

The Carter Administration's “Damnable Dilemma”

How to Respond to Pakistan's Secret Nuclear
Weapons Program, 1978–1979

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During the summer of 1979, months after U.S. government officials had begun confronting the complex, thorny problems raised by new intelligence about Pakistan's nuclear weapons program, President Jimmy Carter's representative for nonproliferation issues, Gerard C. Smith, was deeply dissatisfied. Having favored a confrontational approach toward Pakistan's secret nuclear activities, he believed that the Carter administration was scuttling its non-proliferation goals by acquiescing in Islamabad's nuclear activities so long as Pakistan did not test weapons or transfer nuclear technology. Smith saw a “damnable dilemma”: how could Washington “retain any integrity” for its nonproliferation policy if Pakistan could freely develop a nuclear weapons capability? By lowering standards, he argued, “we would be driven to accept South African enrichment and plutonium separation and uranium enrichment in many countries.” He warned that President Carter “should face squarely up to the fact that a major policy will have been aborted.”¹

A prominent figure who had worked on nuclear weapons issues for decades, Smith had been Secretary of State John Foster Dulles's adviser on nuclear matters and then his chief of policy planning. Moreover, during the Nixon administration, Smith had led the delegation negotiating the first Strategic Arms Limitation Treaty (SALT I) and had then been at the State Department for two years, enlisted to help develop and implement U.S. nuclear

1. Gerard C. Smith to Under Secretary Newsom, 28 August 1979, in U.S. National Archives and Records Administration (NARA), Record Group (RG) 59: Records of State Department, Subject Files of the Ambassador at Large and Special Representative of the President for Nonproliferation Matters, 1977–1981 (Gerard C. Smith), Box 19, Pakistan, August 1979 (Smith Records). In *Disarming Diplomacy: The Memoirs of Gerard C. Smith, Arms Control Negotiator* (Lanham, MD: Madison Books, 1996), Smith briefly touches on Pakistan on pp. 201–202 without mentioning internal policy debates.

nonproliferation policy. He was not the only influential voice in nonproliferation policy, but he had played a key role on a variety of issues, from the South African nuclear weapons program to international fuel cycle policy. Given Smith's stature, it is worth recounting how he came to believe that a "major policy" was being abandoned.

Drawing on recently released primary materials, including major archival sources for the crucial 1978–1979 period, this article attempts to shed light on some of the key decisions and development, including the discovery and developing intelligence on Pakistan's uranium enrichment program, the effort to curb that program through export controls, the policy options that senior U.S. officials considered, the role of geopolitical and nonproliferation concerns in shaping policy, and why and how the administration developed the approach that worried Smith.

The challenge posed by a nuclear program initiated in deep secrecy has invited the attention of historians and social scientists. Few studies, however, have used the newest available sources to interpret President Carter's policy toward Pakistan in a more or less comprehensive way. In a study of U.S. bargaining with proliferators over nuclear testing, Or Rabinowitz discusses the U.S. effort to pursue a no-nuclear-test understanding with Pakistan as a nonproliferation stopgap after the United States had failed to stop that country's uranium enrichment program. In a chapter in a major study of nonproliferation policy, Nicholas Miller argues that the Carter administration could not thwart the Pakistani bomb because the sanctions threat was too modest to provide effective leverage over Islamabad. In an important study on the U.S. and British approach to the Pakistani nuclear program, Malcolm Craig contends that by mid-1979, when Pakistan's success in resisting U.S. opposition had been made clear, the Carter administration turned from "prevention to mitigation" by trying to limit the impact of Pakistani nuclear activities on U.S. nonproliferation policy and international relations generally. Using British records, Craig provides extraordinary detail on how the UK government became aware of Pakistan's secret enrichment program. Thomas Cavanna challenges claims about the central role of nonproliferation in U.S. strategy by depicting the Carter administration's "fragile" efforts to curb the spread of nuclear weapons, allowing concerns about Pakistani security to override nonproliferation objectives from 1979–1980 onward. That perspective resonates with Rabia Akhtar's study of the "blind eye" that Washington cast toward Pakistan's nuclear program.²

2. Malcolm M. Craig, *America, Britain, and Pakistan's Nuclear Weapons Programme, 1974–1980: A Dream of Nightmare Proportions* (Basingstoke, UK: Palgrave Macmillan, 2017), pp. 10, 13; Nicholas

Enlightening and informative as those contributions are, declassifications of materials in recent years permit an even fuller understanding of the Carter administration's policymaking on the Pakistani nuclear program, including the impact of intelligence findings on decisions and diplomatic initiatives. The new evidence sheds light on the discovery of the Pakistani uranium enrichment program in 1978–1979 and the surprised reaction of top State Department officials to Pakistan's progress in acquiring the technology needed to enrich uranium for a weapons program. The declassifications also illuminate an issue not covered by previous accounts: the decision by the White House and the State Department to set up a team of experts to meet with West European governments to discuss blocking Pakistani "shopping expeditions" led by Abdul Qadeer Khan, the technologist who stole gas centrifuge designs from the Dutch. In addition, recent declassifications shed light on the discussions with, and *démarches* to, the Pakistani dictator General Muhammed Zia ul-Haq and other leading figures, who rebuffed almost all U.S. initiatives. New evidence also permits a fuller account of the internal debates over nonproliferation strategy and the growing prominence of geopolitical concerns in the spring of 1979, encouraging high-ranking State Department officials to reject proposals for direct challenges to Pakistan's nuclear program.

New evidence also demonstrates, contrary to previous accounts, that the highest levels of the Carter administration accepted a controversial fallback—a Pakistani no-test, no-technology transfer pledge—soon after it was proposed in June 1979. This solution was divisive because some officials saw it as a "damaging precedent" symbolizing tacit acceptance of Pakistani nuclear weapons capabilities. In any event, agreement with Pakistan on such a pledge proved elusive.³

Although the Carter administration came to power with a strong commitment to curbing nuclear proliferation, the Pakistani case demonstrates how difficult it was to realize that goal. With Pakistan's leaders determined to acquire nuclear weapons to avoid future national humiliations and to deter India, their steady progress in acquiring sensitive technology for producing

L. Miller, *Stopping the Bomb: The Sources and Effectiveness of US Nonproliferation Policy* (Ithaca, NY: Cornell University Press, 2018), p. 201; Thomas Cavanna, "Geopolitics over Proliferation: The Origins of US Grand Strategy and Their Implications for the Spread of Nuclear Weapons in South Asia," *Journal of Strategic Studies*, Vol. 41, No. 4 (2018): pp. 576–603; and Rabia Akhtar, *The Blind Eye: U.S. Non-Proliferation Policy towards Pakistan from Ford to Clinton* (Lahore: University of Lahore Press, 2019). See also Or Rabinowitz, *Bargaining on Nuclear Tests: Washington and Its Cold War Deals* (New York: Oxford University Press, 2014). Also significant is U.S. Department of State, *Foreign Relations of the United States, 1977–1980*, Vol. XIX (hereinafter referred to as *FRUS*, with appropriate year and volume number).

3. Rabinowitz, *Bargaining on Nuclear Tests*, p. 241; and Miller, *Stopping the Bomb*, p. 201.

fissile material spurred U.S. officials to conclude that no combination of measures was likely to halt Islamabad's drive for a nuclear weapons capability, especially when the U.S. government had no effective leverage and a buyout was not possible. Moreover, despite the Carter administration desire to prevent nuclear proliferation, top officials, including Deputy Secretary of State Warren Christopher and Deputy Director of the CIA Frank Carlucci, drew back from the tough approach proposed by Smith out of fear that it could destabilize U.S. relations with Pakistan and contribute to greater instability in Southwest Asia, which was already buffeted by coups and revolutions. Faced with those conflicting priorities, President Carter himself, committed though he was to nonproliferation, worried that even mild pressures could have an adverse geopolitical impact. Pakistan is thus an exemplar of the difficult challenge that nonproliferation poses when a strategically important and relatively autonomous country is determined to build nuclear weapons.

The Pakistan case also illustrates the tensions and dilemmas that can emerge when major foreign policy goals come into conflict. The objectives of nonproliferation and geopolitical stability were different means for supporting a U.S.-dominated world order. By preventing the multiplication of new nuclear powers, successful nonproliferation policy could avert threats to world security as well as to U.S. leadership. Political stability in strategically important areas was important for ensuring U.S. influence and access, especially in the Cold War context when apprehensions about the Soviet Union's reach strongly influenced policy. Yet, those goals could clash. In the Pakistan case concern about regional instability and loss of influence prompted the Carter administration to redefine and downgrade its nonproliferation aims, despite their importance to the president and his advisers.⁴

This article begins by reviewing the early history of the Pakistan nuclear program and the role of South Asian conflict in spurring it. Although the Carter administration was initially concerned about Pakistan's interest in reprocessing, U.S. officials learned from the British and later from other sources that Pakistan had a secret program to enrich uranium for military purposes. Although opinions varied over whether Pakistan could meet the technological challenges posed by developing gas centrifuges, U.S. Ambassador Arthur Hummel was persuaded enough by the intelligence to request authority to lodge diplomatic protests with the Pakistani government. The State Department favored waiting until the intelligence picture was clearer and export

4. William Burr, "Nuclear Proliferation and Conceptions of National Interest: The U.S. Case 1960–1967," in John Baylis and Yoko Iwama, eds., *Joining the Non-Proliferation Treaty: Deterrence, Non-Proliferation and the American Alliance* (London: Routledge, 2019), pp. 8–33.

controls were in place. By early 1979, the lingering doubts were dispelled as U.S. intelligence agencies realized how far Pakistan had gone and was likely to go in developing gas centrifuge technology.

The new awareness posed an “acute dilemma” for U.S. policy by raising tensions with the Pakistani regime over the nuclear program and opening the possibility of greater regional instability.⁵ Although the Carter administration hoped the tightening of export controls could thwart Pakistan’s acquisition of sensitive technology from Western Europe, key suppliers, especially Switzerland and West Germany, were reluctant to help lest they forgo sales opportunities. Knowledge of these developments enriches our understanding of why it was so difficult to stop the Pakistani bomb.

Policy options to constrain Pakistan were few. The consensus view was that diplomatic inducements would not stop Pakistan from acquiring nuclear arms, which its leaders saw as essential for national safety, although U.S. policymakers hoped (in vain) that an Indian-Pakistani nuclear agreement would be possible. The Carter administration considered various forms of pressure, including preventive or “far out” measures, but the administration ruled out a tough diplomatic approach for fear that it could incite anti-American sentiment in the Muslim and Arab world and weaken U.S. influence in the region.⁶ Security concerns were prominent, and the Iranian revolution and Soviet influence in Afghanistan heightened unease about the geopolitical situation to the detriment of nonproliferation goals. To try to keep priorities in balance, the United States proposed a freeze of nuclear research, which General Zia rejected.

Apprehension that the Pakistanis were moving toward a nuclear test led to a U.S. proposal for no-test, no-technology-sharing pledges on Islamabad’s part, leaving it free to develop fissile material production capabilities. Thus, by the summer of 1979 the Carter administration had scaled back its nonproliferation goals rather than risk serious diplomatic tensions with Pakistan. Senior U.S. officials, such as Smith, who saw a nuclear Pakistan as a paramount threat could not prevail against those in the State Department, the Central Intelligence Agency (CIA), and the White House who gave precedence to security and geopolitical interests over the nuclear problem.

5. State Department telegram 025965 to U.S. Embassies in India and Pakistan, “Pakistan Nuclear Problem,” 31 January 1979, State Department declassification release (SDDR), in National Security Archive, Washington, DC.

6. “Minutes of a Policy Review Committee Meeting,” 28 March 1979, in *FRUS*, 1977–1980, Vol. XIX, Doc. 333.

The Secret Enrichment Program and Its Discovery

When Carter ran for the presidency, the problem of nuclear proliferation was high on his campaign agenda. The May 1974 Indian nuclear test had revived concern about the spread of nuclear weapons capabilities, and Carter spoke to those worries. In an early speech, he declared: “We must end the continuing proliferation of atomic weapons throughout the world, which is as senseless as a waste of precious resources as it is a mortal danger to humanity.” Seeing nuclear abolition as the ultimate goal, Carter worried that the proliferation of nuclear power could risk reactor accidents, produce radioactive waste, and worsen the threat of terrorism. Proliferation was already a salient issue in Gerald Ford’s White House, which had developed a hard line against sensitive nuclear exports and nuclear fuel reprocessing. Ford took more nonproliferation initiatives in an attempt to stay ahead of Carter, but they never gave him an edge in a losing campaign.⁷

When the Carter administration came to power, the president’s advisers were divided on some key issues, such as how to approach allies that were heavily invested in recycling spent reactor fuel into plutonium and were unlikely to be responsive to criticisms of such reprocessing. On the question of would-be nuclear weapons states acquiring sensitive technology, however, the administration was undivided. A report drafted by an interagency group treats nuclear proliferation as a threat to the U.S. position as a world power. Demonstrating continuity with the concerns of previous administrations, the report asserts that the spread of nuclear weapons could weaken U.S. influence in world affairs, expose the United States to “new risks,” endanger alliance relations, and exacerbate the danger of terrorism. According to the report, “avoiding proliferation ultimately will depend to a large extent on how successful we are in reducing motivations to acquire nuclear weapons capability.” Countering the spread of such capabilities would be a major challenge if a country’s “motivations coincide with a capability to produce nuclear explosive devices, [because in such cases] further proliferation will almost certainly result.” Such thinking would prove highly relevant to the Pakistani situation, when U.S. policymakers experienced firsthand the difficulty of using diplomacy to neutralize that country’s strong motivations and technological drive.⁸

7. Jimmy Carter, “New Approach to Foreign Policy,” 28 May 1975, in *FRUS*, 1977–1980, Vol. I, Doc. 2; and J. Samuel Walker, “Nuclear Power and Nonproliferation: The Controversy over Nuclear Exports, 1974–1980,” *Diplomatic History*, Vol. 25, No. 2 (2001), pp. 234–237.

8. Walker, “Nuclear Power and Nonproliferation,” p. 237; “Study Prepared by the Ad Hoc Interagency Group on Nuclear Proliferation,” 9 March 1977, in *FRUS*, 1977–1980, Vol. XXVI, Doc. 325; and Burr, “Nuclear Proliferation and Conceptions of National Interest,” pp. 8–33.

The formation and implementation of the administration's nonproliferation policy would involve many players and organizations at various levels. Besides Smith, these included Assistant Secretary of State for Oceanographic, Environmental, and Scientific Affairs Thomas Pickering, Deputy to the Undersecretary of State for Security Assistance, Science, and Technology Joseph Nye, Bureau of Intelligence and Research (INR) analyst (and later member of the Policy Planning Staff) Robert Gallucci, National Intelligence Officer for Nonproliferation John Despres, Deputy Secretary of Energy John Deutch, and National Security Council staffers Gerald Oplinger and Thomas Thornton. On policy toward Pakistan, the Bureau of Near Eastern and South Asian Affairs, led by Assistant Secretary Harold Saunders, pulled considerable weight. Top policymakers such as Secretary of State Cyrus Vance and his deputy Christopher had major roles in defining the parameters of nonproliferation policy and carefully coordinated major initiatives with President Carter and National Security Adviser Zbigniew Brzezinski. Also playing a substantive role was a National Security Council subcommittee, the Policy Review Committee (PRC), in which deputies to the principles hashed out the main lines of policy.

The circumstances that put Pakistani nuclear proliferation on the Carter administration's agenda were rooted in South Asian conflicts. Pakistan's Foreign Minister Zulfikar Ali Bhutto made an almost immutable commitment when he declared, after the 1965 war with India, that, even if it meant "eating grass," Pakistan would build the bomb. Like India, which was far ahead in developing a nuclear capability, Pakistan refused to sign the Nuclear Nonproliferation Treaty (NPT), giving both countries wide freedom of action to develop nuclear weapons. After the disastrous 1971 war with India, Bhutto, then president, was intent on avoiding another national humiliation by launching elaborate plans for a nuclear weapons capability, partly by establishing presidential control of advanced research and development. For Bhutto and the leadership, nuclear weapons were essential to offset India's overall military superiority. A key decision was putting the Pakistani Atomic Energy Commission under the control of Munir Ahmad Khan, a scientist who shared Bhutto's commitment to establishing a weapons program.⁹

9. For "eating grass," see the major study by Feroz Hassan Khan, *Eating Grass: The Making of the Pakistani Bomb* (Stanford, CA: Stanford University Press, 2012), p. 59. Another important study is Hassan Abbas, *Pakistan's Nuclear Bomb: A Story of Defiance, Deterrence, and Deviance* (London: Hurst Publishers, 2018). For nuclear weapons in Pakistani elite opinion, see U.S. Director of Central Intelligence, National Intelligence Estimate (NIE) 32-78, "Pakistan—The Costs of Political Instability," 6 June 1978, CIA Declassification release, in National Security Archive, Washington, D.C. (Copies of

By exacerbating regional rivalries, the May 1974 Indian nuclear test had a major impact on the dynamics of Pakistan's nuclear research and development. Not long after the test, Bhutto visited Beijing and asked for five kilograms of plutonium and support for a South Asian nuclear free zone, but the Chinese refused.¹⁰ Beijing's refusal meant that Pakistan would have to produce fissile material on its own. Toward that end, Abdul Qadeer Khan, a Pakistani metallurgist working in the Netherlands, volunteered his services to Pakistani authorities. Since May 1972, Khan had been working for a subcontractor for URENCO, a British-Dutch–West German consortium that was developing gas centrifuge uranium enrichment technology for producing low-enriched nuclear reactor fuel. Because the centrifuges could produce weapons-grade uranium, the British, Dutch, and West Germans made an agreement with Washington in 1960 to reduce proliferation risks by keeping technological improvements secret. The commitments to secrecy, however, were only as good as the security arrangements that supported them. After a defective security investigation, the Dutch firm Physical Dynamic Research Laboratory (FDO), which had contracts with URENCO, gave Khan access to highly classified information even though he had only a low-level, non-secret clearance. The system that had enveloped gas centrifuge technology in a veil of secrecy failed disastrously. With Bhutto's encouragement, Khan began gathering, copying, and sending sensitive information about gas centrifuge technology to Pakistan. In 1975, Khan had to flee the Netherlands, and in April 1976 he joined the Pakistani enrichment project as director of research and development.¹¹

all documents listed herein from CIA Declassification releases are available at the National Security Archive. Contact the archive for access.)

10. Allan Locke to GS [Smith], "Thoughts on Pakistan," 29 August 1979, in Smith Records, Box 18, Pakistan August 1979. A heavily excised CIA report notes that the "precise nature and extent of [Chinese-Pakistani nuclear] cooperation is uncertain." CIA, "A Review of the Evidence of Chinese Involvement in Pakistan's Nuclear Program," 7 December 1979, CIA Declassification release.

11. Adrian Levy and Catherine Scott-Clark, *Deception: Pakistan, the United States, and the Secret Trade in Nuclear Weapons* (New York: Walker, 2007), pp. 26–33; and Joop Boer et al., *A. Q. Khan, URENCO, and the Proliferation of Nuclear Weapons Technology: The Symbiotic Relationship between Nuclear Energy and Nuclear Weapons* (London: Greenpeace International, 2004), p. 9. For Khan's impact, see Khan, *Eating Grass*, esp. pp. 139–147; and R. Scott Kemp, "The Nonproliferation Emperor Has No Clothes," *International Security*, Vol. 38 (2014), pp. 64–65. In 2005, former Dutch Foreign Minister Ruud Lubbers recalled that in 1975 CIA officials had asked the Netherlands government not to prosecute Khan so that the agency could monitor him. "CIA 'Let Atomic Expert Go,'" *BBC News*, 5 August 2005. (Thanks to Frank von Hippel and Zia Mian, Princeton University, for this citation.) Whether anything happened next, whether any such surveillance continued, and whether it produced any actionable intelligence remain unknown. In any event, according to John Despres, who was national intelligence officer (NIO) on nonproliferation in 1978–1979, the U.S. government did not have evidence of Pakistan's gas centrifuge program before 1978. John Despres, emails to author, 17 and 18 February 2020.

By mid-1978, State Department and intelligence officials had become aware of the enrichment program, but their concerns about Pakistan's nuclear ambitions dated back long before that. In 1974 the Pakistani government began negotiations with a French company to buy a plant that could be used for reprocessing of spent nuclear reactor fuel into plutonium. Despite the safeguards arranged by the French, the deal worried the Ford and then the Carter administration, which saw Pakistani reprocessing as a proliferation risk. The Carter administration wanted to stop the reprocessing deal, but it believed that nonproliferation goals had to be harmonized with political and security interests in Southwest Asia. In January 1978, State Department officials in the offices of Near Eastern affairs, European affairs, and security assistance wrote that Pakistan needed to be "politically stable and economically viable" because a "disintegrating or radicalized" Pakistan "could lead to severe regional instability and might well invite intervention from its neighbors." Thus, the United States had to "maintain some elements of [its] past supportive relationship" if it wished to "retain some ability to affect Pakistan's policies and attitudes." That desire for a "supportive relationship" proved to have an important effect on the direction of U.S. nonproliferation policy.¹²

Bhutto had resisted U.S. pressures against the reprocessing plant until a military coup overthrew him in July 1977. The new military regime was headed by Army Chief of Staff General Zia, who then designated himself president in September 1978, having already banned political activity. Yet, overthrowing a prime minister with a wide popular following provided the military regime with weak domestic legitimacy. A key State Department official, Undersecretary of State for Political Affairs David Newsom, was in Pakistan in July 1978 and wrote of "basic government weakness": Bhutto "remains the most significant political figure in the country" and his "shadow . . . hangs over all that [the] present regime considers."¹³ Zia had no intention of curbing Bhutto's nuclear weapons program, which, according to a U.S. National Intelligence Estimate (NIE), had the support of "virtually all military and civilian leaders." The NIE implied that continuing the program was important for the legitimacy of the government, although Zia sought other sources of

12. Alfred Atherton et al. to the Acting Secretary, "Pakistan: Continuing a Positive Relationship While Maintaining Pressure to Forego a Nuclear Weapons Option," 12 January 1978, in NARA, RG 59, Office of the Under Secretary of State for Security Assistance, Science, and Technology, Files of Lucy W. Benson and Mathew Nimetz, 1977-1980 (Benson-Nimetz), Box 9, Pakistan-A7s 1978. For detailed coverage of the efforts to halt the reprocessing contract, see Craig, *America, Britain, and Pakistan's Nuclear Weapons Programme*.

13. U.S. Embassy Pakistan telegram 6903 to State Department, 17 July 1978, in NARA, RG 59, Benson-Nimetz, Box 9, Pakistan A7s 1978; and Khan, *Eating Grass*, pp. 150-151.

political validity, such as Islamization. The military regime acted with caution and avoided “dramatic steps” on the nuclear front, in part to avoid provoking India, but there is no question that Pakistani leaders wanted the bomb.¹⁴ As Zia told University of Illinois political scientist Stephen P. Cohen during a May 1978 meeting, Pakistan needed “two or three nuclear weapons as [a] deterrent against approximately 20 Indian weapons.”¹⁵

The Carter administration saw a Pakistani capability to reprocess spent fuel and produce plutonium as a serious proliferation threat. Thus, for a long while in 1977 and 1978, U.S. officials focused on persuading France and Pakistan to cancel the reprocessing deal. The Pakistanis denied they wanted reprocessing for a military program, and Foreign Ministry Secretary General Agha Shahi argued that changing course would be “political dynamite.” The French, however, were backing away from the deal on nonproliferation grounds. In January 1978, Andre Jacomet, the French Foreign Ministry official responsible for nuclear policy, told Smith that “France had decided not to go through with the contract,” although President Valéry Giscard d’Estaing wanted to convey the decision to the Pakistani authorities at a time of his own choosing, in part for domestic political reasons.¹⁶ Where the French stood on the matter was not in question: in May 1978, Giscard d’Estaing assured President Carter that France “will not give Pakistan the means to get the bomb.”¹⁷

In July 1978, to the relief of U.S. officials, the French informed the Pakistanis that the reprocessing deal was off, although they refused to make a public statement about cancellation to avoid giving ammunition to Giscard’s opponents. That Washington had intervened in the reprocessing controversy incurred deep Pakistani resentment and, according to the CIA, created

14. U.S. Director of Central Intelligence, NIE 32-78. According to an intelligence report, “there is no important segment in Pakistan that vocally objects to developing nuclear weapons.” Director of Central Intelligence, Interagency Intelligence Memorandum, “Pakistan’s Nuclear Program and Prospects,” April 1979, CIA Declassification release.

15. Department of State telegram 114649 to U.S. Embassy Paris, “Pakistan’s Perceived Need for Nuclear Weapons,” 5 May 1978, in NARA, RG 59, Department of State Records, Access to Archival Databases [online documents at the U.S. National Archives] (AAD), Diplomatic Telegrams. Cohen later observed that “Pakistanis want ‘only’ four or five weapons and seem unaware of how vulnerable this would make them to a serious Indian program.” Thomas Thornton to Gerard Smith, 15 August 1979, enclosing Stephen P. Cohen, “Preliminary Note on South Asian Proliferation,” 10 August 1979, in Smith Records, Box 18, Pakistan September 1979.

16. Memorandum of conversation (Memcon), “US-Pakistani Non-Proliferation Issues,” 30 July 1977, Benson-Nimitz, Box 9, Pakistan A7s; and Memcon [Smith and Jacomet], “Non-Proliferation,” 23 January 1978, in Smith Records, Box 5, Memcons. For the focus on Pakistani reprocessing as of early 1978, see Memorandum for the Files, “A Study of Pakistan’s Capability to Produce Indigenous Nuclear Explosive Devices,” 25 January 1978, in Smith Records, Box 19, Pakistan 1978.

17. Excerpt from Memcon, n.d. (26 May 1978), in Jimmy Carter Presidential Library (JCL), National Security Adviser, Staff Material, North/South, Pakistan: Nuclear, 6/77–12/80.

sentiment that the United States was tilting toward India and did not “comprehend Pakistan’s problems.” Far from deterred by U.S. opposition to the reprocessing contract, Shahi had told Newsom in August 1978 that Pakistan “has the unfettered right to do what it wishes and will retain all its options.” Moreover, Pakistani scientists and technologists had already obtained much information about reprocessing technology, facility design, and construction details, and their secret “New Labs” project for a small reprocessing facility was underway. By then, however, British and U.S. officials were learning that Pakistan’s nuclear program was not simply about plutonium.¹⁸

The British may have had the first inkling that Pakistan was pursuing a uranium enrichment program. The clue was Pakistan’s attempts to purchase electrical inverters that could help regulate the power supply for gas centrifuge cascades. In March 1978, British diplomat Michael Pakenham met with Allen Locke, a State Department expert on nuclear proliferation, and handed him a note recounting key elements of the story of Pakistan’s attempts to acquire inverters from Emerson Electric Industrial Controls, the British branch of a U.S. multinational. In late 1976, the Pakistanis had ordered 300 inverters through Team Industries, a West German front company or “funnel,” and Emerson eventually supplied them in 1977, after considerable debate in the British government. The specifications for the inverters raised suspicions that they were for a gas centrifuge plant, as did the final destination for the order, the Rawalpindi Ordnance Factory. According to the British note, the UK Foreign Office could not see any “way under United Kingdom law [that] this particular export could be stopped.” In March 1978 a Pakistan order for 100 more inverters (worth over 2 million pounds sterling) raised more misgivings. The government’s “technical opinion” inclined it to think that the inverters were “probably for use in a gas centrifuge plant.”¹⁹

18. U.S. Embassy Vienna telegram 8200 to State Department, “Smith-Jacomet Meeting: French Position on Cancellation of Pakistani Reprocessing Contract,” 13 September 1978, SDDR; CIA, “The Pakistani Situation,” 4 December 1978, CIA Declassification release; State Department telegram 25550 to U.S. Embassy Pakistan, “Discussion between Under Secretary Newsom and Pakistan’s Minister of State for Foreign Affairs Agha Shahi on the Reprocessing Issue,” 14 August 1978, SDDR; and Khan, *Eating Grass*, pp. 129–134.

19. Allen Locke to Mr. Nye, “UK Inquiry on Export of Inverters to Pakistan,” with note attached, 28 March 1978, in NARA, RG 59, Benson-Nimetz, Box 9, Pakistan A7s 1978. For further background, see U.S. Embassy Pakistan telegram 274432 to State Department, repeated as State Department telegram 274432 to CINCPAC, “British Export Control Case on Power Converters,” 28 October 1978, SDDR; and Craig, *America, Britain, and Pakistan’s Nuclear Weapons Programme*, pp. 91–95, 126–132, 165–174. For Team Industries as a “front” or “funnel,” see U.S. Embassy United Kingdom telegram 2788 to State Department, “US-FRG Bilateral on Pakistan Nuclear Program,” 11 February 1979, SDDR. On the Pakistani inverter order, see also Khan, *Eating Grass*, p. 169.

Months earlier, in September 1977, a British diplomat had told a State Department official about Pakistan's efforts to purchase inverters, but by all indications the information had no impact in Washington.²⁰ The British note of March 1978, however, put the gas centrifuge issue squarely on the U.S. policy agenda. Because time remained to stop the latest order, UK officials wanted to know whether the State Department believed that inverters fell within the trigger list of items regulated by the Nuclear Suppliers Group (NSG) and thus whose export would require International Atomic Energy Agency (IAEA) safeguards. The British also wanted to know how the matter "relates to U.S. machinery for the possible prevention of their export."²¹

Locke responded that if the inverters were for a gas centrifuge plant, they "may fall within the spirit if not the letter of the NSG trigger list." That is, export controls were conceivable, and so was expanding the list, but the latter would require the consensus of suppliers. Locke did not know whether the Pakistanis had a centrifuge enrichment program, but he said he would ask State Department intelligence to look into it. A State Department chronologist later wrote, mistakenly, that this conversation provided the "first indication" that the "Pakistanis were working on enrichment technology."²²

Senior U.S. officials did not quickly reach that conclusion, however. A few days later, during talks with the British, Deputy Under Secretary Nye downplayed the significance of the inverters. Not believing that their sale violated the "spirit" of the trigger list, Nye apparently suggested that gray-area technology was "important but not unique to enrichment and reprocessing facilities." He also soon raised doubts about the quality of British intelligence. Even so, the British decided to put the Pakistani order on hold.²³

U.S. intelligence experts at the State Department and other agencies began to look into the matter and during the following months collected and collated information about Pakistan's efforts to acquire sensitive uranium enrichment technology. The National Security Agency, no doubt with assistance from the CIA's "Minerva" program, collected communications between Pakistani officials and European companies that were selling nuclear-related sensitive technology, intelligence that proved valuable in charting the direction and

20. Craig, *America, Britain, and Pakistan's Nuclear Weapons Programme*, p. 130

21. Allen Locke to Mr. Nye, "UK Inquiry on Export of Inverters to Pakistan," 28 March 1978.

22. "Pakistan Nuclear Chronology," 5 July 1979, in JCL, National Security Adviser, Staff Material, North/South, Pakistan: Nuclear, 6/77–12/80.

23. "Pakistan Nuclear Chronology," 5 July 1979; and State Department telegram 14396 to U.S. Embassy Paris, "Nye Meeting with FCO Assistant Under Secretary Moberly: Pakistan," 8 September 1978, in NARA, RG 59, AAD. For Nye's doubts in April, see Craig, *America, Britain, and Pakistan's Nuclear Weapons Programme*, p. 167.

scope of the Pakistani nuclear program. Months later, CIA Director Stansfield Turner claimed, “we have had almost all of this since last August [1978].”²⁴

Nye was back in London for talks in September 1978, and he and the British were again not entirely on the same page. Pleased that the French had cancelled the reprocessing contract, Nye emphasized that the United States wanted to develop closer relations with Pakistan to reduce its “sense of isolation” and its interest in acquiring a nuclear weapons capability. The British agreed on the need to strengthen relations with Pakistan, but they were more interested in the implications of the attempts to purchase inverters. Some British officials were reluctant to give up a large sale, and they were debating whether to approve the order. The UK’s Joint Intelligence Committee (JIC) indicated what was at stake by estimating that Pakistan could have a nuclear weapons capability by 1981. British diplomat Patrick Moberly explained that the British were discussing whether to subject inverters to export control licenses. Wondering whether the Federal Republic of Germany (FRG) would cooperate with export controls (it had done nothing to stop Team Industries), Moberly agreed to consider Nye’s suggestion on consultations with nuclear suppliers regarding the problem of controlling “technology that falls short of triggering safeguards and formal restraint mechanisms.” The implication was that the suppliers should consider informal methods of halting exports of sensitive gray-area technology.²⁵

Nye was not as concerned as the British were. Noting that Pakistan’s efforts to acquire gray-area exports did not break U.S. law and suggesting that the JIC’s 1981 estimate was “exaggerated,” he did not intend to bring up the matter when the State Department consulted with Congress.²⁶ Without explaining why he was skeptical, Nye made clear why he did not want British intelligence information anywhere near Congress. The administration was determined to restore aid that had been cut during the reprocessing controversy. Influencing State Department perspectives on Pakistan was concern about that country’s stability, especially after the coup in Afghanistan in April 1978. In a top-secret message to Smith, Newsom explained that Pakistan saw

24. “Minutes PRC Meeting on Pakistan,” 9 March 1979, in JCL, NLC-132-73-6-5-3. (All documents with “NLC” are records from the no-longer-functioning Remote Access Capture computer at JCL.) For the “major role” of the U.S. National Security Agency’s collection, see Fred McGoldrick (deputy director of the Department of Energy’s Division of International Affairs in 1979), telephone conversation, 4 September 1976. For “Minerva,” which gave access to Pakistani coded telegrams, see Greg Miller, “The Intelligence Coup of the Century,” *The Washington Post*, 11 February 2020, pp. W7-W15.

25. State Department telegram 14396 to U.S. Embassy Paris.

26. *Ibid.*; and State Department telegram 235372 to U.S. Mission to IAEA, “Congressional Consultations on Pakistan,” 15 September 1978, SDDR.

“herself surrounded by unfriendly and unstable states” and was “losing confidence in the will and ability” of the United States to “provide security.” The United States, he said, could have more success in reducing pressures for an indigenous nuclear program “if we reknit our ties with Pakistan,” in part by restoring economic and military aid. With France’s decision to cancel the reprocessing deal, key members of Congress did not object to the reinstatement of aid in October 1978.²⁷

When dealing with Congress, Nye and other State Department officials downplayed the risk of an enrichment program in part because of the technical challenges posed by such a program. According to a briefing paper prepared for meetings with Senator John Glenn (D-OH), chair of the Senate Government Operations Committee, and Representative Clement Zablocki (D-WI), chair of the House Foreign Affairs Committee, the “technical problems in any centrifuge effort are enormous and [we] believe we can control this through nuclear suppliers consultations.” In a conversation with Glenn, Nye said that the Pakistani gas centrifuge program would “take time.”²⁸

Nye might have been influenced by an article recently published in the CIA’s *National Intelligence Daily* on “Pakistan: Nuclear Explosives Efforts.” Although the full version is not yet declassified, the excised version indicates that some of its language raised doubts about Islamabad’s potential for moving quickly on an enrichment program: “it probably would not be able to develop even a prototype uranium enrichment capability in less than five years,” an estimate that proved incorrect. A State Department message reported that U.S. officials had learned about groups of scientists associated with the Pakistani Atomic Energy Commission who were working on such topics as “implosion hydrodynamics,” “high explosive testing,” and “the packaging of high explosives.” The most recent intelligence was that some of the activity was continuing and that it included “work on an electronic triggering circuit for remote detonation of a nuclear device.”²⁹

27. State Department telegram 235372 to U.S. Mission to IAEA. On Congressional opinion, see Acting Secretary of State Warren Christopher to the President, 3 October 1978, in JCL, NLC-7-20-8-1-3.

28. Memcon, “Consultations on Pakistan: Details on Indigenous Nuclear Capabilities (Supplement to Oct. 6, 1978 memcon prepared by Amb. Hummel),” 6 October 1978, included in U.S. State Department, Office of the Historian, *Application of the Glenn and Symington Amendments against Pakistan*, 15 December 1979, in Smith Records, Box 13, unlabeled file. At the time, policy officials and technical analysts underestimated Pakistan’s ability to solve the problem of developing nuclear weapons because they “lacked direct knowledge of its technical skills, engineering talent, and arms-making traditions.” John Despres, email, 17 February 2020.

29. “Pakistan: Nuclear Explosive Efforts,” *National Intelligence Daily*, 4 October 1978, CIA Declassification release; and State Department telegram 278243, “Pakistani Reprocessing Plant,” 1 November

Nye's doubts notwithstanding, British intelligence stuck by its assessment that Pakistan could have a bomb by 1981. If the Pakistanis had decided in 1976–1977 to pursue a gas centrifuge plant and if their “craftsmen” were technically competent, they could have a 10,000-unit plant, location unknown, up and running by 1983–1984 with a capacity to produce 50 kilograms of highly enriched uranium (HEU) every year. Pakistan would also need plants to process uranium and to manufacture uranium hexafluoride (UF₆) for the gas centrifuge cascades. Despite the target date of 1983–1984, the analysts believed it would be “unwise to assume that the Pakistanis cannot acquire sufficient fissile material for a single device by 1981 at the earliest.” Nevertheless, that was a low-probability outcome. Most likely the British shared their analysis with U.S. intelligence.³⁰

Ambassador Hummel's Pleas

Even though a full picture of the enrichment program was not yet available, the latest intelligence greatly worried U.S. Ambassador Hummel in Islamabad. He recommended warning Pakistani leaders that “the laws and policies of the USG [U.S. government] are very strict in these matters and I would not want to see such activities cause a reversal of our resumption of aid to Pakistan or an adverse reaction by other countries.” The mention of a “reversal . . . of aid” was a reference to Senator Stuart Symington's 1976 amendment to the Foreign Assistance Act, calling for economic aid and military sales to be cut off if a country acquired or received nuclear enrichment technology after 7 August 1977. In reply to Hummel, a cable signed by Christopher advised that he wait until the department “looked into the proposed scenario.”³¹

Rather than supporting a direct approach to Islamabad, the State Department decided to emphasize intelligence gathering and export controls. Britain and the United States took parallel initiatives, briefing key nuclear suppliers on the Pakistani nuclear program and urging them to adopt restrictive approaches to exports of dual-use technology. In late October 1978, suspecting that Pakistan “intends to construct a uranium enrichment plant and may have

1978, SDDR. The work on high explosives involved the “Wah Group,” among others. See Khan, *Eating Grass*, pp. 179–181.

30. Note, 29 September 1978, attached to DI52 report, “Pakistan: Nuclear Weapons Intentions,” n.d., in The National Archives of the United Kingdom (TNAUK), Records of the Foreign and Commonwealth Office (FCO) 37/2113.

31. U.S. Embassy Pakistan telegram 10202 to State Department “PK Nuclear Intentions,” 19 October 1978, SDDR; and State Department telegram 270191 to U.S. Embassy Pakistan, “Pakistan's Nuclear Intentions,” 24 October 1978, SDDR. Symington was a Democrat representing Missouri.

already begun to do so,” the British distributed a confidential paper informing other governments that they were developing a list of more important gray-area items that should be subject to export controls. They would begin the process by controlling exports of inverters. Following the assumption that it was “worthwhile” to “slow down a weapons development program,” the British asked other suppliers to require export licenses for inverters and to refuse to grant them.³²

As part of the campaign to control dual-use exports, the U.S. officials shared intelligence about Pakistan with the French. In a telegram that Nye personally approved, suggesting he was taking more seriously the intelligence on the enrichment program, the State Department informed the French that U.S. intelligence agencies had picked up signs that Pakistan was developing a “laboratory scale reprocessing operation” at the Pakistan Institute of Science and Technology and also sought to develop a large-scale reprocessing facility, despite France’s cancellation of the contract. In addition, the Pakistanis were “pursuing the development of a gas centrifuge enrichment facility.” To move forward on these projects, Pakistan was “seeking materials, equipment and technical assistance” from Japan and Western Europe and might “try to establish contact with relevant firms” through the use of “indirect representatives and ‘dummy’ purchasing agents to circumvent” government control. The French needed to be vigilant to “deter Pakistan from acquiring sensitive facilities which would permit them to develop nuclear explosive capability.” If Pakistan succeeded, “a particularly dangerous risk of nuclear proliferation would arise . . . with profound implications for the Middle East as well as the subcontinent.” Similar messages went to ten other supplier governments in Western Europe, as well as to Japan and Australia.³³

Even as the United States and Britain circulated their requests for export controls, the State Department prepared a study requested by Brzezinski to identify “benchmarks “or “critical indicators” of Pakistani nuclear activities that could trigger “action on our part, either termination of aid and sales or urgent warning.” The trigger actions included acquisition of fissile material (e.g., evidence that reprocessing or enrichment had begun), research and design of explosive devices, preparations for testing a device, and “evidence of work” on nuclear delivery systems.

According to the paper prepared for the White House, the United States would use multilateral tools to curb the Pakistani nuclear program, not only

32. State Department telegram 278247 to U.S. Embassy Bonn et al., “UK Approach to Supplier Governments on Pakistan,” 1 November 1978, SDDR.

33. State Department telegram 278243 to U.S. Embassy Paris.

by working with suppliers but also by alerting the IAEA and consulting with aid donors. Hummel's proposal of a bilateral approach was also considered. Although State Department officials did not believe the United States had much leverage, they recognized that some actions could trigger "extreme sanctions"; for example, the Symington Amendment. Yet sanctions would have limited impact: "we should not over-estimate our bilateral leverage on the nuclear problem." Even substantial aid increases might not produce "decisive leverage," and a "sharp curtailment would only increase Pakistan's sense of insecurity and thus its motivation for going nuclear." Moreover, "unlike the Taiwan or South Korean situations, neither we nor other suppliers have any decisive leverage [with Pakistan] derived from cooperation in a major nuclear power program." The emphasis remained on "re-knitting" ties and avoiding tensions.³⁴

As the CIA was analyzing intelligence and the State Department was considering options, including the possibility of an "urgent warning," Ambassador Hummel was getting restless. When visiting Washington for congressional consultations, Hummel told his departmental colleagues that he wanted to initiate a "slow but purposeful campaign to make the Paks aware of what we know with the objective of convincing them over a period of time, that their actions could have very serious consequences."³⁵ At the end of November 1978, still awaiting instructions, Hummel took the unauthorized step of telling Foreign Minister Yaqub Khan that the United States and allied governments were "perturbed" by recent reports about Pakistan's nuclear weapons research and development and that he hoped the government "would realize that [the] consequences could be severe . . . if such a course is pursued." He assured Khan that he was discussing activities "entirely unrelated" to the reprocessing deal with France.³⁶

Days later, an interagency intelligence report assessed Pakistan's progress in acquiring an enrichment capability without mentioning "enormous" technical problems. Pakistan's advances in acquiring equipment and technology for an enrichment plant were "more sophisticated and extensive" than had been previously recognized. Moreover, the report warned, the Pakistanis "may

34. Peter Tarnoff to Zbigniew Brzezinski, "Pakistani Nuclear Programs," 22 November 1978, in JCL, National Security Adviser, Staff Material, North/South, Pakistan: Nuclear, 6/77-12/80. For detailed discussion of the problem of leverage with respect to Pakistan, see Miller, *Stopping the Bomb*, pp. 193-216.

35. For Hummel's consultations earlier in the fall, see U.S. Embassy Islamabad telegram 12410 to State Department, "Pak Nuclear Developments," 18 December 1978, in NARA, RG 59, AAD.

36. U.S. Embassy Islamabad telegram 11830 to State Department, "Pak Nuclear Developments," 1 December 1978, SDDR.

succeed” in acquiring unspecified “main missing components” for uranium enrichment capability.³⁷

Such reports may have reinforced Hummel’s concerns. A few weeks later, on 18 December 1978, he sent another complaint, noting that it was “now—inexplicably—eleven weeks since I asked . . . for approved language to use with selected Pak officials” about their secret nuclear activities. Although the State Department had moved ahead in discussing export controls with allies, Hummel wrote that he was “effectively barred by [departmental] inaction from proceeding to say what is necessary here.” A few days later, Assistant Secretary of State Pickering assured Hummel that he also wanted to make the Pakistanis aware that “we know of their efforts.” The message is heavily excised, but apparently the intelligence picture was not as clear as was desired, and Pickering did not want to provide “obscure guidance.” He advised Hummel to “wait a bit longer.”³⁸

Another month passed before Hummel received a go-ahead, but at the time he was writing his complaint in late 1978 a British report suggested that U.S. officials, such as Pickering and the chief of the State Department’s Pakistan desk Jane Coon, thought an “accommodation” with Pakistan was possible. Far more sanguine than others about the lessons of the Taiwan and South Korean cases and possibly hopeful that Pakistan would have trouble making the technology work and acquiring the “main missing components,” these State Department officials were hopeful that a “series of incremental steps, “perhaps starting with a demarche to General Zia, could have productive results.” Nevertheless, Pickering and Coon rejected a “crude carrot and stick” approach, believing it might be possible to convince Zia that his program could endanger “the much wider area of cooperation which had important implications for Pakistani security.”³⁹

“An Acute Dilemma for Us”

Secretary of State Vance did not authorize a *démarche* to General Zia until the State Department presented him with a comprehensive picture, based on the

37. John Despres, National Intelligence Officer for Nuclear Proliferation to Director of Central Intelligence, “Monthly Warning Report—Nuclear Proliferation,” 5 December 1978, CIA Declassification release.

38. U.S. Embassy Islamabad telegram 12410 to State Department; and State Department telegram 319473 to U.S. Embassy Islamabad, “Pak Nuclear Developments,” 20 December 1978, SDDR.

39. P. J. Weston (Embassy, Washington) to R. J. Alston, “Pakistani Nuclear Developments,” 22 December 1978, in TNAUK, FCO37/2114. See also Craig, *America, Britain and Pakistan’s Nuclear Weapons Programme*, p. 179.

latest intelligence, of how much progress Pakistan was making on the nuclear front. Before that happened, President Carter's representative on nonproliferation policy, Ambassador Smith, asked his colleague Robert K. Kelley at the turn of the year, "Would you say there was an intelligence failure involved in the matter of centrifuges in Pakistan?" How Kelley responded to Smith's question remains unknown, and it is not clear what Smith thought had failed or what he finally concluded.⁴⁰

Perhaps Smith wondered whether a construction site at Kahuta, which turned out to be the gas centrifuge plant, could have been discovered earlier. A December 1978 message from the U.S. embassy in Pakistan reported a conversation with French embassy official Jean Forlot (possibly an intelligence officer), who told one of the political counselors that he had seen a "very strange" construction site at Kahuta that consisted of ten buildings under construction, "including a very large rectangular shed-type" structure surrounded by fencing. Stating that the work "was proceeding at uncharacteristic speed for Pakistan," Forlot showed photographs, taken by Australian and French diplomats, of what "may well be an enrichment plant." The site turned out to be the location of the gas centrifuge plant that British intelligence had projected.⁴¹

The information from the French was a fragment of what the U.S. intelligence community was learning about the scope and progress of the Pakistani uranium enrichment program. The British were an especially important source of intelligence. Whether the United States had its own secret sources inside Pakistan remains unknown, although the U.S. ability to read Pakistani Foreign Ministry messages during this period seems incontrovertible. Certainly, Forlot had correctly surmised that the construction site at Kahuta was an enrichment plant specifically intended to house gas centrifuge cascades. By mid-January 1979, information collated and analyzed by an interagency group gave senior State Department officials a reasonably full picture of the Pakistani nuclear program. Besides the inverter orders, reports detailed

40. For a reference to a "single British source," see U.S. Embassy Pakistan telegram 935 to State Department, "Pakistan Nuclear Program: President Zia Ul-Haq Meets with Ambassador," 24 January 1979, in Smith Records, Box 19, Pakistan January–February 1979.

41. U.S. Embassy Islamabad telegram 12497 to State Department, "Discussion with French Official on Nuclear Matters," 19 December 1978, in NARA, RG 59, AAD. Forlot showed the site to an Australian diplomat, who said that the walls of what he believed to be a "secret nuclear establishment" were at "roof level" and that a "high-tension power line" led to a "large industrial looking building at the back of the site." See C. P. Burdess to R. J. Alston, "Pakistan Nuclear Affairs," 18 December 1978, in TNAUK, FCO 37/2114; and Craig, *America, Britain and Pakistan's Nuclear Weapons Programme*, p. 178. At one point in his career, Forlot had responsibility for "Chiffreurs" (Codes and Ciphers), suggesting intelligence responsibilities. Georges-Henri Soutou, email, 21 December 2018.

Pakistani acquisitions since August 1977 (the Symington Amendment trigger date) of a variety of technology relevant to gas centrifuges, including rotor drives, connector and stator bellows, and stator assemblies. According to a report sent to Vance, “The Pakistanis reportedly have succeeded in operating small numbers of centrifuge units.” The use of “reportedly” may have been a reference to the description, in another report of an eight-centrifuge cascade that was “reportedly working,” probably the experimental research laboratory located at Chaklala Air Force Base, where Pakistani gas centrifuge research had begun in 1975–1976 under the aegis of Project 306.⁴²

The report to Vance also mentioned a 64-machine cascade that would be operational in June 1979. This was a reference to the pilot plant at Sihala, the site of Pakistan's first successful uranium enrichment experiment in June 1978. U.S. intelligence later projected that the plant would have about 75 machines, but the estimate of 64 was closer to the 54 that the Pakistanis apparently installed.⁴³

Of the large plant (not specifically identified by its location at Kahuta), Vance further learned from Assistant Secretaries Pickering and Saunders that the Pakistanis have “plans for seven thousand units and have begun to construct buildings to house the facility and to acquire equipment for the plant.” That number—3,000 lower than the earlier British assessment of 10,000—suggests new sources of intelligence, perhaps estimates of the dimensions of the plant from satellite photography. According to the report, the first thousand-unit cascade was “unlikely to come on line in less than two years; production of enough HEU for one device would probably then take at least

42. NEA-Harold H. Saunders and OES-Thomas R. Pickering to the Secretary, “Pakistan's Nuclear Program: Policy and Legal Implications for the United States,” 18 January 1979, included in *Application of the Glenn and Symington Amendments against Pakistan*; and Khan, *Eating Grass*, pp. 155–156. See also “Intelligence Relevant to the Timing of Pakistani Imports of Items for Use in Their Gas Centrifuge Program,” January 1979, attached to Harold Saunders and Thomas Pickering to Mr. Newson, “Mini-PRC Meeting on the Pakistan Nuclear Problem,” 20 January 1979, in NARA, RG 59, Benson-Nimetz, Box 2, LWB Chron January 1979. For references to Chaklala, see State Department telegram 034654 to U.S. Embassy Pakistan, “Pakistan Nuclear Program: Technical Team Visit,” 10 February 1979, in NARA, RG 59, AAD; U.S. Embassy Pakistan telegram 4215 to State Department, “Comments and Recommendations on Meeting with President Zia Ul-Haq,” 10 April 1979, in NARA, RG 59, AAD; and State Department telegram 099204 to U.S. Embassy Pakistan, “Discussions with UK on Pakistan,” 19 April 1979, in NARA, RG 59, AAD. (The last mentions differences with the British over whether Chaklala was an experimental or a production facility.) For Chaklala and Project 306, see Khan, *Eating Grass*, p. 143. For the interagency group, Fred McGoldrick, telephone conversation, 4 September 2018.

43. “Intelligence Relevant to the Timing of Pakistani Imports of Items for Use in Their Gas Centrifuge Program,” January 1979. For Sihala, see CIA, National Photographic Interpretation Center, Summary Report, “Possible Pilot Gas Centrifuge Plant at Sihala, Pakistan,” May 1979, CIA FOIA Website, <https://www.cia.gov/library/readingroom/>. For 75 units, see “Minutes PRC Meeting on Pakistan,” 9 March 1979. For 54 units at Sihala, see Khan, *Eating Grass*, p. 156.

two more years.” That would provide enough capacity “to support a small nuclear weapons program.”⁴⁴

Amid the surge of new intelligence, the State Department informed Hummel that Pakistan had moved “more rapidly toward acquisition of [a] nuclear capability than we had earlier estimated.” The information became so detailed that State Department intelligence prepared a color-coded diagram of a gas centrifuge cascade that showed which company had provided each of the centrifuge components and related parts.⁴⁵

Citing the latest information about gray-area purchases, Oak Ridge National Laboratory staffer Leslie Powers described, during a February 1979 meeting with West German officials, the “probable nature” of the Pakistani centrifuge program. His description was not recorded, but a West German centrifuge expert with the Ministry of Research and Technology observed that the postulated Pakistani machines “seemed similar to ‘early vintage’ (1960s) URENCO design and that URENCO is [now] much more sophisticated.” Apparently, Powers suggested that the distinction was not so important because even a centrifuge that paralleled an “early URENCO” design would be adequate for “provid[ing] high-enriched product for an explosive capability.” Whether any of the discussants knew how much trouble the Pakistanis were having in operating workable centrifuges from the Dutch designs remains unclear.⁴⁶

U.S. intelligence may have had little or no direct evidence that the Pakistanis sought a weapons capability (other than Zia’s statement to Cohen). As CIA Director Turner explained during an early March meeting of the Policy Review Committee, “our evidence is strictly by deduction, arising from the fact that they do not have a nuclear power program that would require enriched uranium of this type.” Yet Turner was confident enough to declare at the same meeting that “the Pakistanis are determined to have at least a nuclear option.”⁴⁷

44. NEA-Saunders and OES-Pickering to the Secretary, “Pakistan’s Nuclear Program,” 18 January 1979.

45. State Department telegram 022211 to U.S. Embassy Pakistan, “Pakistan Nuclear Program,” 27 January 1979, SDDR. For color-coded diagram, Robert Gallucci, telephone conversation, 27 August 2018.

46. U.S. Embassy United Kingdom telegram 2788 to State Department, “US-FRG Bilateral on Pakistan Nuclear Program,” 11 February 1979, in Smith Records, Box 19, Pakistan January–February 1979. For “shopping expeditions,” see U.S. Embassy in Netherlands telegram 701 to State Department, “US-Dutch Bilateral on Pakistan Nuclear Program,” 7 February 1979, SDDR; and Khan, *Eating Grass*, p. 154.

47. “Minutes PRC Meeting on Pakistan,” 9 March 1979.

The new information about Pakistani nuclear capabilities persuaded Vance to authorize Hummel's delivery of the long-awaited warning to Zia in January 1979. But the administration was not yet ready to apply the Symington Amendment and cut off aid, even though there appeared to be a basis for such action. The State Department was unwilling to move quickly on the matter out of fear that it could destabilize U.S.-Pakistani relations and "further add to regional instability" caused by the revolution in Iran. European allies and "regional moderates" would have similar concerns. State Department officials further worried that, if aid were cut, it would be difficult to secure congressional support for significant military cash sales to Pakistan. According to a paper drafted by intelligence and South Asia experts at the State Department, the end of such sales could have "unpredictable consequences"—possibly inducing Pakistan, with its "acute anxiety about potential Afghanistan subversion," to "seek accommodation with the Soviet Union." At a White House meeting of the Policy Review Committee on 22 January 1979, the consensus view was that Washington would "not invoke the . . . [Symington] Amendment on the grounds of our diplomatic efforts and the critical importance of Pakistan to the current circumstances of the area."⁴⁸

Hummel's meeting with Zia on 24 January indicated that "accommodation," much less avoiding Symington Amendment enforcement, would be difficult to reach. The ambassador expressed concern over "continuing reports" about Pakistani uranium enrichment activities designed to provide "fissile material for nuclear explosive devices." Those activities "will have serious consequences for the stability of the region and will impact adversely" U.S.-Pakistani relations, "including . . . our ability to continue our economic and other support." Perhaps shocked that the secret was out, Zia denied everything. "Emotionally and with seeming conviction," Zia asked Hummel to report that "he, Zia, not only contradicted the allegations, but said they are outright lies," and he offered to "take [Hummel] to whatever places are named and show [him] that no such activity is under way."⁴⁹

Hummel reported that he "could detect no false note in [Zia's] denials, but he . . . could be a better actor than I have given him credit for." He was not ready, as Ambassador Vernon Walters was some years later, to

48. Harold Saunders and Thomas Pickering to Mr. Newson, "Mini-PRC Meeting on the Pakistan Nuclear Problem," with enclosures, 20 January 1979; and "Summary of Conclusions of a Mini-Policy Review Committee Meeting," 22 January 1979, in *FRUS*, 1977–1980, Vol. XIX, Doc. 321.

49. U.S. Embassy Pakistan telegram 935 to State Department. For "patriotic liar," see U.S. Embassy Pakistan cable 10239 to State Department, "My First Meeting with President Zia," 5 July 1982, in "New Documents Spotlight Reagan-Era Tensions over Pakistani Nuclear Program," National Security Archive, Doc. 13A, <https://nsarchive2.gwu.edu/nukevault/ebb377>.

characterize the general as the “most superb and patriotic liar I have ever met.” Hummel advised the State Department to follow up on Zia’s offer to open sites for inspection. The ambassador also suggested that U.S. intelligence experts recheck the intelligence assessments, which “come mainly from [a] single British source and from data on purchases of equipment, which could have multiple purposes.”

For key officials at the State Department and the White House, ranging from Undersecretary of State Newsom to Thornton of the NSC staff, Zia’s response was troubling on several levels. Like Hummel, the officials were not sure why Zia had so categorically denied the existence of a nuclear program. State Department experts opined that he could be acting from “sophistry” (a weapons capability did, after all, suggest an intention to build a bomb) or was developing an “economic rationale” for a full fuel cycle. Hummel’s question may have caught Zia “unaware,” with his invitation to visit the sites possibly “shot from the hip,” a response that he might have regretted because it could expose Pakistan’s technological progress, or lack thereof, but also because a visit by U.S. specialists to secret sites might leak to the opposition.⁵⁰

According to a closely held State Department message to Hummel, Pakistan’s progress toward a nuclear weapons capability “poses an acute dilemma for us at a time when we wish to be supportive of Pakistan.” Given that the nuclear program was “stimulated” by India’s 1974 test and that Pakistani developments might induce India to build a nuclear arsenal, U.S. officials wanted to encourage both South Asian governments to consider an agreement on the “non-development and non-use of nuclear weapons.”⁵¹ Hummel agreed that an approach to India and Pakistan on a joint agreement was important but believed it should take place after the United States had gotten access to Pakistani nuclear sites. The State Department and the embassy quickly made plans to send a team of experts to visit the secret sites, but by early March Zia had backed away from his offer, using the excuse that India had not allowed such inspections. The State Department was not immediately ready to approach India on the matter of a joint agreement with Pakistan.⁵²

50. State Department telegram 022214 to U.S. Embassy Pakistan, “Pakistan Nuclear Program: President Zia’s Response,” 27 January 1979, SDDR.

51. State Department telegram 025965, to U.S. embassies in India and Pakistan.

52. U.S. Embassy Pakistan telegram 1317 to State Department, “Pakistan Nuclear Intentions,” 1 February 1979, in NARA, RG 59, AAD; State Department telegram 022214 to U.S. Embassy Pakistan; U.S. Embassy Pakistan telegram 1022 to State Department, “Pakistan Nuclear Program: President Zia’s Response,” 28 January 1979, SDDR; State Department telegram 027432 to U.S. Embassy Pakistan, “Pakistan’s Nuclear Program: Technical Team Visit,” 1 February 1979, SDDR; and Secretary of State Vance to President Carter, 28 February 1979, in *FRUS, 1977–1980*, Vol. XIX, Doc. 324.

An approach to China, which Assistant Secretaries Saunders and Pickering saw as “Pakistan’s most influential friend,” was quickly put into play. The United States would warn Deng Xiaoping during his visit in early 1979 that Pakistan’s drive to build a nuclear bomb “will provoke Indian development of nuclear weapons and delivery capability.” Yet, given Deng’s position, expressed in an August 1977 meeting, that the “nuclear powers had no right to deny others the right to possess nuclear weapons,” Carter and Vance could not have expected a forthcoming response. When they brought up the issue with Deng, he defended the Pakistanis, arguing that they were dissatisfied because they received less aid than India; if, however, the United States gave more aid, “our advice to the Pakistanis not to develop a nuclear capability would be effective.” U.S. officials were not about to provide more aid, but they did not give up on the China card.⁵³

Trying to Stop the “Shopping Expeditions”

Ongoing intelligence collection and analysis had demonstrated how far Pakistan was willing to go to acquire the “main missing components” needed for the uranium enrichment program. Besides the inverters, the Pakistanis were acquiring bellows for centrifuge operations and the technology needed to produce the UF₆ gas that the centrifuges would turn into HEU. In an attempt to stop Pakistani “shopping,” the State Department sent a team of experts to meet with Dutch, French, Swiss, and West German government officials for “prompt consultations.”⁵⁴

Leading the team was Michael A. Guhin, the director of the Office of Nonproliferation and Export Policy at the State Department’s Bureau of Oceans and Scientific and Environmental Affairs. Also participating were Galucci from INR and Powers from the Oak Ridge National Laboratory. Although the U.S. team did not share all the intelligence with its European interlocutors, the State Department wanted to let the European allies and associates know what the Pakistanis were up to so they could better control

53. Harold Saunders and Thomas Pickering to Mr. Newson, “Mini-PRC Meeting on the Pakistan Nuclear Problem,” with enclosures, 20 January 1979; Memcon [Vance-Deng], “International Issues; Normalization,” in *FRUS*, 1977–1980, Vol. 13, Doc. 50; and Memcon, “Summary of the President’s Meeting with the People’s Republic of China Vice Premier Deng Xiaoping,” 29 January 1979, in *FRUS*, 1977–1980, Vol. XIII, Doc. 304.

54. State Department telegram 027834 to U.S. Embassy in The Hague et al, “Nuclear Non-proliferation Pakistan Supply Matters,” 2 February 1979, in NARA, RG 59, AAD.

sensitive exports and share information and analysis on Pakistan's procurement activities.⁵⁵

The first meeting was at The Hague in early February. The U.S. team asked the Dutch to draw on their knowledge of gas centrifuge technology to help "shut off Pakistan shopping." The Dutch volunteered that the Pakistanis had contacted Dutch firms to acquire various centrifuge parts, including rotor disks, end pieces, vacuum valves and pumps, multiphase rotors, an automatic production unit for etching ball bearings (or at least that is what the U.S. delegation thought was being said), and a single gas centrifuge assembly. No sales had been made, but the Dutch suggested that the U.S. officials get in touch with the Belgian government. A. J. Van Galen, with the Dutch Foreign Ministry's Atomic Affairs office, said, "Dr. A. Q. Khan had returned to Europe for [a] time after leaving the Netherlands and had been based in Antwerp." Van Galen then asked whether the U.S. government believed that Pakistan "had all the technology and blueprints necessary for a gas centrifuge facility." Gallucci replied "that on the basis of . . . shopping expeditions for centrifuge components, it appeared that they had access to the necessary technology."⁵⁶

Because the Dutch were already conducting internal investigations of A. Q. Khan's theft of gas centrifuge design information, Van Galen might already have known the answer to his own question and may have been probing to find out what the U.S. team knew. Whatever his motive, this may be the earliest reference to Khan that has shown up in the declassified U.S. record. According to the recollections of one of the U.S. participants, at one point during the meeting, perhaps after Van Galen asked his question, the U.S. team started a briefing on what they had learned about Khan's role in the Pakistani nuclear program and his efforts to acquire components and technology. The intelligence included information on Khan's theft of technology from URENCO, but whether Gallucci's briefing reached that point is not known. During the briefing, one of the Dutch officials made an unusual request, asking, "can we take a break?" Apparently, he and his colleagues had to get permission to share what they knew about Khan. After an hour or so they came back and disclosed the extent of Khan's theft of gas centrifuge technology. The U.S. team thus "learned far more detail" about Khan and his extraordinary theft of information: "the whole shebang," as one of the U.S.

55. *Ibid.*; and U.S. Embassy Netherlands telegram 701 to State Department.

56. U.S. Embassy Netherlands telegram 701 to State Department.

participants in the meeting put it.⁵⁷ The new details may have provided the basis for the following entry in a State Department chronology: during 13–22 February, “New and disturbing intelligence reports [were] received about gas centrifuge project.”⁵⁸

How much of this intelligence was shared with any of the officials that Guhin, Gallucci, and Powers met when they were in Paris, Bonn, and Bern remains unknown. The West Germans might have been informed or might have already known because of their role in URENCO and because the Khan affair represented such an egregious violation of the gas centrifuge secrecy arrangements that Washington had spearheaded since 1960.⁵⁹

The U.S. team's next meetings were in Paris with Jacomet from the French Foreign Ministry and other officials. After Powers described what the U.S. government had concluded about the features of the Pakistani gas centrifuge program and its level of sophistication, he listed items that the Pakistanis needed but were finding it “difficult . . . to fabricate indigenously.” The French were willing to cooperate to stem the flow of sensitive technology, but Jacomet did not have answers to U.S. questions about Calorstat, a French firm that supplied the Pakistanis with bellows, a “key item” designed to reduce the vibrations of the rotors and thus make longer centrifuges and more enrichment possible. Not familiar with Calorstat, the French agreed to investigate it.⁶⁰

The U.S. team followed up on intelligence linking West German firms with Pakistan's nuclear program. When Guhin and his colleagues went to Bonn on 8 February, the West Germans observed that, because of their “free export” guiding philosophy, they needed “ammunition” from Washington to convince industry to accept tighter export controls. The U.S. officials said that the FRG should be aware of “proposed and past exports” to Pakistan and when “possible to control informally any items not covered by established export controls,” but the West Germans did not seem eager. An official from the FRG's Ministry of Economic Affairs observed that his agency lacked “export

57. Michael Guhin, telephone interview, 21 August 2018.

58. “Pakistan Nuclear Chronology,” 5 July 1979.

59. William Burr, “To ‘Keep the Genie Bottled Up’: U.S. Diplomacy, Nuclear Proliferation, and Gas Centrifuge Technology, 1962–1972,” *Journal of Cold War Studies*, Vol. 19, No. 2 (2017), pp. 115–156.

60. U.S. Embassy France telegram 4275 to State Department, “U.S.-French Bilateral on Pakistan Nuclear Program,” 7 February 1979, SDDR. For strong British suspicions about Calorstat as a bellows supplier, see State Department telegram 058631 to U.S. Embassy London, “UK Approach to France on Pakistan Nuclear Program,” 9 March 1979, SDDR. For bellows as a “key item,” see U.S. Embassy United Kingdom telegram 03984 to State Department, “Nonproliferation Bilateral with UK,” 27 February 1979, SDDR.

authority,” and another complained that the NSG trigger list had no “meaning if there was no way of controlling individual items falling below the threshold that could nevertheless be assembled into gas centrifuge machines.” The FRG agreed to bar exports of inverters but was more reluctant to investigate firms that the U.S. team believed had been trafficking with the Pakistani shoppers.⁶¹

As with the French, the U.S. team had questions that West German officials could not answer. Asked about Team Industries (the company that had shipped the inverters), the FRG experts characterized it as “merely intermediary” and did not know whether it had told “supplying companies that Pakistan was the ultimate recipient” or whether it could provide more information about “Pak[istani] shopping.” When questioned about Leybold-Heraeus, the West Germans agreed to approach the “well respected firm.” What intelligence the United States had collected about Leybold-Heraeus is not clear, but U.S. officials eventually concluded that the company was playing a key role in “start[ing] up” a plant in Pakistani to convert yellowcake into UF6 gas.⁶²

With no immediate response from the West Germans, the U.S. government contacted Bonn on 6 March (the same day the British did), with new information that a Pakistani textile company had approached Leybold-Heraeus “over the supply of a facility designed to convert nuclear material to metal.” Moreover, a “group of West German engineers had been assisting Pakistan in the construction of a UF6 conversion plant.” The FRG government approached Leybold-Heraeus, but the firm’s representatives said they “had no contacts with the Pakistanis.” In response to the British *démarche* about specific firms, the West Germans said those companies could not identify “sensitive items” that were being shipped to Pakistan. West German officials “made a strong plea . . . for more complete and specific information.”⁶³

On 17 March, Washington put Bonn on notice about Khan: “We have learned that Dr. A. Q. Khan and others . . . will be consulting with Leybold-Heraeus” in Frankfurt during the week of 19 March. A few days later, Foreign Ministry official Werner Rouget told an embassy official that the ministry had no information that the Pakistanis had contacted Leybold-Heraeus but that

61. U.S. Embassy United Kingdom telegram 2788 to State Department, “US-FRG Bilateral on Pakistan Nuclear Program,” 11 February 1979.

62. *Ibid.*; and State Department telegram 156752 to U.S. Embassy West Germany, “Pakistan’s Nuclear Program,” 13 June 1980, in Smith Records, Box 19, Pakistan June 1979. See also Khan, *Eating Grass*, p. 167.

63. U.S. Embassy in West Germany telegram 04280 to State Department, “Pakistani Nuclear Program,” 9 March 1979, SDDR; and U.S. Embassy in West Germany telegram 04372 to State Department, “Pakistani Nuclear Program,” 9 March 1979, SDDR.

the firm was not aware of the government's interest and thus could not "plead ignorance if it does begin to get involved" with the Pakistanis.⁶⁴

Pakistan's efforts to acquire technology for handling UF₆ gas were critically important to the success of its enrichment program. But also worrisome were contacts between Swiss firms and Pakistani nuclear shoppers. During a meeting with Swiss officials on 9 February, Guhin and the U.S. team reviewed the U.S. effort to halt the flow of sensitive technology. A Swiss firm that had attracted U.S. attention was Vakuum Apparate (VAT), which specialized in producing vacuum valves suitable for use in gas centrifuges. The Swiss, however, had "not heard" of VAT and "wondered whether it was a Swiss company at all." Nevertheless, the U.S. team asked the Swiss for any information they had on the firm, its location and ownership, who controlled it, and its dealings with Pakistan.⁶⁵

When the Swiss offered a "non-committal" response to the U.S. request, the Carter administration followed up on 6 March with more information about the activities of Swiss companies. The U.S. contended that representatives of VAT were "involved in consultations in Pakistan over construction of a secret gas centrifuge enrichment facility," VAT's presence in Pakistan was to increase during March, and it would "soon provide equipment including seals, clamps, and valves for the facility." In addition, another Swiss firm, CORA Engineering Chur Ag, "will also provide consulting services for the Pakistani program this month." (The company's name was a reference to its location in the Chur Valley, where other firms were involved in gas centrifuge work.) The role of CORA Engineering was a significant intelligence find because it manufactured units for converting solid UF₆ into gas and then back into solid form after it had gone through the enrichment process.⁶⁶

Later, on 19 March, the State Department provided the Swiss with especially telling information: that Khan would be "consulting Vakuum Apparate Technik AG" that very week. Whether the Swiss made any inquiries remains unclear, but Rudolf Bindschedler, the Foreign Minister's legal adviser, gave a characteristic response: his government "had no legal way to forbid the export of items not on the London list." Blaming the United States for rebuffing his government's efforts to include "explicit items" on the NSG list, Bindschedler

64. State Department telegram 65680 to U.S. Embassy in West Germany, "Pakistan Nuclear Program," 17 March 1979, SDDR; and U.S. Embassy West Germany telegram 05487, "Draft Export Control List: Pakistan," 26 March 1979, SDDR.

65. United States Embassy United Kingdom telegram 02823 to State Department, "U.S.-Swiss Bilateral on Pakistan Nuclear Program," 12 February 1979, SDDR.

66. State Department telegram 55072 to U.S. Embassy Switzerland, "U.S.-Swiss Discussions on Pakistan Nuclear Program," 6 March 1979, SDDR; and Khan, *Eating Grass*, p. 167.

argued that components exported from Switzerland “were not vital and there must be more important elements shipped to Pakistan from other sources.”⁶⁷

Even if a supplier consensus could be formed, no one believed that thwarting sensitive exports could stop the nuclear program. The Dutch revelations about Khan may have underlined perceptions about how tough a target the Pakistani nuclear program was because its leaders had acquired so much sensitive information about nuclear technology. During the discussions with the West Germans, members of the U.S. team acknowledged that the Pakistani nuclear program was “very likely still vulnerable to supplier actions,” but controls could not prevent “ultimate success.” Nevertheless, they believed that controls “could buy important time for diplomacy to work on turning Pak[istani] program around.”⁶⁸

The assumption that the Pakistanis were on the road to building the bomb and that export controls would not stop them shaped the discussion at a meeting of the NSC’s Policy Review Committee on 9 March. During the meeting Assistant Secretary Pickering suggested that controls over exports could “double” the estimated three-to-five-year period Pakistan needed to produce a nuclear weapon. National Intelligence Officer Despres disagreed: that estimate had assumed “substantial supply restraints.” At best, export controls could “achieve an additional year’s slippage in the construction of a 7,000-unit centrifuge plant.” Despres further explained that Pakistan “already had all of the equipment needed for the first 1,000 units and probably all that would be needed for the next 3,000.” By the end of 1980, a 1,000-unit plant would be operating, and Pakistan would have enough HEU for a weapon by early 1982 (and even earlier, Deutch opined, if low-enriched uranium was available). Despres’s estimate was somewhat more optimistic than the then current assessment that the Pakistanis would have enough HEU to test a device by 1983, although they would probably delay a test until 1984, when they would have enough for two. They might, however, have enough plutonium to test a weapon by 1982 (although that would require secret reprocessing of spent fuel from the safeguarded KANUPP reactor).⁶⁹

67. Charles Van Doren to Ambassador Smith et al., “Chronology of U.S.-Swiss Discussions on Pakistan,” 4 August 1980, in Smith Records, Box 18, Pakistan [May–December 1980].

68. U.S. Embassy United Kingdom telegram 2788 to State Department, “US-FRG Bilateral on Pakistan Nuclear Program,” 11 February 1979.

69. For accounts of the PRC meeting, see George A. Rathjens to Ambassador Smith, “PRC Meeting, March 9, 1979—4:00 PM,” 9 March 1979, in Smith Records, Box 18, Pakistan March 1979; “Minutes PRC Meeting on Pakistan,” 9 March 1979; and Khan, *Eating Grass*, p. 156. For the possibility of violating safeguards on KANUPP, see Peter Tarnoff to Zbigniew Brzezinski, “Pakistani Nuclear

Looking at Policy Options

That export controls could not significantly curb Pakistan's apparent success in the uranium enrichment field meant that diplomatic and political solutions were essential. Yet the United States had no good diplomatic options for inducing Pakistan to end its nuclear efforts. Direct diplomatic pressure was unlikely to work, as indicated by a meeting between Deputy Secretary of State Christopher and General Zia on 1 March 1979. Christopher warned Zia that if the "enrichment activities continue, [that] will trigger U.S. laws that must cut off aid programs." Unlike in the meeting with Hummel in late January, Zia did not push back. He "made no attempt to deny intentions to develop nuclear weapons or to distance himself from the effort." Nor did he back down. Resistant to abandoning a program that had widespread support and deemed essential for national security, Zia argued that only \$20 million in net aid would be at stake if the United States applied the Symington Amendment and that "no country would sacrifice its future for that amount" and "no free country should be forced by an aid cutoff to give up its sovereign rights."⁷⁰ Anthony Parsons, deputy undersecretary at the UK Foreign Office, later observed that this encounter was "was especially depressing because it amounted to Zia declaring 'Yes we are and the hell with you.'⁷¹

That Zia was no longer in denial mode was a "new piece of intelligence," U.S. Deputy National Security Adviser David Aaron observed during the Policy Review Committee session on 9 March. After the meeting, Smith's aide, George A. Rathjens observed, "There was much skepticism . . . about any action being successful." Rathjens added that "there probably is no hope of turning the Pakistanis around unless their legitimate security concerns can be met, and that the key to accomplishing this is in inducing India to move in ways that the Pakistanis see as less threatening." India would indeed be approached, but to no avail.⁷²

Programs," 22 November 1978, enclosing paper "Pakistani Nuclear Programs," in JCL, National Security Adviser, Staff Material, North/South, Pakistan: Nuclear, 6/77–12/80.

70. For the range of diplomatic options under consideration, see Anthony Lake et al. to the Deputy Secretary, "PRC Paper on South Asia," 23 March 1979 ("terminate"), in NARA, RG 59, Records of the Policy Planning Staff Director Anthony Lake, 1977–1981 (Lake Records), Box 17, TL Sensitive 1/1–3/31/79. For the Christopher-Zia meeting, see U.S. Embassy Pakistan telegram 2553 to State Department, "Pak Nuclear Activities—DepSec Conversation with President Zia," 2 March 1979, in NARA, RG 59, AAD.

71. State Department telegram 069518 to United States Embassy United Kingdom, "US-UK Discussions on Pakistan," 21 March 1979, in Smith Records, Box 19, Pakistan [15–31 March 1979].

72. Minutes PRC Meeting on Pakistan," 9 March 1979; and Rathjens to Smith, "PRC Meeting, March 9, 1979–4:00 PM," 9 March 1979."

U.S. officials kept working on the problem because the perceived stakes were high. According to an interagency report sent by Policy Planning Staff director Anthony Lake to Christopher in March 1979, “the Pakistan case will be viewed as a test of our resolve to pursue [a nonproliferation] policy.” Moreover, a successful Pakistani nuclear program would “demonstrate even more forcefully than India” that nuclear weapons status is within the “reach of small, relatively unsophisticated nations notwithstanding the coordinated opposition of the supplier countries.” Marrying ideological and security concerns, the report stressed that an “Islamic bomb” could produce “a direct threat to U.S. national interests in the Middle East and Persian Gulf.” In that connection, “most worrisome are Islamabad’s ties with Libya, which is known to be interested in nuclear cooperation.”⁷³

Financial penalties and inducements received plenty of discussion during the first months of 1979 and for some time thereafter. That Pakistan had so little dependence on U.S. economic or military aid meant that Washington lacked effective leverage for supporting a coercive approach. As an alternative, State Department officials considered inducements—massive aid, debt rescheduling, and arms deliveries—to “buy Pakistan off” from going nuclear. Some, such as Rathjens, thought a buyout was worth trying, even if it was “wrong,” but Undersecretary of State for Political Affairs Newsom saw too many negatives. At the Policy Review Committee meeting on 9 March 1979, he explained that “the price is too high, the precedent is too disquieting, and the costs in our relations with India would be too great.”⁷⁴ As for sanctions or “punitive action,” State Department officials believed that either would need the support of “key countries,” including the United Kingdom, France, West Germany, China, and Saudi Arabia, but that their support was “unlikely” and, anyways, would not “turn Pakistan around.” A sanctions approach “could actually reinforce Pakistan’s insecurities and determination to ‘go nuclear.’”⁷⁵

The penalties imposed by the Symington Amendment were the toughest action the Carter administration took, although the White House and the State Department did so unenthusiastically. What triggered the action was

73. Lake et al. to the Deputy Secretary, “PRC Paper on South Asia,” 23 March 1979. British Ambassador Parsons was outspoken about the “Islamic bomb” danger. See State Department telegram 069518 to United States Embassy United Kingdom. In *America, Britain, and Pakistan’s Nuclear Weapons Program*, Craig puts Parson’s thinking in context at p. 195.

74. Rathjens to Smith, “PRC Meeting, March 9, 1979–4:00 PM,” 9 March 1979. For “buy off” proposals, see also Craig, *America, Britain, and Pakistan’s Nuclear Weapons Programme*, p. 200. Miller, *Stopping the Bomb*, provides detailed discussion of leverage.

75. Lake et al. to the Deputy Secretary, “PRC Paper on South Asia,” 23 March 1979.

the finding that Pakistan had acquired uranium enrichment technology after 7 August 1977. This meant that development assistance projects were wound up and Pakistani participation in the U.S. International Military Education and Training (IMET) program was halted. On 15 March 1977, Christopher told Pakistani Ambassador Sultan Mohammed Khan that “we must comply with the law.” Although President Carter worried about the geopolitical implications, Assistant Secretary Newsom endorsed the implementing instructions on 17 March. Learning about the final decision through a State Department press briefing, the Pakistanis believed they had received insufficient warning and consultations. On 6 April 1979 during a meeting with Ambassador Khan, Newsom explained, “we have taken this action out of necessity and with great reluctance.” Yet, faced with the “evidence of construction of enrichment facilities which cannot be explained in terms of [a] nuclear power program,” the administration found “we had no choice but to apply Symington.”⁷⁶

Suggestions for tougher action had come from Smith, who saw the Pakistani nuclear program as the “sharpest challenge to the international structure since 1945.” By “secretly transgressing one of the most basic and important norms held by most states,” Pakistani could encourage India to build an arsenal and make “the prospect of ‘Moslem’ bombs . . . as likely as a German and Japanese bomb.” Thus, besides proposing a military force to uphold the NPT, Smith suggested a “Sunshine approach.” Influenced by Louis Brandeis’s notion of “sunlight [as] the best disinfectant,” the idea was to put the “glare of world attention” on the Pakistani nuclear program and the way it “puts at risk the peace and security of South Asia and the world.” Smith argued that exposing it, possibly through a UN Security Council meeting or some other international forum, “may be the best, and perhaps only, way to stop them.” Even if sunlight did not work, “it may galvanize those involved into the effort that will produce a solution.”⁷⁷

Christopher saw Smith’s proposals as a valuable contribution and agreed that another suggestion was worth considering: the “brutal” option that “some

76. Memorandum from Secretary of State Vance to President Carter, 15 March 1979, in *FRUS*, 1977–1980, Vol. XIX, Doc. 329; Herbert J. Hansel to Mr. Newsom, “Pakistan and the Symington Amendment,” 17 March 1979, in NARA, RG 59, Records of Deputy Secretary Warren Christopher, 1977–1980, Box 56, Pakistan III; and State Department telegram 067127 to U.S. Embassy Pakistan, “Pakistan Nuclear Program and Application of the Symington Amendment,” 7 April 1979, SDDR. See also Miller, *Stopping the Bomb*, pp. 198–200.

77. Gerard Smith to the Deputy Secretary, 27 March 1979, in Smith Records, Box 7, The Deputy Secretary; and Gerard Smith to Mr. Kreisberg, with comments by Warren Christopher, “Pakistan—Comments on S/P Paper,” 14 March 1979, in NARA, RG 59, Records of Warren Christopher, Box 56, Pakistan III.

other country,” presumably India, destroy or sabotage Pakistan’s nuclear facilities. Discussion of “far out” options continued for some time, as a leak to *The New York Times* later demonstrated, but how far the discussions went remains unclear. Even mere discussion of violent action was highly risky, not least because of the danger that word of it would leak out and anger the Pakistanis, as it did.⁷⁸

In the end, however, Christopher concluded that the sunshine path had too many risks. At a meeting of the Policy Review Committee on 29 March, CIA Deputy Director Carlucci pointed to the “current mood and possible adverse response of anti-U.S. political forces in the Arab, Muslim, and non-aligned movements.” He said it was better to avoid “initiating or amplifying the public response” to any disclosures of information about the Pakistani nuclear program. Christopher agreed and again turned down Smith’s proposal to discuss Pakistan with Soviet officials until there was a “relaxation of tensions over Afghanistan.”⁷⁹

The enforcement of the Symington Amendment on 6 April 1979 occurred two days after the military regime executed Bhutto on trumped-up murder charges, thus removing permanently a political threat. President Carter had sent more than one appeal to spare Bhutto’s life, which Zia likely resented. The enforcement of the Symington amendment exacerbated this resentment. According to Hummel, Zia was “clearly hurt and angry” by the abrupt U.S. government announcement and further “accused [the] U.S. of initiating and orchestrating [a] world-wide campaign against Pakistan.”⁸⁰

78. Smith to Kreisberg, with comments by Christopher, “Pakistan—Comments on S/P Paper,” 14 March 1979; and U.S. Embassy Pakistan telegram 9257 to State Department, “GOP Protests U.S. Actions on PAK Nuclear Developments,” 14 August 1979, in NARA, RG 59, AAD. For “far out” options, see “Minutes of a Policy Review Committee Meeting,” 28 March 1979. Some months later, Stephen P. Cohen ruled out the likelihood that India would stage a “surgical strike” (if Pakistan built a bomb) but would take no other provocative action; for example, the Indian air force had no experience in “daytime penetration” or “target acquisition in the face of a hostile air force.” Moreover, Indian air force leaders would not be able to give politicians “an unqualified guarantee that it will be successful,” and any strike risked Pakistani retaliation. See Cohen’s “Preliminary Note on South Asian Proliferation,” 10 August 1979.

79. NIO/NP to DDCI, “PRC Meeting on Pakistan, Wednesday, March 28, 1979,” 29 March 1979, enclosing Memorandum for the Record, “PRC Meeting on Alternative Approaches to the Pakistani Nuclear Problem,” 28 March 1979, CIA Declassification release. See also “Minutes of a Policy Review Committee Meeting,” 28 March 1979. Gallucci prepared a detailed critique of the “sunshine” approach some days later. See “Pakistan Nuclear Problem: The Sunshine Path,” ca. 6 April 1979, in Smith Records, Box 18, Pakistan Interagency Working Group on South Asian Nuclear Issue June–October 1979.

80. Memorandum from the President’s Assistant for National Security Affairs (Brzezinski) to President Carter, 4 April 1979, in *FRUS, 1977–1980*, Vol. XIX, Doc. 334; and U.S. Embassy Pakistan telegram 4206 to State Department, “Discussion with President Zia,” 10 April 1979, SDDR.

Zia's suspicions may have been provoked when, in late March, the West German television channel ZDF ran a story about the Pakistani nuclear program, precisely the kind of disclosure that Christopher and Carlucci did not want to amplify. Drawing on leaks and playing up the risk that nuclear weapons and weapons technology would fall into the hands of Arab terrorist groups, ZDF revealed A. Q. Khan's theft of gas centrifuge information from URENCO and his role in the nuclear program. The revelations made Pakistan's nuclear activities a matter of abiding media interest. U.S. reporters delved into elements of the story, such as the March 1978 British approach on the inverter order, Team Industries, and the theft of information from URENCO (although Khan's name was not mentioned in the U.S. press until August 1979). The most sensitive aspects of U.S. policy, however, such as the *démarches* to supplier governments, intelligence sources, and the conversations with Zia, remained secret.⁸¹

“Aye, Aye, Sir”

The Policy Review Committee meetings indicated how geopolitical interests defined official discussions of nuclear Pakistan. Even though Smith had supported a confrontational stance over the nuclear program, diplomatic and Cold War concerns continued to move policy in a different direction.

The unfolding Iranian revolution had already made U.S. policymakers, including Carter, nervous about Pakistan. A new flashpoint was the launching of attacks into Afghanistan by Pakistan-based insurgents supported by religious and tribal groups. The Pakistani government was not supporting the cross-border raids (although that would change), but at the end of March the Soviet Union sent a threatening note accusing Pakistan of “conniving” with the “armed gangs” that carried out the attacks. Worried about the influx of refugees, concerned that Afghanistan could become another Hungary or Czechoslovakia, and asserting that “KGB agents” might infiltrate Baluchistan Province, the Pakistanis asked Washington for its views on the 1959 U.S.-Pakistani defense agreement in which the United States offered to support

81. U.S. Department of State Language Services, “Transcription of 3/28/79 FRG TV (ZDF) Broadcast on Pak Nuclear Program,” n.d., in Smith Records, Box 19, Pakistan [15–31 March 1979]; Peter Niesewand, “Pakistan Denies It Is Developing Nuclear Arms,” *The Washington Post*, 9 April 1979; David Binder, “How Pakistan Ran the Nuke Round the End,” *The New York Times*, 29 April 1979; and Don Oberdorfer, “Pakistan: The Quest for Atomic Bomb,” *The Washington Post*, 27 August 1979, pp. A1, 13. For the ZDF broadcast, see also Craig, *America, Britain, and Pakistan's Nuclear Weapons Programme*, p. 185.

Pakistan if it faced “armed aggression from any country controlled by international communism.”⁸²

Believing that Moscow was warning Pakistan “to keep its hands off Afghanistan,” the State Department’s top Soviet experts downplayed the likelihood of Soviet moves against Pakistan. Yet, the Soviet note prompted the administration to upgrade the importance of security issues in its dealings with Pakistan on the nuclear problem. A message to Hummel sent on 4 April 1979 and approved by Secretary of State Vance and National Security Adviser Brzezinski instructed the ambassador to begin multilevel talks with Zia. The United States would continue its “strenuous attempts to prevent Pakistan from developing a nuclear explosive capability,” but if Pakistani concerns about Soviet intentions proved to be “sincere,” the United States would “seek to insulate [the] negative [nuclear] aspect of our relationship from other aspects that are important to both Pakistan and ourselves,” including intelligence cooperation and support for Pakistan’s security against Soviet pressure. The hope was that such steps would yield a more accommodating response from Pakistan on nuclear matters.⁸³

Vance and Brzezinski recognized that Pakistan presented a “dilemma” because of the potentially adverse impact of proliferation on U.S. interests in the region and globally, but the implication of the word “insulate” was that the Carter administration wanted to prevent the nuclear controversy from jeopardizing security interests to the extent possible. As for the 1959 security agreement, “we consider it relevant to the threat posed by the Soviet Union in the Afghan situation.”

Smith had not reviewed the message in advance and doubted that when the Eisenhower administration approved the security agreement it intended to protect a country that was developing nuclear weapons. Lodging his objections with Vance, on 9 March 1979 Smith argued that if Washington treated the nuclear issue and Pakistani security as if they were on separate “levels,” a “straddle” approach would reduce U.S. “leverage.” Noting that Pakistan had

82. U.S. Embassy Pakistan telegram 3713 to State Department, “Soviet Demarche on Alleged Assistance to Afghan Dissidents: GOP Requests U.S. Clarification of 1959 Bilateral,” 28 March 1979, in NARA, RG 59, AAD; CIA, *National Intelligence Daily*, 31 March 1979, CIA FOIA Website, <https://www.cia.gov/library/readingroom/docs/CIA-RDP79T00975A031200270002-4.pdf>; and Conor Tobin, “The Myth of the ‘Afghan Trap’: Zbigniew Brzezinski and Afghanistan, 1978–1979,” *Diplomatic History*, Vol. 44, No. 2 (2020), pp. 146–148. For Carter’s concern about the impact of Iranian events on Pakistan, see his diary entry for 5 January 1979 in Jimmy Carter, *White House Diary* (New York: Farrar, Strauss, and Giroux, 2010), p. 273.

83. U.S. Embassy Pakistan telegram 3713 to State Department; and State Department telegram 85585 to U.S. Embassy in Pakistan, “Instructions for the Ambassador’s Meeting with President Zia,” 6 April 1979, in NARA, RG 59, AAD.

based its nuclear program on “stolen information,” Smith objected to a “mild” reaction: the problem raised by Pakistan’s nuclear ambitions was a matter of “principle,” not “degree.” Believing that U.S. policymakers should be willing to accept “sharp strains” in relations, Smith wanted Pakistan to know that “its nuclear policy puts our whole relation at stake.” That, he argued, was the “best chance to turn the Pakistanis around” and build public and congressional support for U.S. policy.⁸⁴

Vance and Christopher nevertheless reaffirmed the two-level approach that Smith criticized. According to Arnold Raphel, one of Vance’s top advisers on South Asia policy, nonproliferation and security were both important and the secretary wanted to “maximize our chances to be successful in both areas.” Yet the “means of attaining our objectives were often in conflict.” According to Raphel, “legal and political constraints” shaped what actions Washington could take against the Pakistani nuclear program. For example, policy toward Pakistan should not “cause excessive hazards to our relationship with India.” Why that could be so was not spelled out, but some argued that, if the United States tried to get closer to Pakistan to discourage its nuclear program, India would move forward on nuclear weapons. Not only that, but Washington might fail to “dissuade Pakistan from proceeding down the nuclear road.” The 1959 security agreement with Pakistan was still valid, and U.S. officials wanted to cooperate against the “potential threat” from Afghanistan. Unwilling to make a choice between security and nonproliferation (as Smith noted in a marginal comment), Vance understood that an “inherent conflict exists.”⁸⁵

Smith had a more fundamental concern. Recognizing that his argument about “principle” appeared to have lost, he wrote a dutiful “Aye, aye, sir” on Raphel’s memorandum. A few weeks later, Smith told Ambassador Henry Owen that in the Pakistan case “the security consideration now had a preferential position over the proliferation issue.” According to Smith, the administration wanted to keep the lid on Pakistan because of concerns about SALT II (the “Russians could raise quite a stink” about Pakistan), the risk of Indian or Israeli preventive strikes (“extra-curricular activity”), and his “cynical opinion that from a political point of view the Administration did not want to be in a position of ‘losing’ Pakistan, Iran and Afghanistan within the

84. Gerard C. Smith, memorandum to the Secretary of State, 9 April 1979, in Smith Records, Box 19, Pakistan April 1979.

85. Arnie Raphel to Mr. Christopher et al., “Policy toward Pakistan,” 9 April 1979, in Smith Records, Box 19, Pakistan, April 1979. See also Cohen, “Preliminary Note on South Asian Proliferation,” 10 August 1979.

space of 12 months.” Even if Smith was exaggerating, there was no doubt that Vance and Christopher were concerned about Pakistan’s stability and political orientation.⁸⁶

To try to allay bilateral tensions and safeguard the security relationship, the State Department devised a proposal to freeze Pakistan’s uranium enrichment program without requiring its termination. The initiative flowed from a discussion that Hummel had with Zia on 10 April 1979, when he introduced the two-level approach. After Hummel spoke, Zia said he was reassured that “not everything in our relationship is linked to our differences on nuclear issues.” Foreign Secretary Sardar Shah Nawaz later commented that the “segregation” of nuclear and security problems was a “very positive point.” Nevertheless, the meeting took a contentious turn. Reverting to denial mode, Zia launched into a “somewhat agitated” critique of U.S. policy, condemning “faulty” U.S. intelligence and Washington’s “discriminatory” approach to Pakistan and, later, along with Shah Nawaz, strongly insisting that Pakistan lacked the means to enrich uranium; Pakistan, Zia insisted, was conducting only a research program, “like any other country.” Between the Pakistani denials, Hummel suggested that a “freeze on existing Pak[istani] activity might be arranged” in the context of regional security discussions, including a proposal to put a “cap” on both Pakistani and Indian activities.⁸⁷

Despite the acrimony, one of Hummel’s conclusions from the discussion was Zia’s statement of relief that U.S. nonproliferation policy did not mean a “fundamental U.S. shift away from Pakistan.” Moreover, with the Pakistanis seeking security talks in Washington, Hummel believed it was an opportune moment to propose a freeze on gas centrifuge enrichment work at Kahuta, Sihala, and Chaklala, by keeping the activity at what he perceived to be its “present rudimentary level.” In exchange the United States could “lift the ban” on IMET and economic assistance through a presidential waiver of the Symington Amendment.⁸⁸

The State Department quickly followed up with a maximal proposal for a drastic curtailment of the Pakistani nuclear program. Citing Zia’s previous statements that his country’s research was exclusively peaceful, the State Department proposed that Pakistan agree to limit work on uranium enrichment to a “laboratory scale” effort that would be “exclusively” for peaceful purposes. Such a step could be accompanied by an agreement to limit uranium

86. Raphael to Christopher et al., “Policy toward Pakistan,” 9 April 1979; and Memorandum for the file by Smith, 18 April 1979, in Smith Records, Box 19, Pakistan, April 1979.

87. U.S. Embassy Pakistan telegram 4206 to State Department.

88. U.S. Embassy Pakistan telegram 4215 to State Department.

enrichment to no more than 5 percent U-235 and for the laboratory-scaled facility to produce “no more than a total of 50 separative work units per year.” In keeping with that, Pakistan would not import any more “enrichment material, equipment, or technology.” In addition, for any reprocessing facility under construction, Pakistan would follow the safeguards agreement it had made with France and the IAEA in March 1975. Finally, Pakistan would give an assurance that it “had no intention of developing a nuclear explosive device.” To get a Symington Amendment waiver, Pakistan would have to put that promise in writing along with an assurance that it would provide no assistance to other countries that might help them acquire nuclear weapons. To provide technical support for Hummel when he made the proposal, Gallucci was dispatched to Islamabad.⁸⁹

When Hummel presented the U.S. proposal on 22 April, Zia’s overall reaction was “negative,” although he agreed to study it further. Despite acknowledging the existence of the enrichment program, Zia argued that U.S. claims were exaggerated. When Hummel showed him photographs of the Kahuta centrifuge plant, the general said the buildings could be “cowsheds.” More interested in getting the French to honor the reprocessing plant contract, Zia and Shah Nawaz vowed that if that project resumed, Pakistan would accept full-scope safeguards. Zia also expressed disappointment that the United States had not let go of the nuclear issue: Having “previously indicated separation of nuclear issue from . . . reaffirmation of [the] ’59 bilateral, we now seemed to be linking them.” Hummel acknowledged “some unavoidable connections” and later, in a message to the State Department, observed that the Pakistanis had “acquired exaggerated expectations about how far we can separate our security concerns and support for Pakistan from the nuclear issue.”⁹⁰ Despite Zia’s comments about further study, subsequent discussions went nowhere.

According to an intelligence report, Foreign Affairs Adviser Aga Shahi told an interlocutor (whose identity was excised during declassification) that the basic problem with a freeze was that it would make it “too expensive and difficult to resume [production activities] in the future.”⁹¹ Consistent with

89. U.S. Embassy telegram 4344 to State Department, “Discussions with President Zia,” 12 April 1979, SDDR; and State Department telegram 094201 to U.S. Embassy Pakistan, “Proposal for Dealing with Nuclear Issue,” 14 April 1979, SDDR. The “separative work unit” is the standard measure for the amount of effort needed to produce one kilogram of U-235 at an enrichment plant.

90. U.S. Embassy Pakistan telegram 4667 to State Department, “Pakistan’s Nuclear Problem: Conversation with Zia,” 22 April 1979, in NARA, RG 59, AAD.

91. Memorandum from the White House Situation Room to Brzezinski, 29 May 1979, in *FRUS*, 1977–1980, Vol. XIX, Doc. 344.

that, Hummel reported that neither Shah Nawaz nor Aga Shahi “would offer any counter-proposals that we could address in a bilateral context.” The Pakistanis insisted that any “restrictions on Pakistan must . . . apply equally to India.” In the end Shah Nawaz categorically rejected the U.S. proposal: Pakistan would “not accept any discriminatory limitations on its legitimate research activities.” With Zia’s strong commitment to the nuclear option, quiet diplomacy to contain it had reached a dead end.⁹²

Christopher later observed that the Pakistanis “did not want to be wooed along the lines of our two-track strategy.” According to intelligence reports, Zia’s associates were highly suspicious of U.S. policymakers. Shahi told an interlocutor (name excised from the report) that “Moscow had proven itself to be loyal to their friends, regardless of whether their friends were right or wrong, while Washington had demonstrated that it could not be trusted.” Talks a few weeks later with Shahi on security issues and the nuclear problem left matters still unresolved. Shah insisted that Pakistan would not “go for nuclear weapons,” whereas Smith cautioned him that the “Indians or the Soviets might be inclined to preemptively take care of Pakistani weapons plants.”⁹³

Faced with this impasse, Vance told British Foreign Secretary Lord Carington on 21 May 1979 that there was “no way to stop Pakistan” short of a regional understanding. According to Vance, Shahi had declared that if India made a nuclear renunciation statement as part of a bilateral understanding or “regional arrangement,” his country would do likewise; otherwise Pakistan would develop nuclear weapons.⁹⁴

A long-anticipated effort to break the stalemate came in early June 1979 when Vance instructed Ambassador Robert Goheen to take the initiative on what the department had come to see as the most useful way of mitigating regional competition: an Indian-Pakistani agreement to restrict nuclear activities. If the Indian government was in any way responsive, that could provide an opportunity to “test” Pakistani statements of willingness to accept limitations if India also accepted them. But it was unlikely that the Indian

92. U.S. Embassy Pakistan telegram 3856, “GOP Rejects Nuclear Proposals,” 25 April 1979, in NARA, RG 59, AAD; and U.S. Embassy Pakistan telegram 4906, “Luncheon Discussion of Nuclear Issues,” 26 April 1979, in NARA, RG 59, AAD.

93. Policy Review Committee Meeting, “May 23 PRC Meeting on Pakistan and Subcontinent Matters—Minutes,” 25 May 1979, in JCL, NLC 33-10-6-3-5; Memorandum of Shahi-Vance-Smith conversation on 4 May 1979, in Smith Records, Box 19, Pakistan May 1979; and White House Situation Room to Brzezinski, 29 May 1979.

94. Memcon, “SALT, CTB, Non-Proliferation, TNF, US/UK Nuclear Cooperation, Anti-satellite Negotiations, MBFR, Indian Ocean, Turkey, Cyprus, Energy, European Community, Horn of Africa, East Africa, Zaire,” 21 May 1979, in Smith Records, Box 21, UK 1979.

government would be receptive. The British had already “floated” a proposal for a South Asian nuclear security treaty earlier in the year and “had gotten absolutely nowhere.” Prime Minister Morarji Desai was on record as opposing nuclear freeze proposals because they would hold India in an inferior position vis-à-vis China. Nevertheless, Vance wanted Goheen to get across the idea that “India is an essential part of any solution” because Pakistan wanted to counter its main rival.⁹⁵

When Goheen met with Desai on 7 June 1979, he was not surprised by the prime minister’s rejection of a joint non-development and non-use agreement. Desai averred that India had already made “a unilateral pledge” and that, if Pakistan did the same, “two pledges would be as good as a joint statement.” When Goheen asked Desai, a staunch supporter of nonproliferation and India’s non-weapons status, what he would do about the nuclear danger, he said that his country had “good intentions” but that if “he discovered that Pakistan was ready to test a bomb or if it exploded one, he would act at once ‘to smash it.’” As for Pakistan’s support for a nuclear-free zone, he claimed it was disingenuous and that Islamabad would not “abide by” an agreement. Under the circumstances, with Indian opinion rejecting the idea that nuclear China could ever become “part of a regional solution,” Goheen found the idea itself and the recent proposal to send an emissary to India, Pakistan, and China “increasingly irrelevant.”⁹⁶

Talks with the Chinese reinforced Goheen’s point. The United States tried to persuade Chinese leaders that they shared the U.S. interest in halting Pakistan’s nuclear program, but when U.S. officials asked for assistance, the Chinese were unsympathetic. When Assistant Secretary of State Saunders discussed Pakistan with Ambassador Chai Zemin in late May 1979, the ambassador declared that “Pakistan’s fear of India is understandable as are its nuclear activities.” China, he said, had “advised Pakistan to stop its nuclear program,” but had received no response, and the Chinese did not think that bringing up the issue again would be useful.⁹⁷

Veteran diplomat Han Xu made even more pointed statements when the U.S. deputy chief of mission in Beijing, J. Stapleton Roy, brought up

95. State Department telegram 140858 to U.S. Embassy India, “Nuclear Dialogue with India,” 2 June 1979, SDDR; and U.S. Embassy India telegram 4960 to State Department, “Pakistan’s Nuclear Program—Some British Insights,” 23 March 1979, in Smith Records, Box 19, Pakistan [15–31 March 1979].

96. U.S. Embassy India telegram 9979 to State Department, “India and the Pakistan Nuclear Problem,” 7 June 1979, SDDR.

97. State Department telegram 132029 to U.S. Embassy China, “Meeting with PRC Ambassador Zhai,” 24 May 1979, in NARA, RG 59, AAD.

the matter in early July. According to Han, nonproliferation policy was a “minor issue,” but if Washington kept trying to pressure Pakistan, it might “go to another ‘side’” in the Cold War. Han also said that “friends” had told him the United States “had a tendency to ‘bully’ its friends and allies” and that the U.S. administration should “consider its nuclear policy carefully since [it] had already ‘fouled’ U.S. relations with such good friends as Brazil and Pakistan.” China was unwilling to complicate its friendly relations with Pakistan—relations that came to include nuclear technology-sharing arrangements of great concern to Washington—on behalf of a nonproliferation policy that it did not support.⁹⁸

Recalibrating Policy

Desai’s rejection of a regional agreement and Zia’s opposition to a freeze encouraged a U.S. move in early June 1979 to recalibrate strategy. Seeing “insurmountable obstacles” to U.S. attempts to halt a nuclear arms race in South Asia, Deputy Chief of Mission in Islamabad Peter Constable was concerned that Pakistan might test a “peaceful nuclear” device in the near term, which could cause greater instability than the enrichment program. Influencing Constable’s thinking were statements made to him by Foreign Ministry Secretary General Shahi that Pakistan’s program “was directed in part toward [the] development of a nuclear explosive.” Shahi further said that “even if Pakistan were to set off a peaceful nuclear explosive in a few months, this should be no cause for concern” because the purpose would be defense against Indian capabilities. Shahi did not say explicitly that Pakistan had plans for tests, but “he did not avoid such an implication.” After reviewing Constable’s account, State Department officials “did not believe that this information rules out our previous estimates” that Pakistan could not test for three to five years, but “it makes us less confident about this assessment.”⁹⁹

Consistent with heightened concern about a possible Pakistani test, Constable proposed that the United States “adjust [its] non-proliferation strategy” in the region. Soon to be promoted to a senior position in the department’s

98. U.S. Embassy Peking telegram 4321 to State Department, “South Asian Nuclear Problem: Exploratory Discussions with PRC,” 6 July 1979, in NARA, RG 59, AAD. See also State Department telegram 142384 to U.S. Embassy Peking, “Christopher-Chai Meeting,” 2 June 1979, in NARA, RG 59, AAD.

99. State Department telegram 145139 to U.S. Embassy India, “Non-Proliferation in South Asia,” 6 June 1979, SDDR; and State Department telegram 146736 to U.S. Embassy Pakistan, “Pakistan’s Nuclear Program,” 7 June 1979, SDDR.

South Asia office, Constable argued that even if Washington could not stop Pakistan's enrichment program, it "can still have a chance of meeting our overriding policy objectives—the prevention of nuclear weapons fabrication—before that threshold too is passed." Although he wanted to find ways to keep both India and Pakistan "from exercising the nuclear weapons option they possess," his advice applied mostly to Pakistan in light of Desai's antipathy toward an agreement. Constable proposed that the United States try to "persuade the GOP [Government of Pakistan] to forgo a peaceful nuclear explosion (PNE)." If Pakistan conducted a PNE, it could cause the collapse of Desai's position against building an Indian arsenal. Moreover, it would have a damaging impact on nonproliferation policy for the rest of the world. If, however, Pakistan eschewed a PNE, it could "ease the present impasse in U.S.-Pak relations."¹⁰⁰

Besides a no-PNE commitment, Constable recommended seeking Pakistani assurances not to transfer nuclear technology. That was important, he argued, because of "a serious prospect" that Pakistan would "shar[e] advanced nuclear technology with other Muslim states." Getting relations with Pakistan back on track, Constable suggested, would give the United States a "much better chance of exerting influence against any [Pakistani] move to contribute to a so-called Islamic bomb." Although the CIA reported there was "no substantial evidence" that Pakistan was sharing nuclear technology, U.S. officials remained concerned that it might do so. Those concerns turned out to be prescient. Pakistan emerged as a key participant in the illicit nuclear trade in subsequent decades.¹⁰¹

Constable suggested that if Zia made commitments not to share nuclear technology, the waiver provisions of the Symington Amendment could be invoked to remove the Pakistani sanctions. Although this would mean recognizing a "distasteful reality"—Pakistan's development of a capability to enrich uranium—he saw no realistic alternative.¹⁰²

On 9 June, few days after Constable sent his proposal to Washington, a farewell dinner with Zia provided an opportunity to take matters further.

100. State Department telegram 145139 to U.S. Embassy India. For Constable's proposal, although overlooking the no-transfer aspect, see also Craig, *America, Britain, and Pakistan's Nuclear Weapons Programme*, pp. 225–226.

101. State Department telegram 145139 to U.S. Embassy India; and Craig, *America, Britain, and Pakistan's Nuclear Programme*, pp. 205–206. For CIA views, see Policy Review Committee Meeting, "May 23 PRC Meeting on Pakistan and Subcontinent Matters—Minutes," 25 May 1979. Smith remained apprehensive about a "Moslem bomb." See untitled memorandum, 19 July 1979, in Smith Records, Box 19, Pakistan July 1979. For useful coverage of the Khan network, see Khan, *Eating Grass*, pp. 359–376.

102. State Department telegram 145139 to U.S. Embassy India.

When discussing what could be done to break the “impasse,” Zia denied that Pakistan had any interest in conducting a PNE and volunteered to put this “in writing.” When Constable asked whether he could pass that statement to the State Department, Zia said, “Please . . . tell them we do not intend to conduct a nuclear explosion.”¹⁰³

Shahi’s statement about a test and Constable’s proposal resonated in the State Department. INR officials were unsure whether Shahi or unspecified “others” were bluffing to raise Pakistan’s and General Zia’s prestige, among other goals, but they could not exclude the possibility that Pakistan had “stolen or purchased” fissile material or somehow produced it (a “long shot”).¹⁰⁴ Whether Pakistan was bluffing or not, the idea of a no-test/no-transfer pledge was debated within the Carter administration. Some officials in addition to Smith worried that settling for “half a loaf” by tolerating the enrichment program could set a “seriously damaging” precedent for our “global nonproliferation objectives.” According to Smith, the proposal risked “acqui-esc[ing] in Pakistan’s unsafeguarded sensitive facilities, treating South Asia differently from the rest of the world as regards nonproliferation.” President Carter wrote, “I agree,” on the margins of Smith’s paper.¹⁰⁵

Despite these doubts, Carter did not stop the proposal from going forward. Initially Vance supported Constable’s suggestion that the president send a letter to Zia asking him for a written commitment to no-test/no-transfer. In a memorandum to Carter enclosing the text of a letter to Zia, Vance argued that it would be a “significant step forward” if Zia was responsive, but White House officials believed the prestige of a presidential letter was better saved for a later stage. According to NSC staffers Thornton and Oplinger, Zia’s written word would not be enough to meet the “reliable assurance” requirement for a waiver of the Symington Amendment, nor would it “cut any ice with the Indians.” Vance may have made another attempt to persuade Carter to support a letter, but White House thinking prevailed. Hence, the State

103. U.S. Embassy Pakistan telegram 6585 to State Department, “Conversation with President Zia Ul-Haw,” 9 June 1979, in NARA, RG 59, AAD.

104. State Department telegram 147619 to U.S. Embassy Pakistan, “Pakistani Nuclear Motives,” 8 June 1979, SDDR.

105. Pickering to the Secretary, “Status of Indo-Pakistani Non-Proliferation Effort,” draft (“half a loaf”), 13 June 1979, in Smith Records, Box 19, Pakistan June 1979; and Brzezinski to Smith, “Non-proliferation in South Asia,” 25 June 1979, returning annotated Smith memorandum of 8 June 1979, in JCL, National Security Adviser, Staff Material, North/South, Pakistan: Nuclear, 6/77–12/80. See also RK [Robert Kelley] to Mr. Forbes and Mr. Salmon, n.d., in Smith Records, Box 19, Pakistan June 1979, concerning inclusion of Smith’s dissent in a memorandum to Secretary Vance recommending the Constable approach.

Department, with support from the relevant bureaus and the White House, instructed Hummel to make the request himself.¹⁰⁶

By the time the State Department sent instructions to Hummel on 18 July 1979 to seek a pledge from Zia, “much of the steam” behind the move had dissipated, perhaps because U.S. intelligence had learned that Shahi may not have been bluffing about a test but simply been mistaken about the availability of fissile material. When Hummel received the instructions, he expressed some doubts, including whether Zia’s agreement would be enough to justify a Symington Amendment waiver.¹⁰⁷ Nevertheless, despite believing it was a “long shot” that General Zia would agree to the pledge, Under Secretary Newsom and his colleagues were reluctant to disregard his original offer. Not only did Zia’s suggestion “put us on the spot,” a failure to respond to it “may be misinterpreted” by Pakistani authorities and others who learned about it. Moreover, if Zia followed through on his pledge, it could give Washington “leverage” for the future. Concern about a possible PNE may even have increased a few weeks later in light of intelligence information about activity at Pakistan’s test site.¹⁰⁸

Until the close of 1979, when the situation changed dramatically, the quest for “written assurances” became central to the U.S.-Pakistani dialogue. Policy debates in the fall of 1979 hinged on possible responses to a Pakistani test, such as the extent of punitive steps, with some arguing for a “higher level of Pakistani constraint” on its enrichment program. Zia’s refusal of a no-test commitment implied the eventuality of a detonation, although on no-transfer he expressed willingness to make an assurance. A State Department discussion paper addressed those and related issues, such as the feasibility of a

106. Cyrus Vance to the President, “Letter to President Zia of Pakistan,” 20 June 1979, in NARA, RG 59, State Department P-Reels 1979, Box 152, Doc. 0152-0264; Secretary’s Delegation in Tokyo telegram 06047 to State Department, “Miscellany,” 28 June 1979, SDDR; and Thomas Thornton and Gerry Oplinger to Zbigniew Brzezinski, “VBB Breakfast—Zia Letter,” 10 July 1979, in JCL, National Security Adviser, Staff Material, North/South, Box 79, Thornton Country File, Pakistan: Presidential Correspondence 1–12/79. For the State Department’s instructions to Hummel, see State Department telegram 188580 to U.S. Embassy in Pakistan, “Zia’s Written Assurance Offer,” 18 July 1979, in NARA, RG 59, AAD. Though emphasizing Carter’s doubts, Craig notes that Rabinowitz maintains that Constable’s proposal was rejected. Miller takes the same position. See Craig, *America, Britain, and Pakistan’s Nuclear Weapons Programme*, pp. 226–227; and Miller, *Stopping the Bomb*, p. 201.

107. State Department telegram 185580 to U.S. Embassy in Pakistan, “Zia’s Written Assurance Offer,” 18 July 1979, in NARA, RG 59, AAD; and memorandum from Brzezinski to President Carter, “Daily Report,” 3 July 1979, in *FRUS*, 1977–1980, Vol. XIX, Doc. 349.

108. Approved text of telegram to Embassy in Pakistan, “Zia’s Written Assurance Offer,” 23 July 1979, [sent as State 192696, 25 July 1979], in NARA, RG 59, Benson-Nimetz, Box 3, Lucy Wilson Benson Chron July 1979; and Memorandum from Gerald Oplinger to Brzezinski, “Pakistan Test Sites,” 7 August 1979, in *FRUS*, 1977–1980, Vol. 19, Doc. 356.

multilateral program for peaceful power development, but U.S.-Pakistani discussions collapsed and a scheduled meeting of the Policy Review Committee on the nuclear problem was postponed after protesters burned down the U.S. embassy in Islamabad in November 1979, killing four employees in the process while Pakistani authorities looked the other way. The paper prepared for the canceled discussion on Pakistan raised a prescient question: "Can we identify points in time where we should adjust our non-proliferation strategy to new developments both on the nuclear side (e.g., a test?) and security problems (e.g., an Afghan threat?)." One such "point of time" was reached soon than expected. The Soviet invasion of Afghanistan produced an adjustment in nonproliferation policy, with the Carter administration giving priority to security concerns and downgrading further consideration of a U.S.-Pakistani agreement on nuclear matters.¹⁰⁹

Limits of Export Controls

Despite the implications of the Soviet invasion of Afghanistan, the Carter administration continued to try to slow Pakistan's progress in building the bomb, including by seeking to block, wherever possible, the export of sensitive technology. As Paul Kreisberg of the Policy Planning Staff remarked on 19 July 1979, "I see little prospect of turning around the Pakistanis, although there may be ways to delay them and make their nuclear efforts more costly." Export controls, démarches, and occasional arrests of smugglers remained integral parts of the U.S. approach. Yet, key suppliers and their governments, especially Switzerland and West Germany, were reluctant to cooperate because they did not want to lose business with Pakistan. Not until after the 1990 Gulf War did the United States and other nuclear suppliers reach agreement on the need for comprehensive controls to halt the sale of gray-area exports.¹¹⁰

109. Peter Tarnoff to Mr. Vance, "Your Breakfast with the President Friday, October 19, 1979," 18 October 1979, in NARA, RG 59, Meeting Minutes of Cyrus R. Vance, Box 3, Presidential Breakfast 9/11/79 thru 12/31/79. A report by Lake indicates that internal disagreements continued: Lake to the Secretary, "The Pakistan Strategy and Future Choices," 8 September 1979, in NARA, RG 59, Lake Records, Box 18, TL Sensitive 7/1-9/30/79. See also State Department Executive Secretary Peter Tarnoff, memorandum for Dr. Zbigniew Brzezinski, the White House, "PRC on South Asian Nuclear Issues," 24 October 1979, in NARA, RG 59, P-Reels P790165-1388. For the deferred PRC discussion, see Christine Dodson to the Vice President et al., "Scheduled PRC Meeting on South Asian Nuclear Matters, November 29, 1979," 27 November 1979, in NARA, RG 59, P-Reels P790177-1859; and Miller, *Stopping the Bomb*, pp. 201-202 (with the recent *FRUS* volumes on Afghanistan and Pakistan providing more detail).

110. Paul H. Kreisberg to Robert F. Goheen, 20 July 1979, in Smith Records, Box 16, India Jun-Dec 1979.

The French bellows case illustrates the difficulty of controlling nuclear trade even by an ally that was more cooperative than its continental neighbors. Hoping to put a “spanner in the works,” in March 1979 the British added to U.S. pressure by warning the French of the risks of exporting bellows. In May 1979, with pressure finally coming from the Élysée Palace, French officials brought a halt to Calorstat’s bellows exports, but this move came late, and the Pakistanis had already acquired 1,000 bellows. Pakistan’s chief nuclear procurement officer, Shafique Ahmad Butt, operating from the embassy in Bonn, had placed an order for 10,000 bellows in October 1978.¹¹¹ On 2 May 1979 the French stopped Calorstat from “any further work in this area,” but the firm nevertheless made a last shipment of 600 bellows that had been improperly marked to evade export controls. Calorstat had not supplied any bellows-forming technology, which the Pakistanis also wanted, but the French believed the Pakistanis could produce it themselves with equipment acquired elsewhere in Western Europe.¹¹²

In the summer of 1979, French officials, including Jean Leygonie from the Nuclear Policy Council and General Pierre Montrelay from the General Secretariat for National Defense, provided intelligence briefings to U.S. officials. They showed how Calorstat implicated the Netherlands in dual-use trade with Pakistan. In following Pakistani specifications to produce the bellows, Calorstat had manufactured them with extremely robust maraging steel imported from the Netherlands (later motivating a U.S. warning to the Dutch), although the centrifuge design that required the specialized steel turned out to have serious flaws. The French also provided information about Pakistan’s acquisition from Niger of unsafeguarded uranium, apparently in concentrated form (yellowcake). Delivered by air with Pakistani guards, the first shipment (some fifteen metric tons) arrived in 1978. The second and third shipments, 150 metric tons each, were in January and March 1979. For use in a gas centrifuge plant, the uranium would have to be converted into UF₆ gas, but the French had no idea where that would occur. However, other intelligence sources filled in that gap.¹¹³

111. State Department telegram 058631 to U.S. Embassy London; and U.S. Embassy France telegram 11406 to State Department, “Presidential Message—Pakistani Nuclear Program,” 9 April 1979, in Smith Records, Box 19, Pakistan 1979. On Butt, see Khan, *Eating Grass*, pp. 145–146, which has him working at the embassy in Belgium.

112. U.S. Embassy France telegram 19955 to State Department, “Pakistan’s Nuclear Program,” 2 June 1979, SDDR; and U.S. Embassy France telegram 21073 to State Department, “Intelligence Discussion on Pakistan Nuclear Program,” 29 June 1979, SDDR.

113. U.S. Embassy Paris telegram 21073 to State Department; and Roscoe Suddarth to Mrs. Benson et al., enclosing INR report, “Nigerien Uranium for Libya and Pakistan” (16 July 1979), 17 July 1979,

In comparison to the French, the Swiss and West Germans remained far less cooperative. Not long after the United States circulated to nuclear suppliers a detailed list of components whose export required close monitoring, West German officials agreed to add inverters to the NSG's trigger list. Yet until the restriction became law, as Rouget of the FRG Foreign Ministry explained to Pickering and Charles Van Doren (from the Arms Control and Disarmament Agency), the government in Bonn would not act on U.S. intelligence findings that an Emerson Electric subsidiary in Hanau was transshipping inverters to Pakistan and that the Pakistanis were trying to buy "pieces" of inverters. The West Germans were reluctant to endorse U.S. proposals for an expanded trigger list because they wanted competitors such as Japan and Switzerland to be on board. Even as the United States was expressing concern to allies about exports of UF6 production facilities and related technology, it was learning that representatives from a West German firm, aptly named Nukem, may have been in Pakistan to discuss UF6 production issues. For years ahead Pakistani and other nuclear shoppers found ways to secure sensitive technology before the FRG was ready to approve comprehensive controls.¹¹⁴

In the case of Switzerland, U.S. intelligence continued to find evidence of significant transactions, despite the Swiss government's denials. The UF6 production secret had already leaked. CORA Engineering "had supervised the erection of a facility" associated with the uranium enrichment project and had also provided "equipment and training required for [the] successful operation of a centrifuge facility." At least one "facility" that U.S. intelligence later identified was a "complete installation for feeding uranium hexafluoride into the Pakistani uranium enrichment plant." Another project involving CORA was a UF6 solidification plant that it had completed by the summer of 1978 and was apparently operating by 1980, or even earlier. Moreover, according to U.S. officials, Vakuu Apparat had not only provided valves and negatives for use in etching centrifuge bearings but had also evaluated gas centrifuge designs provided by Pakistani experts. Another firm, Sulzer Brothers, was assisting in the construction of the "New Labs" pilot reprocessing plant by providing ventilation and glove-box systems. Moreover, even after the Swiss government

in Smith Records, Box 18, Incoming Cables. Abbas, *Pakistan's Nuclear Bomb*, p. 142, discounts claims that Libya played a role in supplying the yellowcake.

114. U.S. Embassy West Germany telegram 8418 to State Department, "Pickering/Van Doren Visit: Pakistan," 16 May 1979, SDDR; State Department telegram 187381 to U.S. Embassy West Germany, "US-FRG Technical Discussions on Nuclear Export Controls," 19 July 1979, SDDR; State Department telegram 20871 to U.S. Embassy United Kingdom et al., "Nuclear Export Controls," 10 August 1979, SDDR; and IISS Strategic Dossier, *Nuclear Black Markets: Pakistan, A. Q. Khan and the Rise of Proliferation Networks* (London: International Institute of Strategic Studies, 2007), p. 24.

put into place control regulations, enforcement was lax, and sensitive exports continued.¹¹⁵

The intelligence provided by the French and the information collected on the Swiss and West Germans illuminated Pakistan's developing nuclear capabilities. Niger was a source of yellowcake that, thanks to Leybold-Heraeus and other firms, Pakistan could turn into UF₆ gas. With Swiss assistance, the Pakistanis had a capability to feed UF₆ gas into the Kahuta gas centrifuge plant and turn the resultant HEU into solid form. By 1981, Pakistan may have had around 4,000 operating centrifuges at Kahuta, although earthquakes and technical problems delayed the production of HEU by several years, suggesting a greater potential than U.S. analysts had estimated a few years earlier. With the HEU they could design and produce a gun-type nuclear weapon ("Little Boy") without even testing it. As one of Smith's aides wrote, the device would "behave more or less as predicted without verifying it empirically."¹¹⁶

Conclusion

Amid alarming intelligence about the scope of the secret Pakistani nuclear program, the Carter administration tried to persuade Zia's government to change course. Nevertheless, such key figures as Vance and Christopher did not allow their apprehension about the risks of nuclear proliferation, which was considerable, to divert attention from what they saw as the priority of ensuring Pakistan's stability and containing Soviet influence in Southwest Asia. Although they saw the Pakistani nuclear project as a significant threat, they worried that a tough approach could be destabilizing. They did not make that decision lightly, but when they recognized that nonproliferation and geopolitical priorities were conflicting, they saw little alternative to relegating the former in order to preserve U.S. influence in the region.

The importance of security interests was evident in the fall of 1978 during the brief interlude between the controversy over the reprocessing plant and

115. Charles Van Doren to Ambassador Smith et al., "Chronology of U.S.-Swiss Discussions on Pakistan," 4 August 1980; State Department telegram 247649 to U.S. Embassy Switzerland, "Nuclear Exports to Pakistan and Argentina," 21 September 1979, in Smith Records, Box 4, Heavy Water-Argentina/Canada/Germany September–December 1979; State Department telegram 227353 to U.S. Embassy Switzerland, "Paper on Activities by Swiss Firms," 26 August 1980, in Smith Records, Box 18, Pakistan [May–December 1980]; and Khan, *Eating Grass*, p. 116.

116. Khan, *Eating Grass*, p. 156; Locke to GS [Smith], "Thoughts on Pakistan," 29 August 1979; and Rathjens to Smith, "PRC Meeting, March 9, 1979—4:00 PM," 9 March 1979.

growing concern about uranium enrichment. State Department officials were interested in “re-knitting” ties with Pakistan, worried about the impact of the coup in Afghanistan and upheavals in Iran, and apprehensive that an isolated Pakistan could be “radicalized.” Even so, they were relatively slow to acknowledge British warnings about uranium enrichment and Ambassador Hummel’s requests for action.¹¹⁷

That Vance and his advisers had not previously understood the depth of the problem became apparent in January 1979 when they acknowledged that a Pakistani nuclear capability had developed “more rapidly than . . . we had earlier estimated.”¹¹⁸ What State Department officials and intelligence collectors and analysts were learning, and would continue to discover, was how far the Pakistanis had come in acquiring the tools and technology, including gas centrifuge plants, needed to produce HEU and plutonium. U.S. officials wanted to head off further transactions, but the Swiss and West German governments, unlike the French, provided little cooperation. Still, stronger support in halting the nuclear trade would not have stopped Pakistan.

Once U.S. intelligence agencies had obtained compelling evidence of the scale and scope of Pakistani nuclear activities, some level of tension with Islamabad was unavoidable. Senior officials and their advisers believed that diplomacy was necessary to resolve the Pakistani nuclear problem, which they saw as a significant security challenge. In the end, however, no workable diplomatic solutions were found, and Zia, like his predecessor, Bhutto, defied all U.S. *démarches* and proposals. Moreover, the Indians declined to consider an Indian-Pakistani regional non-nuclear compact. Although Smith, supported a “sunshine” policy to confront Pakistan openly, geopolitical considerations took that off the table.¹¹⁹

In the spring of 1979, as concern about Soviet pressure on Pakistan increased, U.S. officials began taking a “two-level” approach to indicate that security interests were as important as nonproliferation, a development Smith interpreted as downgrading the latter. U.S. policymakers hoped the new approach would gain the confidence of Pakistani leaders, but Zia rejected a U.S. nuclear freeze proposal, the sole U.S. attempt to turn the nuclear program around altogether. Insisting that nothing could stop Pakistan

117. Atherton et al. to the Acting Secretary, “Pakistan: Continuing a Positive Relationship While Maintaining Pressure to Forego a Nuclear Weapons Option,” 12 January 1978; and State Department telegram 235372 to U.S. Mission to IAEA.

118. State Department telegram 022211 to U.S. Embassy Pakistan.

119. Smith to Kreisberg, “Pakistan—Comments on S/P Paper,” 14 March 1979.

from asserting its “sovereign rights,” Zia sustained Bhutto’s commitment to the nuclear program as a means of deterring India and avoiding national humiliation.¹²⁰

Under the circumstances, the odds were low that the United States could halt the Pakistani nuclear program. Pakistani leaders, from Bhutto to Zia, defined national survival in terms of a nuclear capability, saw their political legitimacy as partly dependent on the nuclear program, had little dependence on U.S. economic and military aid, and, despite U.S. and British opposition, were able to acquire from overseas suppliers the sensitive dual-use technology to produce fissile material. Thus, Pakistan was in a strong position to defy the United States, where concern about regional stability overrode interest in a coercive nonproliferation strategy.

The impasse over Pakistan’s nuclear weapons program encouraged proposals to alter U.S. policy. Hastening the development of what Craig calls a mitigation strategy was concern that Pakistan might stage a test sooner than anticipated.¹²¹ Decisions in the summer of 1979 to pursue a non-transfer/non-test commitment met internal dissent but presaged on-and-off-again attempts to apply a limited nonproliferation policy that left enrichment capabilities in place.

In the mid- to late 1970s, U.S. policymakers were relatively successful in containing suspicious nuclear activities by allies and close associates (e.g., Taiwan and South Korea). In those cases, they could employ significant leverage without worrying about loss of influence. With Pakistan, the United States had no effective leverage; an attempted buyout would create bad precedents, and excessive pressure could have a destabilizing effect. The influence of decisionmakers at the State Department, White House, and CIA who gave priority to geopolitical concerns outweighed what influence Smith could muster. Even preventing the flow of sensitive technology to Pakistan was difficult because important allies did not want to lose those exports. These circumstances underscore what a tough case Pakistan was and why the United States never openly challenged Islamabad’s freedom of action to develop its nuclear capabilities, with all of their dangerous and destructive potential. As one of the official participants recently observed, the net impact of U.S. policy was to “kick the can down the road.”¹²²

120. State Department telegram 85585 to U.S. Embassy in Pakistan; and U.S. Embassy Pakistan telegram 2553 to State Department.

121. Craig, *America, Britain, and Pakistan’s Nuclear Weapons Programme*.

122. John Despres, email, 17 February 2020. See Miller’s discussion of the Taiwanese case in *Stopping the Bomb*.

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