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Authors:

Peter R. Blood Elizabeth R. Curtiss James Heitzman Barbara A. LePoer Robert J. Levy Douglas C. Makeig Russell R. Ross

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January 1986

Author: Elizabeth R. Curtiss

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PREFACE

This bibliography provides selective annotations of open-source material on two current issues:

-nuclear developments in South Asia, and -tactics and organization of Afghan resistance groups.

The bibliography incorporates serials and monographs received in December 1985 and is the eighth in a series on these subjects.

Entries within each topic are arranged alphabetically by author or title. Call numbers for materials available in the Library of Congress are intended to facilitate recovery of works cited.

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GLOSSARY 1 - NUCLEAR TERMINOLOGY RELATING TO SOUTH ASIA

- AEMC The Atomic Energy Minerals Center at Lahore is responsible for the location and exploitation of Pakistan's uranium ore and fills a vital need stemming from boycotts of Pakistan by international nuclear fuel suppliers.
- BARC Bhabba Atomic Research Centre is located in north Bombay and is India's facility for research in and development of nuclear technology.
- CHASHNUPP Pakistan's Chashma Nuclear Power Plant, a projected 900-megawatt facility in Mianwali District, Punjab, was sanctioned in 1982 in order to create electrical power through light-water technology.
- Cirus A Candu-type Canadian-built plant located at BARC, Cirus was commissioned in 1960. India reprocessed spent fuel from Cirus to make the plutonium for its 1974 "peaceful nuclear explosion;" Cirus has a capacity of 40 megawatts.
- Dhruva One of the world's few high-flux reactors, Dhruva, which went critical in August 1985, is solely the product of Indian research and production, and therefore, falls completely outside IAEA safeguards. Dhruva shares facilities with Cirus, its neighbor in the BARC, has a 100-megawatt capacity, and can produce 30 kg of plutonium annually.
- IAEA International Atomic Energy Agency (United Nations)
- Kalpakkam This Tamil Nadu town is the site of the Indira Gandhi Atomic Research Center (formerly MAPP) and gives its name to a 40-megawatt fast-breeder reactor which went critical in August 1985 using plutonium-uranium carbide fuel.

KANUPP Karachi Nuclear Power Plant, a 125-megawatt reactor, was supplied by Canada on a turnkey basis and became operational in 1972.

- MAPP-1 Madras Atomic Power Project's first Candu-type 235megawatt unit was commissioned in January 1984. The center is locatd at Kalpakkam, Tamil Nadu, and is fully indigenous; consequently, its units and the plutonium they produce fall outside IAEA inspection safeguards. MAPP units are intended to provide electricity for Madras. In October 1985, MAPP was renamed the Indira Gandhi Atomic Research Center, but new names for individual plants have not been made public.
- MAPP-2 The second unit at Madras Atomic Power Project is also a Candu-type 235-megawatt plutonium and heavy-water reactor. MAPP-2 went critical in August 1985 and was commissioned in October of the same year.
- NPT The Nuclear Nonproliferation Treaty was ratified by the UN General Assembly in 1968. India and Pakistan contend that the NPT discriminates against non nuclear states, but Pakistan has repeatedly offered to sign if India will do so simultaneously. In the UNGA, Islamabad voted in favor of the NPT.
- PAEC Pakistan Atomic Energy Commission
- PINSTECH Pakistan Institute of Nuclear Science Technology, the site of a US-supplied 5-megawatt "swimming pool"-type reactor installed in the 1960s
- Tharapur The Tharapur nuclear power plant, located near near Bombay, was built by the US, has a capacity of 600 megawatts and can annually produce 50 to 80 kg of plutonium; Tharapur and its products come under IAEA inspection safeguards.

GLOSSARY 2 - SOVIET AND SOUTH ASIAN TERMINOLOGY RELATING TO THE CONFLICT IN AFGHANISTAN

- Commander A resistance fighter who is recognized as a military leader in local or regional areas of conflict; some commanders are respected outside their own regions, but there is not yet a coordinated nationwide command.
- <u>Dushmani</u> (singular: <u>dushman</u>) Soviet perjorative term for Afghan insurgents; it means "bandit" and originated during the 1930s Central Asia resistance.
- DRA The Democratic Republic of Afghanistan was established by a coup in April 1978 but controls only small parts of Afghan territory concentrated along the major highway, airbases, and military installations, and urban centers, including Kabul---none of them secure from resistance guerilla operations.
- KHAD DRA intelligence service whose operations are entirely directed by its many Soviet KGB advisors.
- <u>Mujahideen</u> (singular: <u>mujahid</u>) This Islamic term means "holy warrior", but it is most often used as a name for Afghanistan's resistance fighters, who consider their campaign a <u>jihad</u> (holy war) to drive unbelievers from their country.
- SPETZNAZ Soviet special warfare troops under the GRU (Military Intelligence Directorate) of the Soviet Ministry of Defense. These highly mobile units are deployed throughout Afghanistan for operations which require more skill or loyalty than is commonly displayed by Soviet or DRA troops.

1. NUCLEAR DEVELOPMENTS IN SOUTH ASIA

"Anti-Nuclear Noises". Economic and Political Weekly (New Delhi), vol XX, no 42, 19 October 1985, p. 1767.

The arguments against India's and Pakistan's acquiring nuclear weapons can be quite ludicrous, according to this column. The assertion that Third World leaders are liable to commit nuclear acts accidentally is merely racism, because the superpowers, who are the main proponents of the idea, have no fear of their own frenzied vertical proliferation. The argument that nuclear weapons are too expensive can be dismissed, because both New Delhi and Islamabad commit large proportions of their impoverished peoples' tax receipts to conventional forms of defense, precisely because they have no nuclear arsenals. It must be noted that China, which has nuclear weapons, spends far more on hospitals, roads, foods, and services than either India or Pakistan. Most importantly, the world's two major nuclear powers have not gone to war with each other since World War II despite strong antagonisms. In the modern world, nations without nuclear weapons have been subjected to nuclear blackmail or threats regardless of their other assets --- and the only way known so far to avoid that fate is to obtain a nuclear threat of one's own. "Power cannot be wished away." The unnamed author concedes only one point to antinuclear lobbyists: raising the number of nuclear weapons in the world necessarily raises the statistical chances of nuclear war.

"Fabrication of 500 mw Reactors Underway". Business Standard (Calcutta), 28 July 1985, np.

The Chairman of India's Atomic Energy Commission Dr. Raja Ramanna says that India is already working on fabrication of a 500-megawatt nuclear reactor. The Soviet Union has been offering 40-megawatt reactors, but New Delhi is looking way beyond that scope. More than 90 per cent of the components of India's nuclear reactors are already made in India, and increasing the standardization of the reactors will help bring down costs. Plants scheduled to be activated in the 1990s will benefit from being replicas of plants brought on line in the 1980s. One of the biggest problems facing India's nuclear power program is the funding, because the economy will suffer badly unless substantial portions of the energy budget go to projects

with near-term results. Once the bugs are worked out and India builds replicated plants, atomic energy will be the cheapest source of electricity. Ramanna dismisses the potential difficulty of disposing of nuclear waste, saying that mountains of coal ash are hard to dispose of, and nuclear waste is much less voluminous.

"French Decline to Discuss ICC Judgement on Pakistan Reprocessing Plant". Nuc<u>leonics Week</u> (New York), 21 November 1985, p. 10. HD9698.AlN8.

Pakistan alleges that in 1978 a French company breached a contract in which they agreed to supply a 50- to 100metric ton per year reprocessing plant to PAEC. PAEC brought the case before the International Chamber of Commerce [ICC] which is reported to have ruled in Islamabad's favor in October 1985. The French company pleaded that it had been forced by changes in Paris' nuclear export policy to take the action it took. In 1983 there had been some speculation that the French might build the CHASHNUPP in order to rectify their previous offense, but universal international concern about Islamabad's clandestine nuclear buildup has prevented any country from agreeing to participate in CHASHNUPP. The U.S. is applying pressure against the project, and European leaders are not willing to risk American disapproval for a relatively small Pakistani contract. Islamabad's chances of building CHASHNUPP would increase dramatically if Indo-Pakistani relations are warmed up, but a nonproliferation gesture would still almost certainly have to precede any real progress in the Pakistani nuclear energy program.

"Gandhi Dedicates Kalpakkam Fast Breeder Reactor". Delhi Domestic Service, 16 December 1985. In FBIS Dai<u>ly Report</u> South Asia, 17 December 1985, p. El.

Indian Prime Minister Rajiv Gandhi dedicates the second unit of the MAPP. The new unit is a test fast breeder reactor. In the same ceremony, he renames the MAPP in honor of his mother, the late Prime Minister Indira

Gandhi; the center will now be known as the Indira Gandhi Center for Atomic Research. Guests at the ceremony, where Gandhi restates India's abhorrence of nuclear destruction and pledges to work for nuclear disarmament in the world, include representives from the IAEA, Pakistan, China, Bangladesh, and Argentina.

"Gandhi Invites Zia to See Opening of Nuclear Plant". <u>New York</u> <u>Times</u> 1 December 1985, p. Al3.

Rajiv Gandhi, Prime Minister of India, has invited Pakistan's President Mohammad Zia-ul-Haq to witness the official opening of India's latest atomic power plant. Gandhi, speaking during a visit to Japan, says India has no intention of building a nuclear weapon. Zia is scheduled to visit India around the time of the plant's opening; by attending the ceremonies, he can observe for himself the peaceful nature of India's atomic energy program.

"Gandhi-Zia Talks Said to Bear Fruit". <u>New York Times</u>,18 December 1985, p. A3.

At the conclusion of a visit to India by Pakistani President Mohammad Zia-ul-Haq, he and Indian Prime Minister Rajiv Gandhi hold a joint press conference in which they "smile broadly, exchange mutual praises," and announce an agreement not to bomb each other's nuclear facilities. Analysts and South Asian citizens have been worried that a war would start if India undertook a preemptive strike against Pakistan's nuclear research center at Kahuta, as some Indian politicians have urged. However, the two countries have not yet found a way to reassure each other that their nuclear intentions are peaceful. This Zia-Gandhi meeting was their most friendly to date, and the sixth they have held since Gandhi took office in October 1984.

"In September, India's Nuclear Power Plants Generated 262,801 Gross Megawatt-Hours". Nucleonics Week (New York) 7 November 1985, p. 12. HD9698.AlN8.

"Tarapur-1 generated 15,785 MWH operating at 10.44% capacity; Tarapur-2 generated 108.643 MWH. 71.85% capacity; and Mapp-1 generated 138,373 MWH. 81.78% capacity."

Khan, A. Q. "Indian Nuclear Duplicity." Muslim (Islamabad), 13
November 1985, p. 4.

The author, who is Pakistan's chief nuclear scientist, recites a long list of reasons why India's 1974 explosion of a "peaceful nuclear device" is the equivalent of the detonation of an atomic bomb. In addition to citing several Indians who have made the same equation, Khan enumerates a sequence of secret thefts of supposedly safeguarded nuclear materials and ideas by which New Delhi fashioned its explosive device. Khan also asserts that "any average engineer could turn a device into a deliverable bomb in a few months." Khan's arguments usually rely heavily on undifferentiated character assassination against Indians in general and the Nehru-Gandhi dynasty in particular; this selection follows that pattern.

"Pakistan Elected to IAEA Board of Governors". Muslim (Islamabad), 3 December 1985, p. 6.

Pakistan has been elected to the Board of Governors of the IAEA for an eighth 2-year term. The Board has 35 member countries.

"Pakistan-Canada Cooperation". Da<u>wn</u> (Karachi) 23 December 1985, p. 5. In FBIS Daily <u>Report South Asia</u>, 27 December 85, p. F2.

Canada's Secretary of State for External Affairs Joseph Clark is visiting Pakistan to promote and expand bilateral The two countries have disagreed on nuclear relations. matters since 1976 when Canada demanded safeguards for continuing its supply of nuclear fuel to KANUPP; Ottowa then wthen cancelled assistance to that plant. Despite this dispute, bilateral relations are generally good, given Canada's continued substantial aid to major development projects in Pakistan. While confirming Ottawa's commitment to aiding Pakistan and Afghan refugees in Pakistan, Clark says that Pakistan was an innocent victim of the high standards set by his country in the field of nuclear cooperation. However, according to this editorial, Canada, in addition to its inspection rights at KANUPP. wishes to be free to investigate any other nuclear plants in Pakistan, thus violating Pakistan's sovereignty. This action is discriminatory against a country whose nuclear progress is still dependent on outside assistance, but which must compete with a rival---India---able to build a fast-breeder reactor with indigenous equipment and personnel.

Ram, Mohan. "Playing Without Safeguards". Far <u>Eastern Economic</u> Review (Hong Kong), 14 November 1985, p. 85. HC411.F18.

With the opening of the fast-breeder test reactor at Kalpakkam, India becomes the first developing country to join the exclusive club of nations capable of such advanced technology. This plant is expected to prepare the way for a commercial fast breeder reactor due to be commissioned in the next 15 years. India's present nuclear power generating capacity is 1,330 megawatts with an anticipated capacity of 2,270 megawatts by 1990. By the year 2000, New Delhi expects to have 10,000 megawatts of capacity. India's uranium reserves are not estimated to be sufficient to sustain more than 15,000 megawatts for more than 30 years, which means that fast breeder reactors using plutonium-uranium carbide fuel are essential to the second stage of the program in order to bypass commercial uranium supplies which are subject to international safeguards. New Delhi remains extremely reluctant to deviate from its chosen path of self-reliance.

2. TACTICS AND ORGANIZATIONS OF AFGHAN RESISTANCE GROUPS

"Afghans Leave Iran." Arabia (London), October 1985, p. 13.

The Afghan mujahid group Hezb-i-Islami. led by Gulbaddin Hekmatyar, has decided to close down its office in Iran. Although it was widely believed that Gulbaddin was close to the Iranians. a resistance source says the office was not serving any useful purpose. Two other mujahid groups, the Jamiat-e-Islami led by Burhanuddin Rabbani, and a Hezb faction led by Yunis Khalis, still maintain Iranian offices in Mashhad and Teheran. Afghan resistance groups are active in organizing relief work for about one million Afghan refugees in Iran and three million in Pakistan.

Hannon, John. "Paktia Observations." <u>International Defense</u> <u>Review</u> (Geneva), vol. 18, no. 11, 1985, p. 1733.. Ul.I48-

In the battle for the border town of Khost, the Hezb-i-Islami (Islamic Party associated with Gulbaddin Hekmatyar) committed an unusually heavy number of troops to an effort to dislodge a large Soviet/DRA garrison which was threatening resistance supply lines. Most of the resistance fighters whose supplies were affected by the Khost garrison were associated with the Hezb commander Jalaludin, but members of other parties also stand to benefit from the action's success. Approximately 3,000 mujahideen attacked Khost, approaching close enough to use rocket launchers. The government troops surrendered after a battle of about one hour, and many were taken prisoner. The prisoners were taken to a camp which appeared well-organized and was secured with low-level air-defenses and hillside shelters for use during artillery and helicopter attacks. Uninjured prisoners were allowed to move about the camp freely, while the wounded received whatever medical care was available. In addition to taking prisoners, the mujahideen captured equipment. Radios were set aside to coordinate later attacks. Vehicles which were captured were gutted for parts, metal, and ammunition, although some trucks were repaired and repainted. Although the mujahideen have captured armored vehicles, they have not been able to use them effectively due to lack of fuel and an ignorance of armored tactics. The article includes photographs and detailed explanations of captured equipment.

Martin, Michael. Afghanistan: Inside a Rebel Stronghold. Poole, (Dorset, UK): Blandford Press, 1985. 256 pp. DS371.1.M375.

The author traveled behind Afghan resistance lines for four months in 1983. Under the sponsorship of the fundamentalist Hezb-Islami of Gulbaddin Hekmatyar, a group generally avoided by Western journalists, he toured the eastern part of the country from the war-ravaged villages near Kabul to the more tranquil Bamyan Valley. He notes that the force of Islam is the backbone of the anticommunist resistance, but that the insurgent groups expend considerable effort feuding and exacting vengeance upon each other. He illustrates the surreal aspects of the conflict through the juxtaposition of traditional Afghan mores with the lethality of modern warfare; the author and his insurgent hosts, for instance, eat a meal insouciantly while bullets chip away the building they occupy. In another example, an 80-year-old Afghan patriarch offers to join the jihad against the Soviet-dominated regime in place of his son, who has just been killed in action. For depicting the indominability and stubborn resistance of the Afghan insurgents, Martin's account is among the best available today.

Michaels, Jim, and Paul Behrends. "Inside Afghanistan..." Defense Week (Washington, DC), 30 September 1985, p. 12.

The battle for Khost, which is located in Paktia Province only 20 miles from Pakistan, raged for years before the mujahideen changed their tactics in August 1985. In the past they had limited themselves to small hit-and-run raids, but in August they initiated routine artillery and rocket bombardments of the garrison from higher terrain nearby. This marks the mujahideen's first "conventional" campaign in the long struggle against Soviet-backed government forces. Resistance fighters continue to be poorly trained and short on ammunition, but well-equipped with 76mm howitzers, 82mm mortars, rocket launchers, and other weapons. Most resistance weapons are captured Soviet pieces, supplemented by Chinese-made weapons. While the string of small victories which the new tactics have created is a boost to resistance morale, sources concede that it is not enough to defeat the entire

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garrison in fixed battle or hold any ground which might be seized. For best results, the muja<u>hideen</u> prefer to fight at night when jet and helicoptor reprisals are impossible. The Khost campaign can be compared to the Tet offensive during the Vietnam war when the Vietnamese Communists scored a propaganda coup by appearing to challenge US superiority. State Department Afghanistan Desk Officer Phyllis Oakley says the muj<u>ahideen</u> can only hope for enough military success to buy time to gain a political settlement. She notes, however, that as long as they speak with fragmented voices the chances of a political settlement remain slim.

Salahuddin, Muhammad. "Inside Afghanistan: At War Alongside the Mujahideen." <u>Arabia</u> (London), October 1985, p. 42.

A Pakistani journalist visits the Zawar center, a mujahid encampment which has the reputation of being the best-equipped and best-fortified in Afghanistan. The camp was the brainchild of its commander, Zabita Umar Khan, who defected from the DRA Army in 1979 as a first lieutenant, and who was 28 years old at the time of this interview. When the center was established in 1982, it was the first step in providing Paktia with infrastructure for training and supplying its resistance forces. Its military training program is organized by a former major and a former captain in the DRA Army; the center also repairs captured military supplies. In conversation Umar Khan says that his camp has seen no American assistance--"the West remains content with empty talk ... war, meanwhile has been extended to all Afghanistan's 29 provinces." Umar Khan says the resistance is "fighting a classical querrilla war in a terrain eminently suitable for such a conflict. We have learnt to avoid suicide missions and unnecessary wastage of lives and ammunition. The objective of the struggle is not to score spectacular success but to maximise the losses of the imperialist and mercenary forces and to convince them that victory is not possible..." The Zawar center also features a communication center which employs Soviet wireless equipment to link all operational bases and mujahid units in Paktia. In the training center, instructors use slides and diagrams to demonstrate the best deployment of rocket

launchers, heavy guns, antiaircraft equipment, armored cars, and tanks. The center receives electricity from a single generator. There is a workshop which was currently repairing equipment captured in 1983, including a 101mm mortar, wireless sets, and a machine-gun from a jet aircraft. The center also contains a mosque, a 10-bed hospital with X-ray machine, and a guest house. Outposts with anti-aircraft guns guard the center. Other training centers have now been established as well, most of them under the command of Maulana Abdur Raul Sayyaff.