

THE NUCLEAR NOOSE AROUND PAKISTAN'S NECK

By Pervez Hoodbhoy

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Thirty years ago, fearful of India's newly acquired nuclear weapons, Pakistan set out on its own quest to become a nuclear weapons state. Lacking a strong technological base, it secretly searched the world's industrialized countries for what was needed. Few could have imagined then that the move from buyer to seller of the world's deadliest technology would be so swift.

But spectacular revelations beginning late last year by Iran, and later Libya, have forced Pakistan's president, Gen. Pervez Musharraf, to launch an investigation of Pakistani involvement in secret transfers of vital nuclear weapons information and equipment to Iran, North Korea and Libya. Musharraf has conceded the existence of "an underworld of people" in Pakistan who, out of "personal greed," could have sold nuclear secrets.

The figure at the center of the crisis is Dr. A.Q. Khan, Pakistan's most celebrated bomb maker and a national hero, who was fired on Saturday from his job as science adviser to Pakistan's prime minister. In his heyday, Khan was accustomed to adulation and worship. His procurement, by whatever means, of secret centrifuge designs from a Dutch consortium in the mid-1970s was critical to Pakistan's successful nuclearization. With unlimited government resources at his disposal, and free of auditing restrictions, Khan, a metallurgist who is often wrongly referred to as a nuclear scientist, managed to purchase restricted items, which companies in Europe and the United States were willing to sell for the right price, no questions asked. In the process, Khan became a wealthy man.

Today, he and several close associates find that the laws of powerful nations cannot be spurned as easily as those of the state they have claimed to defend. Forced by the international community (read: the United States), Pakistan has put Khan and his cohorts on notice. Inspections of Iran's nuclear facilities by the International Atomic Energy Agency (IAEA) revealed centrifuges and traces of highly enriched uranium, and Iran pinpointed Pakistan as the source. A British expert who recently accompanied agency inspectors into Iran identified Iranian centrifuges as being identical to the Dutch design that Khan secretly obtained.

And yet it is unlikely that Khan will be convicted in a Pakistani court, because that would involve a head-on collision with the country's religious parties and with a public that has been led to believe that

Khan's development of the bomb guaranteed Pakistan's security.

While the IAEA and U.S. intelligence may claim credit for having discovered the fountain of nuclear proliferation, Khan widely and openly advertised his wares over the past decade. Every year -- including 2003, when the proliferation controversy was already hot -- Islamabad was festooned with colorful banners advertising international workshops on "Vibrations In Rapidly Rotating Machinery" and "Advanced Materials," sponsored by the Dr. A.Q. Khan Research Laboratories (also known as the Kahuta Laboratories), Pakistan's key uranium enrichment facility.

Over the years, Khan and his collaborators also published a number of papers on issues regarding the technical means for enabling centrifuge rotors to spin at supersonic speeds without disintegrating, which is essential for making bomb-grade uranium. They could scarcely have been more blatant. But to make absolutely certain, Kahuta issued glossy brochures that were aimed at classified organizations but were easily obtained on the Kahuta Web site.

But Khan's nuclear bravado was of little concern to any of Pakistan's governments, civil or military. Indeed, since May 1998, when the country conducted several underground nuclear tests, Pakistan has flaunted its nuclear status in a manner wholly different from the world's other nuclear-armed countries. Nuclear nationalism was the order of the day as governments vigorously promoted the bomb as the symbol of Pakistan's high scientific achievement, national determination and self-respect, and as the harbinger of a new Muslim era. Publicly funded nuclear shrines still litter the country. One, a fiberglass model of the nuclear-blasted Chaghai mountain, stands at the entrance to Islamabad, bathed at night in a garish, orange light. Pakistan's political parties, secular and Islamic, rushed to claim ownership after the nuclear tests; elites and the masses all saw in the bomb a sign that Pakistan could succeed at something. With great pomp and ceremony, the bomb makers were turned into national heroes.

With international outrage over its proliferation growing, the bomb threatens to become a noose around Pakistan's neck. For Musharraf's government, Khan's mega-ton ego and his escapades over the past decade and a half are now a nightmare. Even as the Iranian revelation catapulted Pakistan to the forefront of the world's attention, Khan threw down the gauntlet last month by declaring in a television interview: "Who made the atom bomb? I made it. Who made the missiles? I made them for you." Responding to calls by the Islamic parties to defend the bomb makers, thousands have taken to the streets of Pakistani cities in the past week to protest investigations into the activities of Khan and others. Qazi Hussain Ahmad, leader of Jamaat-e-Islami, has called for Khan's exoneration even if he "has made millions of dollars, because he has saved

Pakistan."

The investigation is likely to raise more issues than it settles. While Musharraf has said that "There is no such evidence that any government personality or military personality was involved," this attempt to ascribe all wrongdoing to a few greedy individual scientists will find few takers. Nor should it.

Since its inception, Pakistan's nuclear program has been squarely under army supervision. A multi-tiered security system was headed by a lieutenant general (now, two) with all nuclear installations and personnel kept under the tightest possible surveillance. Diplomatic immunity was insufficient to prevent a physical roughing up of the French ambassador to Pakistan some years ago when he journeyed to a point several miles from the enrichment facility. Kahuta was considered sensitive to the point that Benazir Bhutto, the former prime minister, claims that even while in office she could not receive clearance to visit the labs. In such an extreme security environment, it would be amazing to miss the travel abroad of senior scientists, engineers and administrators, their meetings with foreign nationals, and the transport and transfer of classified technical documents and components, if not whole centrifuges.

While individual gain may have been part of the motivation, the substantial cause lies elsewhere. From the inception of the bomb program, Pakistan's establishment has sought to turn its nuclear ambitions and success into larger gains. For one, it wanted (and gained) the support of hundreds of millions of Muslims the world over by claiming to provide a Muslim success story. (That this involved replicating a 60-year-old technology for mass destruction is a sad commentary on the state of the Muslim world.) For another, it enabled Pakistan to enjoy considerable financial and political benefits from oil-rich Arab countries. Among others, Libya reportedly bankrolled Pakistan and may even have supplied raw uranium. After Pakistan's nuclear tests six years ago, the Saudi government gave an unannounced gift of \$4 billion worth of oil spread over five years to tide Pakistan over during its difficulties caused by international sanctions.

The transfers to North Korea are more prosaic. Having developed the bomb, Pakistan needed missiles to deliver them. North Korea was willing to supply them, for a price. Like the Dutch centrifuges, all Kahuta had to do was put them together and stick a star and crescent on them.

These deals and transfers of technology apparently took place from about 1987 until 1995. Musharraf is reported to have given Secretary of State Colin L. Powell his "four hundred percent assurance" that no such interchange is taking place now. This may be enough for now, given

Musharraf's solid support for U.S. moves against al Qaeda.

Whether moved by money or faith, Pakistan's bomb makers, like the bomb itself, have seriously compromised the country's international standing and security. Two years ago, it was scientists from the Pakistan Atomic Energy Commission who, in a fit of Islamic solidarity, went to Afghanistan and met with Osama bin Laden and the Taliban. It is hard to believe they were the only ones so inclined.

Pakistan will have to put its nuclear house in order. Anything less than strict and complete accountability, regardless of rank or reputation, will leave the door open for those who may wish to try their luck, or in whom the fire of faith burns brighter. My country's loose nukes underscore a global danger that may already be out of control.

Nuclear secrets will keep leaking as long as the bomb has value as a currency of power and prestige. Humanity's best chance of survival lies in creating taboos against nuclear weapons, much as those that already exist for chemical and biological weapons, and to work rapidly toward their global elimination. To do away with the bomb, bomb technology and the menace of their proliferation will require the United States, as the world's only superpower, to take the lead by reducing its own nuclear arsenal, as well as dealing with all proliferators, including its ally Israel, at the same level.

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