sufficiency in missile production by 2002." "India ready for lift-off on Agni missile production," *Jane's Defence Weekly,* February 25, 1998: 17.

[29] R. Jeffrey Smith, "Analysts Skeptical of Pakistan's Claims," *Washington Post,* May 29, 1998: 33.

explosion on May 13. In the latter test, the maximum yield would have been 100 to 150 tons, compared to the announced yield of 800 tons.[30]

Nonetheless, it appears that India undertook the tests with the expectation of not conducting further tests. An Indian government statement of May 11 said, "India would be prepared to consider being an adherent to some of the undertakings in the Comprehensive Test Ban Treaty."[31] Vajpayee was quoted on May 16 as saying, "No more tests are planned."[32] On May 31, a statement by the Indian Ministry of External Affairs said, "India will observe a voluntary moratorium and refrain from conducting tests. India is also willing to move to a de-jure formulation of this declaration."[33] In his September 1998 address to the U.N., Vajpayee said, "India ... is now engaged in discussions with key interlocutors on a range of issues, including the CTBT. We are prepared to bring these discussions to a successful conclusion, so that the entry into force of the CTBT is not delayed beyond September 1999."[34]

Technical Aspects of Pakistan's Nuclear Testing

All evidence points to Pakistan's nuclear weapons program being smaller and less ambitious than that of India. Pakistan reportedly used a simple weapon design based on enriched uranium, which is said to be a less sophisticated approach than one based on plutonium,[35] such as India uses. Abdul Qadeer Khan, the head of Pakistan's nuclear program and the "father" of its atomic bomb, said, "None of these explosions [of May 28 and 30] were thermonuclear ... We are doing research and can do a fusion blast, if asked."[36] There are few, if any, other references to a Pakistani fusion, or hydrogen, bomb program, and the implication that Pakistan could detonate a hydrogen bomb soon seems doubtful. In contrast, India has done considerable work toward a weapon of that type, as discussed above under "Technical Aspects of India's Nuclear Testing." Note that a smaller program may suffice to meet Pakistan's perceived strategic need of deterring India, while India, which sees China as a potential threat to be deterred, may require a larger program.

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[30] Terry Wallace, "The May 1998 India and Pakistan Nuclear Tests," *Seismological Research Letters,* September 1998; results of seismic data cited here are from preprint version, http://www.geo.arizona.edu/geophysics/faculty/wallace/ind.pak/index.html.

[31] "Text — Indian government statement on nuclear tests," Reuters, May 11, 1998.

[32] Narayanan Madhavan, "India shrugs off sanctions, says tests over." Reuters, May 16, 1998. This article cites the source of the quote as an interview in the magazine *Outlook.*

[33] "Indian Statement on Nuclear Testing," Reuters newswire, May 31, 1998, 5:11 A.M. Eastern Time.

[34] Atal Bihari Vajpayee, "Address of the Prime Minister of India to the 53rd UN General Assembly," September 24, 1998, http://www.meadev.gov.in/speeches/unspeech.htm.

[35] William Broad, "Experts Say Pakistan Test Was Either Small or a Failure," *New York Times,* May 31, 1998: 8.

[36] John Kifner, "Pakistan Sets Off Atom Test Again, but Urges 'Peace,'" *New York Times,* May 31, 1998: 8.

By all accounts, Pakistan's weapons program relies extensively on foreign technology. According to one source:

> China ... provided blueprints for the bomb, as well as highly enriched uranium, tritium, scientists and key components for a nuclear weapons production complex, among other crucial tools. Without China's help, Pakistan's bomb would not exist, said Gary Milhollin, a leading expert on the spread of nuclear weapons. ...
>
> Pakistan had obtained the plans from the Chinese Government in the early 1980's. The bomb was simple and efficient, based on highly enriched uranium, and it had been tested by the Chinese in 1966. United States Government physicists built a model of the bomb and reported that it was a virtually foolproof design.[37]

On May 28, 1998, Pakistan announced that it had conducted five underground nuclear tests; it announced a sixth test on May 30. Yield estimates of the tests varied widely. A.Q. Khan reportedly said one of the tests of May 28 had a yield of 30 to 35 kilotons, about twice that of the Hiroshima bomb.[38] Samar Mobarik Mand, said to be "the scientist who conducted Pakistan's nuclear test programme," reportedly placed the yield of the May 28 tests at 40 to 45 kilotons, and that of the May 30 test at 15 to 18 kilotons.[39] On the other hand, estimates based on seismic data placed the yield of the May 28 tests at between eight and 15 kilotons.[40] U.S. officials reportedly "estimated the cumulative force of the Pakistani blast or blasts [of May 28] at between 2 kilotons and 12 kilotons, and most likely 6 kilotons ..."[41] For the May 30 test, some reports placed the yield between 12 and 18 kilotons, but the CIA was said to have estimated the yield at between one and five kilotons.[42] Seismic data indicated a yield of between zero (no detectable signal) and one kiloton.[43] A later analysis by seismologist Terry Wallace placed the yield of the May 28 explosion (or explosions) at 9 to 12 kt, and that of the May 30 explosion at 4 to 6 kt.[44]

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[37] Tim Weiner, "U.S. and China Helped Pakistan Build Its Bomb," *New York Times,* June 1, 1998: 6.

[38] John Kifner, "Pakistan Sets Off Atom Test Again, but Urges 'Peace,'" *New York Times,* May 31, 1998: 8.

[39] Tahir Ikram, "Pakistan Has New Missiles To Test — Reports," Reuters newswire, June 1, 1998, 4:15 A.M. Eastern Time.

[40] William Broad, "Experts Say Pakistan Test Was Either Small or a Failure," *New York Times,* May 31, 1998: 8.

[41] R. Jeffrey Smith, "Analysts Skeptical of Pakistan's Claims," *Washington Post,* May 29, 1998: 33.

[42] John Kifner, "Pakistan Sets Off Atom Test Again, but Urges 'Peace,'" *New York Times,* May 31, 1998: 1.

[43] William Broad, "Experts Say Pakistan Test Was Either Small or a Failure," *New York Times,* May 31, 1998: 8.

[44] Wallace, "The May 1998 India and Pakistan Nuclear Tests."

While Pakistani statements and seismic data agree that there was only one test on May 30, the number held on May 28 is disputed. In early reports of May 28, Pakistan claimed two or three tests,[45] a number it quickly revised to five.[46] U.S. analysts questioned the higher number. "Instead of five, 'it appears at least two' bombs were tested, said one U.S. intelligence official..."[47] Similarly, the *New York Times* reported that "American intelligence officials said Pakistan had probably tested only two weapons rather than the five announced."[48] Wallace found seismic signals that could correspond to two explosions, but discounts the plausibility of the second one.[49]

Because the yield appears lower than announced, it is unclear if the devices performed as intended. According to a press report, U.S. officials said that the estimated yield of the Pakistani test or tests of May 28, put by that report at most likely six kilotons, "is less than what U.S. intelligence experts had estimated as the likely yield of even one of the principal bombs in Pakistan's arsenal, raising questions about whether the device or devices exploded by Pakistan had performed as expected."[50] On the other hand, as noted above, the Chinese design is thought to be "nearly foolproof."

There are indications that the tests were of actual weapons, as distinct from test devices. A.Q. Khan "described the devices tested as 'ready-to-fire warheads' that had been miniaturized so they could fit onto Ghauri missiles..."[51] He also indicated that four of the five tests of May 28 were of low-yield tactical nuclear weapons.[52] According to a press report, "Intelligence analysts believe a goal of the test [on May 30] was to devise a bomb small enough to fit on a missile. Pakistan is believed to be close to that difficult goal."[53]

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[45] For example, the Associated Press, in an early report on the May 28 tests, put the number at two. Kathy Gannon, "Pakistan Explodes Nuclear Device," Associated Press newswire, May 28, 1998, 8:34 A.M. Eastern Time.

[46] "Excerpts of Pakistan PM's [Prime Minister's] speech on N-tests," Reuters newswire, May 28, 1998, 1:03 P.M. Eastern Time.

[47] R. Jeffrey Smith, "Analysts Skeptical of Pakistan's Claims," *Washington Post*, May 29, 1998: 33.

[48] John Burns, "Pakistan, Answering India, Carries Out Nuclear Tests; Clinton's Appeal Rejected," *New York Times*, May 29, 1998: 8.

[49] Wallace, "The May 1998 India and Pakistan Nuclear Tests."

[50] R. Jeffrey Smith, "Analysts Skeptical of Pakistan's Claims," *Washington Post*, May 29, 1998: 33.

[51] John Burns, "Leaders in India and in Pakistan Tone Down Crisis," *New York Times*, May 30, 1998: 5.

[52] John Kifner, "Pakistan Sets Off Atom Test Again, but Urges 'Peace,'" *New York Times*, May 31, 1998: 1.

[53] Tim Weiner, "Pakistan Test Leaves U.S. out of Ideas, and Angered," *New York Times*, May 31, 1998: 8.

Testing actual weapons is plausible. If, as reported, China gave Pakistan the design of a nuclear weapon, there would be no reason to "de-weaponize" it; measurements of weapon physics, radiochemistry, etc., could be gained from a weapon not specially configured as an experimental device. Moreover, testing a weapon provides information on the reliability of the weapon and of the production process; testing an experimental device would provide less confidence in these key elements of reliability.[54] By one estimate, Pakistan has enough weapons-grade uranium for 16 to 20 weapons, while India is said to have enough separated plutonium for approximately 75 weapons;[55] Pakistan would therefore have a strong incentive to conduct as few tests as possible using conservative designs in weapons configurations.

There would be good reason for testing missile warheads and tactical nuclear warheads. The Ghauri, a missile with a range of 900 miles, is expected, once deployed, to be Pakistan's main deterrent of India, as its range would enable it to strike almost all of that country. Testing a warhead for that missile would seem to be Pakistan's highest nuclear priority. Similarly, short-range, low-yield tactical nuclear weapons would arguably help Pakistan deter a conventional attack by India, which has much stronger conventional forces. Apparently to capitalize on its conventional superiority, India offered not to be the first to use nuclear weapons, most likely if Pakistan offers a similar pledge; apparently to help offset its conventional inferiority, Pakistan has been reluctant to make such a promise.[56] Indeed, Prime Minister Nawaz Sharif implied that its nuclear weapons could be used to counter conventional attack: "These weapons are to deter aggression, be it nuclear or conventional."[57] This implicit threat to use nuclear weapons to counter a stronger conventional force parallels NATO's rejection of a policy of no first use of nuclear weapons during the Cold War, when NATO's tactical nuclear weapons and the implicit link to strategic nuclear weapons were seen as a counter to the Warsaw Pact, which had numerical superiority in conventional forces.

It appears that Pakistan could deploy warheads on the Ghauri; indeed, that missile makes little strategic sense without a nuclear warhead. According to one report, "Intelligence reports to the White House did confirm Pakistani claims that it could mount a nuclear warhead atop a medium-range Ghauri missile ... .[58]A.Q. Khan said "it would not be difficult" to mount warheads on missiles, and that Pakistan could

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[54] This assessment reflects a number of discussions with nuclear weapon experts over the past several years.

[55] "Pakistan Capable of Making 16-20 N. Bombs — Think Tank," Dow Jones newswire, June 2, 1998, 12:11 A.M. Eastern Time.

[56] John Burns, "Leaders in India and in Pakistan Tone Down Crisis," *New York Times,* May 30, 1998: 5.

[57] Prime Minister Nawaz Sharif, excerpts from a statement at a news conference in Islamabad, *Washington Post,* May 29, 1998: 32.

[58] John Diamond, "Clinton Ordering Sanctions Against Pakistan after Blasts," Associated Press newswire, May 28, 1998, 4:17 P.M. Eastern Time.

do this "in days."[59] He also said the nuclear devices that Pakistan tested were "not so big," and that they "are small enough to be very easily put on our Ghauri missiles."[60] "Senior Pakistani officials" were quoted as saying that Pakistan's warheads have been subjected to shock and vibration tests relevant to deployment on missiles and are ready for mounting on the Ghauri.[61] On the other hand, a U.S. Defense Department spokesman said on June 2 that it would probably take both India and Pakistan a year or two to miniaturize nuclear weapons for use on missiles.[62]

It is, though, less clear if Pakistan is deploying nuclear-armed Ghauris. An official statement said that the missile was "already being capped with nuclear warheads,"[63] and Pakistani Foreign Minister Gohar Ayub Khan said Pakistan would "naturally be serially producing nuclear warheads and missiles."[64] The Pakistani Foreign Ministry was quoted, however, as saying that reports of an official statement that Pakistan was preparing to arm the Ghauri were "patently wrong."[65] And U.S. intelligence officials "said they had found no sign yet that Pakistan had capped the Ghauri or other missiles with a nuclear warhead, contrary to Pakistani claims last week that were later retracted."[66]

The uncertainty about whether Pakistan has armed its Ghauri missiles with nuclear warheads is compounded by conflicting domestic and international imperatives, and practical considerations. Deploying a nuclear missile force would seem likely to have political support as another assertion of Pakistan's prowess and as an actual, rather than a potential, deterrent. On the other hand, Pakistan is probably acutely aware that deployment would ratchet up the South Asian nuclear arms race, perhaps prompting India to deploy nuclear-armed missiles and aircraft. With missile flight times of three or four minutes from one nation to the other's major cities, deployment would arguably increase the risk of nuclear war by depriving each side of adequate time to confirm that an attack was underway. The inherent vulnerability to a disabling first strike could compel both countries to adopt a doctrine

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[59] John Kifner, "Pakistan Sets Off Atom Test Again, but Urges 'Peace,'" *New York Times,* May 31, 1998: 8.

[60] Raja Asghar, "Pakistan Scientist Says Bombs Better Than India's," Reuters newswire, May 31, 1998, 7:59 A.M. Eastern Time.

[61] Barry Schweid, "Administration's Concern Centered on Warhead Capabilities," Associated Press newswire, June 2,1998, 7:51 A.M. Eastern Time. This article cites the information to *Jane's Defence Week* of June 3, 1998.

[62] "Pakistan, India Need 1 or 2 Years for Nuke Warheads: U.S.," Reuters newswire, June 2, 1998, 11:03 P.M. Eastern Time.

[63]John Burns, "Pakistan, Answering India, Carries Out Nuclear Tests; Clinton's Appeal Rejected," *New York Times,* May 29, 1998: 8.

[64] John Burns, "Leaders in India and in Pakistan Tone Down Crisis," *New York Times,* May 30, 1998: 5.

[65] "Pakistan Denies Arming Missile with N-Warheads," Reuters newswire, May 29, 1998, 7:44 A.M. Eastern Time.

[66] Jim Wolf, "U.S. Intelligence Still Sorting Pakistan Tests," Reuters newswire, June 1, 1998, 6:13 P.M. Eastern Time.

of launch on warning, or even a preemptive strike in a crisis. Another uncertainty about whether Pakistan has armed its Ghauri missiles with nuclear warheads is due to the uncertainty about how many warheads Pakistan has available. It is unclear whether Pakistan had produced more than a few warheads prior to testing them.

As with India, Pakistan could gain technical advantages by continued testing. Even if it has simpler weapons of "foolproof" design, further testing would increase confidence in weapon designs and the processes used to manufacture them serially, and would permit improvements. Nonetheless, the prospect of further Pakistani testing appears remote. Sharif said in a speech to the U.N. in September 1998 that Pakistan "announced a unilateral moratorium on testing." Moreover, he continued, "Pakistan is ... prepared to adhere to the CTBT ... However, Pakistan's adherence to the Treaty will take place only in conditions free from coercion or pressure."[67] Regarding the latter point, President Clinton decided in November 1998 to lift some sanctions on India and Pakistan in response to their announcements of testing moratoria and steps toward strengthening controls on exports of nuclear and missile technology.[68]

Implications for the Comprehensive Test Ban Treaty

The Indian and Pakistani tests shattered the "norm" against nuclear testing, in place since the last Chinese test in July 1996, and made the risks of nuclear proliferation more stark. According to one report, the Japanese Defense Agency fears the tests "increase the likelihood North Korea will attempt to develop its own nuclear arsenal."[69] A North Korean missile test of August 1998 can only have added to this fear. Richard Murphy, formerly Assistant Secretary of State for the Near East and South Asia, has warned that Pakistan's tests "will add to the motivation of Iranians to go for a nuclear weapons program...."[70] Secretary of Defense William Cohen, in Senate testimony, speculated that India's tests could lead to "a chain reaction ... there will be other countries that see this as an open invitation to try to acquire this technology."[71]

Fears of global proliferation, as well as of an arms race and nuclear war in South Asia, have led to international efforts to urge India and Pakistan to join the CTBT. There was worldwide criticism of the tests. At the Conference on Disarmament, 46

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[67] Mohammad Nawaz Sharif, "Address by H.E. Mohammad Nawaz Sharif, Prime Minister of the Islamic Republic of Pakistan, to the 53rd Session of the UN General Assembly," September 23, 1998, http://www.undp.org/missions/pakistan/12980923.html.

[68] "White House Announces South Asian Sanctions Relief," Associated Press newswire, November 7, 1998, 4:10 P.M. Eastern Time.

[69] "Japan Govt Document: Tests Spur N Korea Nuclear Devt — Nikkei," Dow Jones newswire, June 2, 1998, 9:52 P.M. Eastern Time.

[70] Barbara Crossette, "South Asian Arms Race: Reviving Dormant Fears of Nuclear War," *New York Times*, May 29, 1998: 9.

[71] Carol Giacomo, "U.S. Sends Mission to Pakistan on Nukes Issue," Reuters newswire, May 13, 1998, 11:53 P.M. Eastern Time.

member nations issued a joint statement urging Pakistan and India to sign the CTBT and the Nuclear Nonproliferation Treaty and condemning their tests.[72] President Clinton urged both nations to sign the two treaties.[73] The United Nations, the Association of Southeast Asian Nations Regional Forum, France, the United States, and others pressed the two nations to sign the CTBT. [74] Sanctions affected Pakistan severely, leading it to raise the specter of defaulting on its loans; sanctions affected India as well, but to a lesser extent. The threats, counterthreats, fears, and rumors of nuclear war between India and Pakistan, and deployments linked to the possibility of a war, surely proved sobering. Perhaps for these reasons, the inflammatory rhetoric between the two nations, ubiquitous from mid-May to mid-June, had by late July largely vanished, replaced by discussions on nuclear issues between each nation and the United States, and between the two nations themselves. These discussions, in turn, contributed to the two nations' announcements of September, discussed above, on joining the CTBT. (See CRS Issue Brief 92099, *Nuclear Weapons: Comprehensive Test Ban Treaty and Nuclear Testing*, and CRS Report 96-631F, *Indian and Pakistani Nuclear Tests? Potential Test Ban Risks and Technical Benefits*.)

The Indian and Pakistani tests were part of the reason the Senate did not consider the CTBT in 1998. In his January 1998 State of the Union Address, President Clinton asked the Senate to approve the treaty in 1998. In the wake of the tests, Senate Majority Leader Trent Lott said, "The nuclear spiral in Asia demonstrates the irrelevance of U.S. action on the Comprehensive Test Ban Treaty (CTBT).... it now appears likely that the Administration's push for the CTBT actually accelerated the greatest proliferation disaster in decades: two new nuclear powers emerging in the last few weeks."[75] Senator John Glenn said that India's testing "makes [the CTBT] more difficult to pass,"[76] while Senator Jesse Helms, Chairman of the Senate Foreign Relations Committee, said, "India's actions demonstrate that the Comprehensive Test Ban Treaty, from a non-proliferation standpoint, is scarcely more than a sham....I, for one, cannot and will not agree to any treaty which would

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[72] "India, Pakistan Urged To Join CTBT, NPT," Dow Jones newswire, June 2, 1998, 10:49 A.M. Eastern Time.

[73] "Clinton Urges India, Pakistan To Join CTBT, NPT," Dow Jones newswire, June 1, 1998, 9:49 P.M. Eastern Time.

[74] See, for example, "U.N. Making Efforts for India, Pakistan To Follow CTBT," Dow Jones newswire, July 27, 1998, 7:23 AM Eastern Time; "France Asks Pakistan, India To Sign Test Ban Pact," Reuters newswire, July 23, 1998, 7:03 A.M. Eastern Time; "Summary of Statement of ASEAN Regional Forum," Dow Jones newswire, July 27, 1998, 9:25 A.M. Eastern Time; and Ashok Sharma, "U.S., Indian Negotiators End Third Round of Talks on Nuclear Issues," Associated Press newswire, July 21, 1998, 7:23 A.M. Eastern Time.

[75] Senator Trent Lott, "Nuclear Arms Race in Asia Makes Test Ban Treaty Irrelevant, Lott Says," press release, May 29, 1998, 1 p.

[76] Tom Raum, "Indian Tests Escalate Nuclear Tensions, Instability," Associated Press newswire, May 13, 1998, 1:16 A.M. Eastern Time.

legitimize de facto India's possession of these weapons, just so long as they are not caught further testing them."[77]

If the CTBT has not entered into force within three years of its opening for signature (i.e., by September 1999), Article XIV provides for a conference of states that have ratified the treaty to "consider and decide by consensus what measures consistent with international law may be undertaken to accelerate the ratification process in order to facilitate the early entry into force of this Treaty." In their U.N. speeches of September 1998, the prime ministers of India and Pakistan both indicated they were "prepared to" join the treaty by September 1999. A Senate rationale for not considering the treaty in 1998 was the rejection of that treaty by these two nations. If they join the treaty by September 1999, the force of that rationale would diminish.

The failure of U.S. intelligence to detect India's test preparations despite many Indian statements prior to May about testing and despite knowing the location of India's test site may make U.S. ability to detect other nations' test preparations less credible. This could weaken U.S. (and international) ability to forestall tests; timely detection of preparations permits diplomatic efforts that try to thwart testing, as occurred in late 1995 when the United States detected Indian test preparations and apparently forestalled them with a strong diplomatic initiative. The intelligence failure also makes the threat of clandestine tests more serious, as part of the ability to deter such tests would arise from ability to detect preparations for them. On the other hand, Sidney Drell, professor of physics at Stanford University, stated that "the global network of seismic sensors that will form the core of the treaty's verification system *did* detect, locate, and identify the main nuclear blast" that India detonated on May 11, and "very low yield tests are of questionable value in designing new nuclear weapons or confirming that a new design will work as intended. Any failure by the monitors to detect such tests is not the proper benchmark for determining the system's — or the treaty's — effectiveness."[78] Moreover, an official review of the intelligence failure provided a number of lessons that may help avert such failures in the future.[79]

U.S. Response

The U.S. response to India’s and Pakistan's nuclear tests centered on the imposition of wide-ranging, largely economic sanctions under the Arms Export Control Act (AECA) and other legislation. Major aspects of the sanctions included: termination of some categories of U.S. foreign assistance; termination of U.S. Government sales of defense articles and service; termination of foreign military financing; denial of credits, credit guarantees, or other financial assistance by U.S.

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[77] Randall Mikkelson, "Clinton Urges India To Adopt Nuke Test Ban Treaty," Reuters newswire, May 16, 1998, 10:02 A.M. Eastern Time.

[78] Sidney Drell, "Reasons To Ratify, Not To Stall," *New York Times,* June 2, 1998: 27; original emphasis.

[79] Tim Weiner, "C.I.A. Study Details Failed Spy System," *New York Times,* June 3, 1998: 1.

Government agencies; U.S. opposition to loans or assistance by any international financial institution; prohibition on U.S. commercial bank loans or credits; and prohibition on exports of "specific goods and technology," particularly dual-use items.

Most of these sanctions have been temporarily eased through passage and signing into law of two congressional initiatives, the Agriculture Export Relief Act and the India-Pakistan Relief Act of 1998.[80] The former exempts from the application of sanctions, through September 30, 1999, various forms of financial support provided by the Department of Agriculture for the purchase of food or agricultural commodities from U.S. farmers. The latter authorizes the President to "waive for a period not to exceed one year upon enactment of this Act," the application of sanctions relating to foreign assistance, U.S. Government nonmilitary transactions, U.S. position on loans or assistance by international financial institutions, and U.S. commercial banks transactions.

The President immediately used the authority in the Agriculture Export Relief Act to allow U.S. farmers to participate in winter wheat auctions in Pakistan. The authority in the India-Pakistan Relief Act was cited when, on November 7, 1998, the White House announced the President's decision to restore Export-Import Bank, Overseas Private Investment Corporation, and Trade and Development Agency, and International Military Education and Training programs in India and Pakistan. At that time the President also lifted restrictions on U.S. commercial banks in their transactions with both countries, and announced that the United States would support the International Monetary Fund's negotiations with Pakistan to implement an international debt reduction program, including an infusion into that country of some $1.56 billion in IMF, World Bank and Asian Development Bank funds.

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[80]The Agriculture Export Relief Act, S. 2282, was signed into law July 14, 1998, as Public Law 105-194 (112 Stat. 627), codified as notes to the amended section of the Arms Export Control Act (22 USC 2799aa). The India-Pakistan Relief Act of 1998, popularly referred to as the Brownback amendment, was incorporated into the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 1999 (H.R. 4101), as Title IX, which was in turn incorporated into the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999 (H.R. 4328) and enacted into law on October 21, 1998, as Public Law 105-277 (112 Stat. 2681).

The Arms Export Control Act[81]

Section 102(b) of the Arms Export Control Act (AECA), as amended,[82] prohibits a variety of assistance and commercial transactions between the United States and any country if the President determines that that country — if it is a non-nuclear-weapon state — has, among other things, detonated a nuclear explosive device. President Clinton denounced India's conducting of several nuclear explosive device tests over May 11-13, 1998, and on May 13 issued a written determination to Congress. The President likewise determined on May 30, 1998, that Pakistan was a non-nuclear-weapon state that had detonated nuclear explosive devices on May 28th and 30th.[83] Issuance of these determinations triggered mandatory imposition of the following sanctions, pursuant to section102(b)(2):

- **Termination of U.S. assistance under the Foreign Assistance Act of 1961, except for humanitarian assistance, food or other agricultural commodities.**

In Fiscal Year 1998, India was scheduled to receive an estimated $54.3 million in U.S. development assistance.[84] Of this total, $36.3 million was obligated to a variety of projects that are exempt from the sanctions: child survival projects

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[81]Other statutes by which sanctions could be imposed against India and Pakistan for their nuclear explosive device detonations are, for the most part, redundant to the provisions stated in the Arms Export Control Act. Each of the following provisions of law are either waivable, not mandatory at the outset, or only provide guidance toward restricting transactions with a targeted state: section 2(b)(1)(B) of the Export-Import Bank Act of 1945, as amended (12 USC 635(b)(1)(B)); section 2(b)(4)(A), (C) of the Export-Import Bank Act of 1945, as amended (12 USC 635(b)(4)(A), (C)); section 823 of the Nuclear Nonproliferation Prevention Act of 1994, as amended (108 Stat. 512); section 701 of the International Financial Institutions Act, as amended (22 USC 262d); and section 129 of the Atomic Energy Act of 1954, as amended (42 USC 2158). Of these, only sec. 2(b)(4)(A), (C) of the Export-Import Act of 1945, as amended, was invoked. The Secretary of State made a determination pursuant to that section for India on May 13, 1998, and one relating to Pakistan on May 28th. The India-Pakistan Relief Act includes this sanction as waivable, and the President did include it in his actions on November 7th.

[82]22 USC 2799aa-1(b). Popularly referred to as the Glenn amendment. The language prohibiting U.S. foreign assistance to any non-nuclear-weapon state that detonates a nuclear explosive device was originally incorporated in 1977 into the Foreign Assistance Act of 1961 as section 670. It was amended and restated in 1981, and amended again and moved from that Act to the Arms Export Control Act by sec. 826(a) of the Nuclear Nonproliferation Prevention Act of 1994 (title VIII of the Foreign Relations Authorization Act, Fiscal Years 1994 and 1995; Public Law 103-236; 108 Stat. 515).

[83]For India, see Presidential Determination No. 98-22 of May 13, 1998 (63 F.R. 27665). For Pakistan, see Presidential Determination No. 98-25 of May 30, 1998 (63 F.R. 31881).

[84]The FY1998 Congressional Presentation Document estimates $51.35 million for India in U.S. development assistance in the current fiscal year. The upward adjustment of actual obligation of funds for this fiscal year and the program breakout is based on conversations with AID staff in July 1998.

(estimated $13.97 million); polio prevention ($4 million); HIV and AIDS programs; family planning; women's support; and some projects addressing environmental issues.[85] Some $12 million in obligations for financial sector reform and agribusiness was terminated, and $9 million in authorized for housing loan guarantees was terminated. Some $6 million in funds obligated for greenhouse gas pollution prevention was currently suspended (but could have been restored; see previous footnote). Further, aid for India approved in prior years that has not yet been expended was required to be similarly scrutinized. India also would have received $475,000 in FY1998 through the International Military Education and Training Program (IMET).

The President's announcement of November 7th to waive certain sanctions removes any such restriction on his $41 million FY1999 development aid budget request for India (another $14.5 million for child survival and AIDS programs, and an undetermined amount in housing loan guarantees for FY1999 are not subject to sanctions). The one-year lifting of sanctions makes available a possible $450,000 in IMET funding for FY1999.

India was also slated to receive $91.88 million in food assistance in FY1998 and $91.75 million in FY1999 through P.L. 480 title II, which was not cut off.

Pakistan had not been eligible to receive U.S. foreign assistance since FY1991, when President Bush declined to certify that Pakistan did not have a nuclear explosive device and that U.S. assistance "would reduce significantly the risk that Pakistan will possess a nuclear explosive device."[86] This restriction was eased in 1995 to prohibit only military assistance. For FY1998, Pakistan received $1.5 million in international

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[85]Section 102(b)(2)(A) of the AECA exempts "humanitarian assistance" from the application of sanctions, but does not define the term. USAID had classified, in this instance, polio prevention, family planning, and some women's programs, as humanitarian assistance. Furthermore, section 522 of the Foreign Operations Appropriations, 1998 (P.L. 105-118), states that funds for child survival, AIDS, and other activities may be provided "notwithstanding any provision of law that restricts assistance to foreign countries" and section 539(b) of the same Act, relating to "special authorities," states that "Funds appropriated by this Act to carry out the provisions of sections 103 through 106 of the Foreign Assistance Act of 1961 may be used, notwithstanding any other provision of law, for the purposes of supporting tropical forestry and energy programs aimed at reducing emissions of greenhouse gases, and for the purpose of supporting biodiversity conservation activities..."

Generally, a "notwithstanding" provision prevails over restrictions stated elsewhere in law.

[86]Section 620E(e) of the Foreign Assistance Act of 1961 (22 U.S.C. 2375), popularly referred to as the Pressler amendment, currently prohibits military assistance to Pakistan unless the President makes such a determination. The India-Pakistan Relief Act, however, authorizes the President to waive for one year any application of sanctions or restriction contained in sec. 620E(e).

Added to the Foreign Assistance Act of 1961 in 1985, the Pressler amendment originally prohibited all assistance; in 1995 the prohibition was narrowed to refer only to military assistance (with enactment of the Brown amendment). Presidents issued determinations annually for 1985-1989. See *Legislation on Foreign Relations Through 1997*, volume I-A, p. 249-251, and notes.

narcotics control funds and $5.22 million in P.L. 480 title II food assistance — both exempt from the sanctions. In FY1999, the Administration has requested $2.5 million in narcotics control funding for Pakistan, which would be exempt. The Administration had also requested $350,000 in IMET funding for Pakistan for FY1999, likely to be made available pursuant to the President's November 7 announcement.

- **Termination of U.S. Government sales of defense articles, defense services, design and construction services, and licenses for exportation of U.S. Munitions List items.**

The Department of Defense estimates that for each of FY1998 and FY1999, India would have received $230,000 in foreign military sales (FMS) orders.[87] For FY1997, $29.9 million in commercial export licenses were approved for U.S. sales of munitions list items to India. Completion of these orders could be affected by the President's determination. The State Department estimates that in FY1998, $6.85 million in munitions list items would have been delivered to India; $14.95 million of such items would be delivered in FY1999.

No figures are currently available for Pakistan. That country received about $60 million in defense sales and other exports requiring licenses in 1997, according to recent press accounts.

- **Termination of foreign military financing under the Arms Export Control Act.**

India has not received foreign military financing for more than 30 years. Pakistan is ineligible for foreign military financing pursuant to restrictions in section 620E(e) of the Foreign Assistance Act of 1961, the so-called Pressler amendment. While the Pressler amendment may be waived pursuant to the India-Pakistan Relief Act, Pakistan would remain ineligible for foreign military financing because this section of the Arms Export Control Act was not made waivable by that amendment.

- **Denial of any credit, credit guarantee, or other financial assistance by any department, agency, or instrumentality of the U.S. Government, excluding those related to humanitarian assistance or congressional oversight of intelligence activities.**

This applied, at a minimum, to Export-Import Bank (ExIm Bank) programs, Overseas Private Investment Corporation (OPIC), Trade and Development Agency (TDA), Commodity Credit Corporation (CCC), and Department of Agriculture (USDA) funding. In hearings on May 13, 1998, before the Near Eastern and South Asian Affairs Subcommittee of the Senate Committee on Foreign Relations, Assistant Secretary of State for South Asian Affairs Karl Inderfurth speculated that the prohibition on government financing agencies and U.S. commercial banks could cost hundreds of millions of dollars, affect projects already approved or in the pipeline, and

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[87]India has not been a major purchaser of defense articles or services from the United States. From FY1952-FY1997, the total value of India's FMS purchases from the United States was about $86.2 million.

could cause major U.S. companies and financial institutions to rethink entirely their presence and operations in India. For FY1998, India was cut off from a potential $300 million in OPIC guarantees, covering $10.2 billion in investment projects; $20 million in agricultural export credits through the CCC; and $500 million in current ExIm Bank projects. The ExIm Bank, in announcing the closing of new business with India on May 13, projected that another $3.5 billion in U.S. exports could be prohibited in the longer term.

The ExIm Bank, in announcing the closing of new business with Pakistan on June 1, 1998, stated that the Bank's current exposure in Pakistan was $429.1 million, and another potential project was valued at approximately $1.1 million. According to a sanctions fact sheet prepared by the State Department, OPIC had just resumed activities in Pakistan prior to the nuclear detonation tests. While the fact sheet provides no numbers relating to OPIC in Pakistan, it is understood that OPIC's exposure there was negligible at the time of the imposition of sanctions.[88]

The President invoked the authority granted him in the India-Pakistan Relief Act to waive these sanctions. Effective November 7, 1998, and for one year hence, ExIm Bank, OPIC, and TDA programs could be made available to both India and Pakistan.

Pakistan is also the leading foreign purchaser of the U.S. harvest of white wheat and the third largest foreign purchaser of U.S. wheat overall; in 1997 Pakistan purchased 81 million bushels of U.S. wheat, almost entirely financed with export guarantees. The imposition of sanctions would have barred Pakistan from using the remaining $88 million in USDA credits for FY1998 wheat purchase and would prohibit the availability of $350 million in credit for FY1999.[89] Congress, however, concerned about the impact this sanction would have on domestic wheat growers, passed the Agriculture Export Relief Act of 1998, which amended the Arms Export Control Act to exempt through September 30, 1999, "any credit, credit guarantee, or financial assistance provided by the Department of Agriculture to support the purchase of food or other agricultural commodity" from the application of sanctions. The AECA was also amended to exempt permanently medicines, medical equipment, and fertilizer from the application of sanctions. The President later invoked the authority granted him in the India-Pakistan Relief Act, potentially extending the sanction waiver to as late as November 7, 1999. For the waiver to be permanently exercised, however, Congress will have to take action to either extend or make permanent the President's authority to waive or lift any of the AECA sanctions.[90]

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[88] *Fact Sheet: India and Pakistan Sanctions,* Department of State, June 18, 1998.

[89] On October 13, the Department of Agriculture added Pakistan to the list of countries eligible to participate in its Food Aid Initiative. At that time, USDA donated 100,000 metric tons of U.S. wheat to that country. *USDA Release No. 0414.98.*

[90] Debating the withholding of food as a foreign policy has had distinctive episodes: the wheat embargo against the Soviet Union because of that country's invasion of Afghanistan; the impact of sanctions on the civilian population in Iraq resulting in the "oil-for-food" program; and recurrent efforts to exempt food, medicine, and medical equipment from the embargo imposed against Cuba, to name a few. The Senate, in the 105th Congress, passed language that would have made food, other agricultural products, medicines, and medical equipment

(continued...)

- **Opposition to the extension of any loan or financial or technical assistance by any international financial institution (IFI),** in accordance with section 701 of the International Financial Institutions Act (see also discussion under "Other Legislation").[91] The United States, by itself, cannot block loans, financial or technical assistance to any country from the World Bank, International Monetary Fund, Asian Development Bank, or Asian Development Fund. Such efforts would require supporting "No" votes from a consortium of countries with voting memberships in the various banks. Foreign ministers of the G-8 (Britain, Canada, France, Germany, Italy, Japan, Russia, and the United States), however, announced on June 12, 1998, that their respective nations would deny loans — other than those intended for humanitarian purposes — to India and Pakistan. This is presumed to apply to both bilateral assistance from these countries and to their participation in votes before international financial institutions.

Assistant Secretary Inderfurth, in the May 13th hearings, stated that the "requirement to oppose loans and assistance in the international financial institutions could potentially cost India billions of dollars in desperately needed financing for infrastructure and other projects." India was slated to be considered for around $3.8 billion in World Bank loans in the near-term. In the week following India's tests, the World Bank postponed votes on $800 million for that country for energy projects and road improvements, and Japan announced it would withdraw its offer to host a meeting scheduled for June 30th to discuss longer-term funding for India's projects. In subsequent days, the World Bank postponed two more loans for agricultural and health care projects, valued at $206 million.

In early 1998, Pakistan was currently in the middle of receiving a $1.56 billion loan from the International Monetary Fund (IMF) for debt restructuring, of which $1.1 billion is undisbursed but will be allowed to go through. The World Bank also stated it would not disrupt funds to its 41 projects in Pakistan to which it was already committed. The Asian Development Bank, Pakistan's largest donor, suspended consideration on $450 million in new aid the week after Pakistan's tests, and stated that all new loans to both India and Pakistan would be suspended for the time being.

On July 21, 1998, the State Department hosted a background briefing, with Treasury Department officials participating, to discuss the United States' position vis-a-vis IMF loans to Pakistan. Speakers summarized Pakistan's longstanding economic woes and noted that "it was never the intention of our sanctions program that resulted from Pakistan's nuclear tests to punish Pakistan citizens or to precipitate economic collapse."[92] Officials announced that the United States, while required by law to oppose loans when brought to a final vote, would not oppose the *negotiation* of those

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[90](...continued)
exempt from inclusion in any U.S. unilateral sanctions regime in the agriculture appropriations measure. The language, however, was dropped in conference.

[91]22 USC 262d. See particularly § 701(b)(3)(C) of that Act.

[92]State Department background briefing, July 21, 1998. Federal Document Clearing House transcript, Reuters wire service.

loans. IMF negotiations with Pakistan to restructure that country's foreign debt, which were canceled at the end of June because of the nuclear detonation, would now proceed. A Treasury Department official stated, "that there is a green light from our standpoint for resumption of negotiations on such programs in the IMF. However, the United States will do what is *legally required* to do by the Glenn Amendment and that is oppose these loans with its vote in the IMF. We do not have veto power in the IMF. Other stakeholders are able to support these loans and get them through." Officials further stated at that time that there was no change in U.S. policy with regards to the other international financial institutions and transactions with either India or Pakistan.

Although enactment of the India-Pakistan Relief Act authorizes the President to waive the restriction on U.S. cooperation in the international financial institutions, the President chose not to do so when other changes in the sanctions policy were announced on November 7th.[93] Generally, U.S. opposition to loans to either India or Pakistan will, for the time being, continue, except in instances where the loans might address Pakistan's current financial emergency. To that particular end, the White House spokesperson announced that the United States would work with allies to complete negotiations on a one-time IMF, World Bank, and Asian Development Bank package of $1.56 billion to Pakistan.

- **Prohibition on any U.S. bank from making loans or providing credit to the governments of India or Pakistan, excluding loans or credits to purchase food or other agricultural commodities.**

This provision was intended to prevent loans not just to the government but also to Indian banks, many of which are government-owned, public sector industries, and trading companies. Press reports at the time of the testing projected that U.S. banks were considering about $1.9 billion in loans to the Government of India or its entities, all of which would have been terminated.

The Government of Pakistan borrows, on average, $1.5 billion to $2 billion annually from the commercial banking sector, of which $700 million to $1 billion is derived from U.S. commercial lenders. In the latter half of 1997, Pakistan commercially borrowed $580 million, not necessarily solely from U.S. lenders, to finance oil imports alone. Future loans would be terminated.

The State Department, on numerous occasions, stated that the Administration would "issue Executive Orders to prohibit U.S. banks from extending loans or credits to the governments of India and Pakistan."[94] No order or regulations were ever issued, however. On November 7, 1998, the President invoked authority granted him in the India-Pakistan Relief Act and waived the banking prohibitions. For the six months that the banks were kept from conducting transactions with the governments

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[93]"Easing of Sanctions on India and Pakistan," Statement by the Press Secretary, the White House. November 7, 1998 (http://www.pub.whitehouse.gov).

[94]State Department fact sheet, June 18, 1998, press briefings, congressional hearings, telephone conversations with State Department officials.

of India or Pakistan, the banks had been left to regulate themselves and define for themselves what compliance with the law required.

- **Prohibition on exports "of specific goods and technology," excluding food, agricultural commodities, or items related to congressional oversight of intelligence activities,** in accordance with section 6 of the Export Administration Act of 1979 (50 USC App. 2405), relating to foreign policy controls.

The Department of Commerce put 1997 U.S. exports to India at $3.8 billion (estimated) and 1996 U.S. exports to Pakistan at $1.4 billion (1997 figures not available). Commerce estimated that only $7 million of that $5.2 billion would have been automatically denied export license in the wake of sanctions, and another $94.7 million in export licenses would be reviewed with a presumption of denial.[95]

The Department of Commerce's Bureau of Export Administration (BXA) issued guidelines for export licensing policy to India and Pakistan in June and in November posted on their Internet website new rules along with lists of Indian and Pakistani entities that, if listed as recipients or end-users for exports, U.S. businesses could presume that export licenses would be denied.[96] The lists include more than 200 Indian and nearly 100 Pakistani entities and subsidiaries found to be involved in nuclear or missile projects.

Waiver Authority in the AECA. Section 102(b)(4)(A) of the Arms Export Control Act, as amended, authorizes the President to delay the imposition of these sanctions for 30 days. Presumably, the President had this in mind when his Administration approached the Government of India after the first day's nuclear detonations and averred that sanctions could be avoided if that government would disavow any future testing or deployment of nuclear weapons. This overture was thwarted, however, when India conducted two more tests a day later. Similarly for Pakistan, the President did not invoke the 30-day delay, instead issuing his determination and implementing sanctions on the day of the second round of detonation tests.

Had the President invoked the 30-day delay, Congress might have initiated some means for the Administration to modify, waive, or terminate the sanctions. By not following the procedure laid out in the AECA, new legislation, either freestanding or amending the Arms Export Control Act, would be required to waive, suspend, or terminate the sanctions against India or Pakistan at this point. The Agriculture Export Relief Act of 1998 and the India-Pakistan Relief Act of 1998 provide only interim alleviation.

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[95]No breakout is available for potential export license denial for each country. The aggregate automatic denial and presumption of denial figures are taken from: Barbara Opall-Rome, "India, Pakistan Sanctions Stop Little U.S. Commerce," *Defense News*, June 29-July 5, 1998, p. 3.

[96]Regulations were expected to be printed in the *Federal Register* on November 19, 1998. See http://www.bxa.doc.gov/ind-pak.htm, and http://www.bxa.doc/Licensing/Ind-Pak2.htm.

Implications for U.S. Interests

The Indian and Pakistani nuclear weapon tests, along with the intensification of charged rhetoric over the Kashmir dispute and other indicators of strained relations between New Delhi and Islamabad, seriously threaten to undercut U.S. nonproliferation and regional security interests. In the first instance, the open display of nuclear weapons capabilities by each country raises the risk of a miscalculation that could bring about a nuclear exchange. The tests could also create wider reverberations, such as fueling intensified efforts by Iran to acquire nuclear weapons and delivery systems and causing other regional states that have decided to forego developing a nuclear weapons capability to rethink their position.

The popular enthusiasm in Pakistan (and elsewhere in the Muslim world) over what is seen as the realization of the "Islamic bomb" has also renewed fears that Pakistan might transfer its nuclear technology or put its weapons at the disposal of radical states, such as Iran or Iraq, or even conservative Saudi Arabia, a traditional major financial benefactor.[97] At present, Pakistan appears likely to find it more advantageous to maintain a nuclear monopoly in the Islamic world than to dissipate its one clear claim on the support and purses of its friends and neighbors in West Asia. In the event that U.S. and other international sanctions lead to extreme economic distress and the emergence of a more populist-nationalist government, however, these calculations could change. In addition, the actual collapse of the Pakistani state, either as a result of economic and political crisis, or a military defeat, could lead to an exodus of Pakistani nuclear scientists and technicians to neighboring Islamic countries.

President Clinton and other U.S. political leaders and officials have indicated several interrelated policy goals. These include, in the first instance, persuading India and Pakistan to avoid further tests and sign the CTBT, and to refrain from deploying ballistic missiles armed with nuclear weapons. Other goals include getting both countries to agree to stop producing fissile materials and to sign the NPT. Signing the latter would require putting all of their nuclear facilities and material under the supervision of the International Atomic Energy Agency (IAEA), a most unlikely action under foreseeable circumstances. The United States and other major powers also have called for a resolution of the underlying causes of the India-Pakistan rivalry.

At this point, the goals of rolling back the nuclear programs of India and Pakistan appear highly visionary, given India's stance towards the NPT and Pakistan's refusal to sign unless India does. As for the more limited objectives, the possibility of a positive response depends very much on whether the perceived interests of India and Pakistan, on the one hand, and the nonproliferation goals of the United States and other major powers, on the other, can be reconciled through diplomacy, persuasion, coercion, or a combination thereof.

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[97]See CRS Report No. 98-525 F, *South Asia Crisis: Effects on the Middle* East [by (name r edacted)], June 5, 1998.

Three Interrelated U.S. Policy Challenges

Three particular challenges face the Administration and Congress at this time. The first is to find, if possible, an anti-proliferation approach that will in fact appeal to the perceived self-interest of India and Pakistan, whether positively, negatively, or both. The second is persuading other major powers and influential countries either to support U.S. initiatives or put forward their own plans that would garner broad international backing.

While the United States still remains a powerful international actor in the eyes of Indian and Pakistani leaders, U.S. influence is probably more limited now than during the Cold War era. At present, the European powers and Russia, are more interested in offering "carrots" than using "sticks." Japan has at least temporarily suspended more than $1 billion of its bilateral aid for an unspecified period, but is not likely to impose any other bilateral economic sanctions. China, which has strongly condemned India, nonetheless maintains a blanket policy of opposing the use of sanctions and, moreover, sees itself as both a fair and foul weather friend of Pakistan.

The Problem of Reconciling Conflicting Indian and Pakistani Objectives

For many years, South Asian and nuclear nonproliferation specialists both within and outside the U.S. government have largely despaired of finding a formula to resolve the India-Pakistan rivalry and satisfy India's aspirations for the status of a nuclear weapons state. Although it is widely agreed that the best way to stop the nuclear arms race in South Asia is to resolve the underlying causes of tension, primarily, the Kashmir issue, that issue not only is exceedingly intractable but some current Indian leaders have also have indicated their belief that India's nuclear capability gives it a trump card for settling the issue on India's terms. Moreover, India's aspirations to be equated with China are equally important to its foreign and security policymakers.

Indian and Pakistani National Objectives. Analysis of India and Pakistani security goals by scores of regional and nonproliferation experts, both western and Indian, carried out over many years, underscores the inherent difficulties in achieving a regional nonproliferation regime.

India's objectives include the following, though not necessarily in this order:

(1) The prestige and recognition of being accepted as a full member of the nuclear club, while not participating in a "discriminatory" nonproliferation regime;

(2) Being treated as a more important country than Pakistan, rather than being equated with it;

(3) Having the ability to deter China from using its nuclear weapons to coerce India, while itself enjoying this capability against Pakistan;

(4) At a minimum, gaining Pakistani recognition of the line of control in Kashmir as an international border and an end to Pakistani support for the anti-India secessionist movement there. Some hawkish BJP leaders such as Home Minister and Minister for Jammu and Kashmir, L. K. Advani, have called for reclaiming the Pakistani held parts of Kashmir, including both Azad ("Free") Kashmir and Pakistan's Northern Areas that connect it with China. How seriously the BJP leaders believe their own rhetoric cannot be determined.

Pakistani goals are largely a mirror image of India's:

(1) Achieve the capacity to counter India's superior conventional power with a nuclear "equalizer" that could be used either offensively, under favorable circumstances, or as a last resort to prevent a catastrophic military defeat;

(2) Maintain close ties to other friendly and/or wealthy or militarily powerful states as an offset to India's 7-1 population advantage and 3-1 military advantage;

(3) Keep India off balance in Kashmir and, optimally, gain international support for a plebiscite that would lead to the state's accession to Pakistan;

(4) Gain respect and support within the Islamic world; and

(5) Deny India effective hegemony over the South Asian region.

Areas of Potential Mutual Self-Interest. These opposing goals notwithstanding, India and Pakistan do have some mutual interests, and it may still be possible for New Delhi and Islamabad to step back from a full-fledged nuclear arms race.

- Neither country wants to get into a nuclear exchange and both know that a nuclear missiles at-the-ready status creates a situation more of crisis instability than deterrence. Indian Prime Minister Vajpayee reportedly stated in mid-June that India sought only a minimum "credible" deterrent, and had no intention of "engaging in a nuclear arms race and building huge arsenals as we have seen other nuclear weapons states do, because their doctrines were predicated on nuclear war." Vajpayee also said that India did not intend to "replicate the command and control structures" that the major nuclear powers maintained.[98]

- Despite brave talk, Pakistan cannot really afford either the direct costs of a nuclear arms race or the heavy costs of U.S. and international economic sanctions. These costs did not deter Pakistan from testing, in part because the political price to Nawaz Sharif of yielding to foreign pressure was even greater, and in part because Pakistan's demonstration of a nuclear weapons capability was seen as having important psychological and objective security advantages. Now that its nuclear capability has been demonstrated, Pakistan appears to be looking for relief from the costs. India, likewise, paid an

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[98]Kenneth J. Cooper, "Leader Says India has a 'Credible' Deterrent," *Washington Post*, June 17, 1998: A21.

economic price for its tests, although less so than Pakistan because of a greater degree of self-sufficiency. India has also seen a sharp slowdown in inward foreign investment. This may derive as much from the Vajpayee government's use of the rhetoric of economic nationalism as from nervousness over the nuclear situation or the temporary loss of U.S. trade credits and investment insurance.

- Both governments have come under considerable public criticism for being too complacent about the economic impact of the tests. However, a meaningful political backlash probably cannot occur in either country without a perception by the public that the government is being unreasonable in continuing to resist U.S. and international overtures.

U.S. and Congressional Options

Most analysis by regional security and nonproliferation experts has centered on finding a mix of incentives and penalties to defuse the crisis, bring India and Pakistan into a bilateral or international arms control regime, and ease the underlying sources of rivalry. Deputy Secretary of State Strobe Talbot noted during a *Meet the Press* interview on May 31, 1998, that although India and Pakistan had regrettably crossed a threshold, "there are plenty of bad and stupid things that they have not yet done, and we hope to use the period ahead to give them every incentive not to do it, to get them back ... from the brink."

A few days earlier Talbot observed that while both countries had ignored U.S. pleas that they not carry out tests, that "doesn't mean they are deaf or blind to arguments, particularly ones that appeal to their self-interest."[99]

Current Status of U.S. Nonproliferation Sanctions. Working in cooperation with the Administration, Congress adopted legislation during the close of the past session that provided temporary flexibility to the President in regard to nonproliferation sanctions that affect U.S. agricultural exports, access to American bank loans, and the U.S. stance on loans from international financial institutions. (See section on legislation, below.) The waiver authority granted to the President was not contingent on any specific actions on the part of India or Pakistan. In that sense, it has been described by regional analysts as a "carrot" that can be used by the Administration to seek concessions by India and Pakistan. Among other considerations, U.S. officials reportedly are counting on Pakistan's dire financial straits and its desire to gain U.S. support for a $ 5 billion emergency credit from the IMF, the World Bank, and G-7, to tip the balance towards accommodation with U.S. goals.[100]

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[99] " Talbot Briefs on Pakistan, India Nuclear Tests," *USIS Washington File.*

[100] Ahmed Rashid, "Sweet Talking: Clinton Gets Clout to Push for South Asian Nuclear Deal" *Far Eastern Economic Review,* Nov. 5, 1998: 27.

Taking into account the remaining constraints imposed by current U.S. sanctions law, and the time-limited nature of the President's current authority to waive certain sanctions, American options appear to fall into three broad categories:

Option 1: Maintain or broaden sanctions under Sec. 102(b) of the Arms Export Control Act (AECA) and other provisions.

Rationale and Advantages: Given the slim prospects of reaching agreement by India and Pakistan on nuclear restraint or a rollback of their nuclear and missile programs, some observers argue that the two countries should feel the full weight of U.S. sanctions and those that might be imposed by other countries. If nothing else, some maintain, the imposition of broad and painful sanctions will serve as an object lesson to other would-be proliferators.

U.S. diplomacy under this option would concentrate on getting additional countries to impose sanctions and to use its leverage at the international financial institutions to cut off development and balance of payments loans. Initial U.S. efforts in this direction received a temporary boost at a June 12 Group of Eight (G-8) meeting in London, during which all of the members countries, including the developed industrial democracies and Russia, agreed to oppose loans to India and Pakistan by international financial institutions, except loans "to meet basic human needs."[101] Subsequently, however, votes on loans at the World Bank suggest that most loan requests would be regarded as meeting these criteria.

Disadvantages: Perhaps the most important obstacle to this approach is that many Members of Congress believe that unilateral U.S. sanctions harm U.S. economic interests without achieving any concrete nonproliferation benefits. More generally, critics argue that this option leaves the United States as an outlier among the other nuclear weapons states and major powers in regard to the scope and breadth of its bilateral sanctions, and could have unintended negative consequences, such as an economic and political collapse of Pakistan, or increasing dependence of Islamabad on Iran and/or other Islamic states. In June 1998, the CIA reportedly warned policymakers that Pakistan's financial woes might cause it to sell nuclear technology to Iran or other neighbors.[102] Over time, it is argued, a hard-line adherence to sanctions could lead to a significant breakdown in cooperation with U.S. allies, and with Russia and China, since it is questionable how long they will be prepared to maintain their aid suspensions and opposition to loans from the international financial institutions.

Congressional Role: The authority to waive a range of sanctions that was provided via the Omnibus appropriations bill for FY 1999 will expire in one year. After that, it will be up to Congress whether to extend the waiver authority to allow the sanctions to be reimposed.

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[101]David Buchanan, Mark Nicholson, and Farhan Bokhari, "G8 to Step Up Pressure on India and Pakistan," *Financial Times*, June 13-14, 1998.

[102]Ahmed Rashid, "It's No Party," *Far Eastern Economic Review*, July 16, 1998: 70.

Option 2: Provide the President with authority to waive current sanctions, subject to congressional review and override, in return for specific actions of restraint on the part of India and Pakistan.

Rationale and Advantages: The object of this approach, which largely represents current policy, is to offer the selective lifting of sanctions in return for specific actions by India and/or Pakistan to step back from their confrontation. In theory, the specific prior grant of waiver authority by Congress gives the Administration the ability to negotiate with more credibility than would be the case if the Administration could only pledge to seek the lifting or modification of sanctions by Congress after commitments are obtained from India or Pakistan.

Disadvantages: Although the Clinton Administration has been armed with the ability to negotiate, the history of the legislation suggests a strong mandate to invoke the waiver authority without regard to actions by India and Pakistan. Both countries, in fact, thus far have declined to enter into quid-pro-quo discussions, though both have indicated unilaterally that they do not intend to conduct more tests. Moreover, India and Pakistan have probably concluded that the waiver authority granted to the President under P.L. 105-194 by Congress was less aimed at reinforcing the Administration's negotiating authority than a desire to avoid harm to U.S. agricultural exports and other interests.

Congressional Role: This approach is current law until the end of FY 1999. The 106th Congress will have to decide whether to extend the President's waiver authority or allow it to lapse. Congress could also choose to expand the waiver authority to apply to arms exports and sensitive technology sales.

Option 3: Concentrate on Getting Pakistan to Sign the CTBT First.

Rationale and Advantages: This is more of a tactical approach than an option, but if successful it could create significant momentum towards the larger U.S. objective of a regional nonproliferation regime. The option would build on the long-standing special relationship between the United States and Pakistan, which is grounded in the still valid 1959 Mutual Security Treaty. India would find itself in an awkward position if Pakistan were to embrace the CTBT, leading to intensified international pressure for following suit.

Several factors suggest that Pakistan might, under the right circumstances, sign the CTBT. First, Pakistan appears to have less need than India to conduct further tests, since it does not need to acquire a thermonuclear capability. Second, Pakistan has been hurt more by the sanctions and existing economic problems, and badly needs international assistance to avoid default on its current debts. Third, as the weaker country, Pakistan has always sought an external patron to compensate for its inherent weaknesses vis-a-vis its larger rival. Realistically, Pakistan cannot expect to resurrect the close security relationship that it enjoyed during the Afghan war era, but greater U.S. political and economic support, and an implicit security guarantee, might be enough to motivate the government of Prime Minister Nawaz Sharif to rethink its stance.

Disadvantages: This approach has several potential obstacles and disadvantages. The Pakistani government might well decide that domestic political considerations raise overwhelming obstacles to taking unilateral nonproliferation steps ahead of India, regardless of the potential economic, international economic, and even security benefits. India, for its part, may still shun signing the CTBT regardless of international opprobrium, which would leave the treaty no closer to coming into force. On the other side of the equation, should Pakistan become too confident of its newly reestablished relationship with the United States, it might become emboldened to take provocative steps regarding Kashmir that would leave the region more unstable than at present.

Congressional Actions

The Congress and the Administration appear to have worked closely in dealing with the changed nuclear proliferation landscape resulting from the Indian and Pakistani nuclear tests. In testifying before the Senate Foreign Relations Committee on July 13, Assistant Secretary of State for South Asian Affairs Karl F. Inderfurth requested waiver authority for all sanctions currently in place against India and Pakistan, to be used only when the two countries make "substantial progress" on a number of nuclear nonproliferation and other security objectives. Inderfurth noted that, "both the Administration and the Congress share a desire to inject a greater degree on consistency, flexibility, and effectiveness into the sanctions regimes against India and Pakistan...."[103]

U.S. business interests and the economic interests of farm communities were key to the swift passage of legislation that waived sanctions on agricultural export credits. On July 14, President Clinton signed into law the Agriculture Export Relief Act of 1998 (P.L. 105-194), which amends the Arms Export Control Act by exempting, for one year, food and other agricultural commodity purchases from nuclear nonproliferation sanctions under Section 102(b) of that law. Submitted as S. 2282 (McConnell) on July 9, 1998, the new legislation permitted U.S. wheat growers to take part in a July 15 Pakistan wheat auction.

On July 15, the Senate adopted the India-Pakistan Relief Act of 1998 — popularly referred to as the Brownback amendment — by voice vote — as an amendment to the 1999 agricultural appropriations bill (H.R. 4101). The India-Pakistan Relief Act gives the President the authority to waive for one year some economic sanctions imposed on India and Pakistan. The measure allows the President to waive the application of most sanctions imposed pursuant to sections 101 and 102 of the AECA, with the exception of paragraphs (B), (C), and (G) of section 102, pertaining to military assistance, arms sales, and sensitive technology exports. The measure does not establish specific criteria for waivers, but would require prior consultation with the Senate Foreign Relations Committee, the House International Affairs Committee, and the Appropriations Committees of both chambers. The

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[103] See Statement by Karl F. Inderfurth, Assistant Secretary of State for South Asian Affairs, before the Senate Subcommittee on Near East and South Asia, Committee on Foreign Relations, July 13, 1998.

Senate on July 16, 1998, passed the agriculture appropriations act by a vote of 97-2. It was then referred to House-Senate conference, but was subsequently folded into the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999 (H.R. 4328), and enacted into law on October 21, 1998, as Public Law 105-277 (112 Stat. 2681)