



DEPARTMENT OF STATE

Washington, D.C. 20520

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November 22, 1978

SECRET/SENSITIVE

MEMORANDUM FOR DR. ZBIGNIEW BRZEZINSKI THE WHITE HOUSE

Subject: Pakistani Nuclear Programs

Attached is the paper requested in your memorandum of October 18, 1978. This paper is intended to identify critical "benchmarks" in Pakistan's nuclear program and outline our strategy -- both multilateral and bilateral -- for inhibiting Pakistan's acquisition of nuclear explosive capability. The CIA will be addressing your last question in a separate memorandum.

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> Peter Tarnoff Executive Secretary

Attachment:

Paper on Pakistani Nuclear Programs.

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BY BAE NARA DATE 11/12

PAKISTANI NUCLEAR PROGRAMS

Despite the cessation of French cooperation with Pakistan on the reprocessing plant, intelligence reports indicate that Pakistan is continuing with its program to obtain a nuclear weapons option. Its motivation remains unchanged, namely its fear of India's intentions and its desire to off-set India's conventional military superiority and nuclear advantage. Pakistan probably also believes that such capability would greatly enhance its stature in the Moslem world.

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Pakistan has considerable but not complete technical competence and is exploring various ways to obtain fissile material for an explosive program. The Pakistanis are looking into the gas centrifuge process for enrichment of uranium and are shopping around for related equipment. There are also reports that the Pakistanis may seek to complete the French reprocessing plant on their own. Finally, there are indications that Pakistan may be working on an expanded lab scale reprocessing facility at PINSTECH (the principal nuclear research center). We have no indication that Pakistan is working on a so-called "quick and dirty" reprocessing facility which might be a fast though

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probably insecure route for acquiring fissile material, but this possibility cannot be disregarded. There is also evidence the Pakistanis are engaged in research and design work for the other components of a nuclear device which would be used together with fissile material obtained through reprocessing or enrichment to create a nuclear explosion. (An IIM describing and evaluating these efforts in more detail will soon be available.)

BENCHMARKS:

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In a continuing and complex program of research and development, we can identify a few obvious benchmarks, but we will need to keep the entire program under constant review. This is an inexact science at best and much of our intelligence information is ambiguous. It is not possible to predict when or if Pakistan will arrive at one of these benchmarks. Among the critical indicators, or benchmarks, in four broad areas are:

1. Acquisition of Fissile Material

-- Public suspension or detected covert violation of safeguards on the KANUPP Power reactors, and spent fuel storage facilities at KANUPP and PINSTECH, the only



current source of significant quantities of spent fuel.

- -- Restrictions on the activities of IAEA inspectors or irregularities in the application safeguards of KANUPP or at PINSTECH.
- -- Evidence of a "quick and dirty" reprocessing facility, which could permit separation of sufficeint quantities or plutonium for a few devices within 1-3 years.
- -- Acquisition from abroad of trigger list or gray area materials or technology for enrichment or reprocessing.
- -- Fabrication and irradiation of indigenous fuel at KANUPP which the GOP might claim is not subject to a Canadian reprocessing veto.
- -- Evidence from sampling that reprocessing of spent fuel or enrichment or uranium had been undertaken.
- -- Seizure and reprocessing of irradiated 93% HEU which has been provided by the US and used in the PINSTECH research reactor.

2. Research and Design of Explosive Devices

-- Shopping abroad for materials or components related to development or manufacture of a nuclear explosive device, such as specialized high-speed cameras, a hot isostatic press, neutron sources, specialized electronics, etc.



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- -- Testing of a high explosive package for a nuclear device using natural or depleted uranium.
- -- Evidence that natural or depleted uranium has been used in explosive tests.

3. Preparations for Testing

-- Preparations of a site for nuclear testing (e.g. drilling of wide diameter bore holes, provision for cabling and instrumentation monitoring for test, security preparations, etc.).

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- 4. Evidence of Work on Delivery Systems or Delivery Techniques
- -- Practice by Pakistani aircraft of nuclear weapons delivery techniques.
- -- Attempts to acquire specialized electronics for fighter aircraft.
- -- Acquisition of long-range missile parts, technology, or guidance systems.

U.S. STRATEGY

Our strategy to inhibit Pakistan from moving successfully toward nuclear capability should utilize both multilateral tools as well as bilateral pressures and inducements.

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1. Multilateral

- -- We have already alerted 11 supplier countries to Pakistan's intentions and urged them to restrict exports to Pakistan of equipment and technology related to reprocessing. The British have done the same thing with respect to enrichment materials and technology and are themselves acting to prevent the export of electrical invertors recently ordered by the Pakistanis. We will continue to keep in close touch with the supplier countries and share intelligence as appropriate.
- -- We have alerted the IAEA too, and they are cognizant of the need for careful inspection of all the Pakistani nuclear facilities.
- -- We intend to share our concerns about Pakistan as a potential proliferator with both the Soviets and the PRC, in order to lay the ground work should we wish at a later date to enlist their cooperation in bringing to bear greater influence on Islamabad.
- -- We will look for appropriate opportunities to engage

 Iran and Saudi Arabia in our efforts to deflect Pakistan

 from its present course.



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-- Should Pakistan appear to reach a critical benchmark, we would consult with other concerned countries, and particularly members of the aid consortium, on ways to bring to bear concerted economic pressure, keeping in mind, however, the possibility that one or more oil-rich Muslim countries could conceivably take up the slack.

2. Bilateral

Provided that Pakistan does not initiate action which triggers extreme sanctions (i.e. suspend military sales and economic aid), we should not over estimate our bilateral leverage on the nuclear problem. Our suspension of economic aid in 1978 did not dissuade Pakistan from pursuing the reprocessing contract with the French; it was probably more useful in terms of signaling the seriousness of our concern to the French. Even substantially increased military sales and economic aid would probably not give us decisive leverage. On the other hand, a sharp curtailment would only increase Pakistan's sense of insecurity and thus its motivation for going nuclear. Nevertheless, military sales and economic assistance can help us reknit our relations with Pakistan, reduce its sense of isolation and provide some degree of influence. It will, however, take some time to rebuild and expand this relationship.



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It should also be noted that, unlike the Taiwan or South Korean situations, neither we nor other suppliers have any decisive leverage derived from cooperation in a major nuclear power program. In 1975 Canada ceased virtually all cooperation on Pakistan's only power reactor, KANUPP, and early plans for an additional power reactor at Chasma have not advanced. We have provided HEU through the IAEA for the research reactor at PINSTECH. Refueling in the next year or two by us or another supplier may permit the application of some pressure. (Other potential sources of HEU at this time are the UK, France, USSR, and China.)

Recognizing the limits on our bilateral influence, the following steps have been taken and/or are being considered:

-- Ambassador Hummel, when informing the GOP of our resumption of aid, put the Pakistanis on notice that we are concerned about their nuclear intentions and will follow Pakistan's activities in this field closely. He made clear that should Pakistan develop an indigenous nuclear capability or acquire reprocessing technology or equipment, we would have to review immediately our overall



relationship. He also provided the GOP with a paper summarizing all pertinent legislative considerations relating to our non-proliferation concerns.

- -- If the Pakistanis acquire from abroad triggerlist items for their enrichment or reprocessing programs,
 the Symington/Glenn Amendment would require us to terminate
 economic and military assistance (IMET). Such Pakistani
 acquisitions would almost certainly adversely affect our
 military sales program although the legislation does not
 so require.
- -- At some point it might be useful to put the GOP on notice that we are aware of their covert activity in the nuclear field. In this connection, we will wish to avoid compromising intelligence sources which could affect adversely our collection efforts. Moreover, it may be useful first to restore our economic and military relationship so that the costs of proceeding would be more apparent to the Pakistanis.

Beyond this, the timing, content and nature (bilateral or multilateral) of further approaches will necessarily depend on both overt and covert developments in Pakistan's nuclear program. There are too many imponderable factors to define specifically in advance how we would react when

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and if Pakistan approaches any given "benchmark". We continue to be fully aware that one of our primary goals is to prevent Pakistan from acquiring nuclear weapons capability.

